

Maintenance check sheet

AC Motor Routine Maintenance

E&M form No.

FM-04-010

Rev. 1Sheet 1 of 1Plant system : FCXIEquipment name : BY PASS DAMPEREquipment code : M113Type code MS8054Frame size 80Voltage (V) 220/400S/N No. G1102Rating (kW) 0.75Current (A) 3.5/2.0Manufacturer ETSTOPower Factor 0.76Frequency (Hz) 50Insulation class F (155°C)I.P 54Speed (rpm) 1410

| Item | Description | Condition | | | |
|------|---|---|--|---------------------------------|--|
| 1 | Cleaning of motor frame | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> NO | | |
| 2 | Inspection of motor frame | <input type="checkbox"/> Damaged | <input checked="" type="checkbox"/> NO Damaged | | |
| 3 | Doweling and holding down bolts inspection | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 4 | Cooling fan and fan cover cleaning | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> NO | | |
| 5 | Inspection cooling fan and cover | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 6 | Inspection Coupling or pulley | <input type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 7 | Inspection cable box and terminal connections | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 8 | Inspection grouding wire connections | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 9 | Stator winding insulation test | U-G <u>520 MΩ</u> | V-G <u>587 MΩ</u> | W-G <u>641 MΩ</u> | |
| 10 | Stator winding resistance test | U-V <u>20.8 Ω</u> | V-W <u>20.8 Ω</u> | U-W <u>20.8 Ω</u> | |
| 11 | Running current on load test | U _(A) <u>-</u> | V _(A) <u>-</u> | W _(A) <u>-</u> | |

Note ☒ Condition can check☐ Condition can't checkPrepared by Technician : Prempracha. D.Pichet T.Checked by Engineer : SomkiradDate : 8 Jan 2411-Jan-24Date : 10 Jan 24

Maintenance check sheet

AC Motor Routine Maintenance

E&M form No.

FM-04-010

Rev. 1Sheet 1 of 1Plant system : FCXIEquipment name : FLUE GAS DAMPEREquipment code : M111Type code MS8054Frame size 80Voltage (V) 220/400S/N No. G1102Rating (kW) 0.75Current (A) 3.5/2.0Manufacturer ETSTOPower Factor 0.76Frequency (Hz) 50Insulation class F (155°C)I.P. 54Speed (rpm) 1420

| Item | Description | Condition | | | |
|------|---|---|--------------------------------|--|--|
| 1 | Cleaning of motor frame | <input checked="" type="checkbox"/> Yes | | <input type="checkbox"/> NO | |
| 2 | Inspection of motor frame | <input type="checkbox"/> Damaged | | <input checked="" type="checkbox"/> NO Damaged | |
| 3 | Doweling and holding down bolts inspection | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 4 | Cooling fan and fan cover cleaning | <input checked="" type="checkbox"/> Yes | | <input type="checkbox"/> NO | |
| 5 | Inspection cooling fan and cover | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 6 | Inspection Coupling or pulley | <input type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 7 | Inspection cable box and terminal connections | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 8 | Inspection grouding wire connections | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | |
| 9 | Stator winding insulation test | U-G <u>800 MΩ</u> | V-G <u>823 MΩ</u> | W-G <u>814 MΩ</u> | |
| 10 | Stator winding resistance test | U-V <u>20.9 Ω</u> | V-W <u>21.0 Ω</u> | U-W <u>20.9 Ω</u> | |
| 11 | Running current on load test | U _(A) <u>-</u> | V _(A) <u>-</u> | W _(A) <u>-</u> | |

Note ☒ Condition can check☐ Condition can't checkPrepared by Technician : Premprach. D.Pichet T.Checked by Engineer : SomkiradDate : 8 Jan 2411-Jan-24Date : 10 Jan 24

Maintenance check sheet

AC Motor Routine Maintenance

E&M form No.

FM-04-010

Rev. 1Sheet 1 of 1Plant system : FCXIEquipment name : FLUE GAS EXTRATION FANEquipment code : M104Type code SQ108M4Frame size 180Voltage (V) 380/660S/N No. G032070Rating (kW) 18.5Current (A) 32.8Manufacturer ELECTRIMPower Factor 0.9Frequency (Hz) 50Insulation class F (155°C)I.P 55Speed (rpm) 1475

| Item | Description | Condition | | | | | |
|------|---|---|--------------------------------|--|----------------|------------------|---------------|
| 1 | Cleaning of motor frame | <input checked="" type="checkbox"/> Yes | | <input type="checkbox"/> NO | | | |
| 2 | Inspection of motor frame | <input type="checkbox"/> Damaged | | <input checked="" type="checkbox"/> NO Damaged | | | |
| 3 | Doweling and holding down bolts inspection | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 4 | Cooling fan and fan cover cleaning | <input checked="" type="checkbox"/> Yes | | <input type="checkbox"/> NO | | | |
| 5 | Inspection cooling fan and cover | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 6 | Inspection Coupling or pulley | <input type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 7 | Inspection cable box and terminal connections | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 8 | Inspection grouding wire connections | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 9 | Stator winding insulation test | U-G | <u>1.48 GΩ</u> | V-G | <u>1.63 GΩ</u> | W-G | <u>1.69GΩ</u> |
| 10 | Stator winding resistance test | U-V | <u>0.50 Ω</u> | V-W | <u>0.50 Ω</u> | U-W | <u>0.50 Ω</u> |
| 11 | Running current on load test | U _(A) | <u>-</u> | V _(A) | <u>-</u> | W _(A) | <u>-</u> |

Note ☒ Condition can check☐ Condition can't checkPrepared by Technician : Premprach. D.Pichet T.Checked by Engineer : SomkiradDate : 8 Jan 2411-Jan-24Date : 10 Jan 24

Maintenance check sheet

AC Motor Routine Maintenance

E&M form No.

FM-04-010

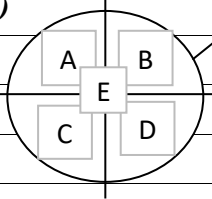
Rev. 1Sheet 1 of 1Plant system : FCXIEquipment name : FLUME GAS EXTRATION FANEquipment code : M107Type code FS-JFrame size 180Voltage (V) 380S/N No. 498Rating (kW) 18.5Current (A) 36.5Manufacturer MISUBISHIPower Factor -Frequency (Hz) 50Insulation class B (130°C)I.P -Speed (rpm) 1460

| Item | Description | Condition | | | | | |
|------|---|---|--------------------------------|--|-----------------|------------------|-----------------|
| 1 | Cleaning of motor frame | <input checked="" type="checkbox"/> Yes | | <input type="checkbox"/> NO | | | |
| 2 | Inspection of motor frame | <input type="checkbox"/> Damaged | | <input checked="" type="checkbox"/> NO Damaged | | | |
| 3 | Doweling and holding down bolts inspection | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 4 | Cooling fan and fan cover cleaning | <input checked="" type="checkbox"/> Yes | | <input type="checkbox"/> NO | | | |
| 5 | Inspection cooling fan and cover | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 6 | Inspection Coupling or pulley | <input type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 7 | Inspection cable box and terminal connections | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 8 | Inspection grouding wire connections | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Loose | <input type="checkbox"/> Damage | | | |
| 9 | Stator winding insulation test | U-G | <u>1.665 GΩ</u> | V-G | <u>1.703 GΩ</u> | W-G | <u>1.784 GΩ</u> |
| 10 | Stator winding resistance test | U-V | <u>0.60 Ω</u> | V-W | <u>0.60 Ω</u> | U-W | <u>0.70 Ω</u> |
| 11 | Running current on load test | U _(A) | <u>-</u> | V _(A) | <u>-</u> | W _(A) | <u>-</u> |

Note ☒ Condition can check☐ Condition can't checkPrepared by Technician : Premprach. D.Pichet T.Checked by Engineer : SomkiradDate : 8 Jan 2411-Jan-24Date : 10 Jan 24

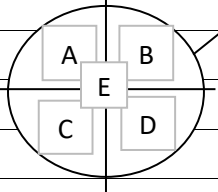
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|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Melting furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
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|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | <input checked="" type="checkbox"/> | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greas</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | |
| 12 Furnace roof general cleaning; | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | |

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|---|-----------------------------|--|--------------------|--|---------------------------|---|
| 13 Furnace common stack fan ; (check only MFEI) | | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | | <input checked="" type="checkbox"/> good tension | | <input type="checkbox"/> replacement remark _____ | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable remark _____ | | |
| 14 Furnace common fume fan ; (check only MFEI) | | | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | | <input checked="" type="checkbox"/> good tension | | <input type="checkbox"/> replacement remark _____ | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable remark _____ | | |
| 15 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | |
| Check at suction duct on fume hood. | | | | | | |
| Position | A | B | C | D | E |  |
| Air velocity (m/s) | 10 | 10 | 10 | 11 | 10 | |
| Air velocity average (A+B+C+D+E)/5 = 10.2 | | | | | | |
| <u>Conclusion.</u> | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | |
| Item | Description | | | | Follow up by | |
| | - Change alumina ball of B1 | | | | SOMPARN | |
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| | | | | | | |
| Done by E&M Technician : | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | NIKON | | Production Staff : | | Assistant / E&M Manager : | |
| Date : 15-JAN-24 | Date : 16-JAN-24 | | NARUPON | | NIKON | |
| | | | Date: 16-JAN-24 | | Date: 16-JAN-24 | |

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| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| <u>For Melting furnace maintenance</u> | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| | | | | | |
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|--|------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | ✓ | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greasi</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | | | remark _____ |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 stroke</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 12 Furnace roof general cleaning; | | | | |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |

| | | | | | | |
|---|--|--|--------------------|---|---------------------------|---|
| 13 Furnace common stack fan ; (check only MFE1) | | | | | | |
| Bearing greasing (EP0= 4 stroke | | | | | | |
| <input checked="" type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | <input checked="" type="checkbox"/> good tension | <input type="checkbox"/> replacement | remark _____ | | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | |
| 14 Furnace common fume fan ; (check only MFE1) | | | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | <input checked="" type="checkbox"/> good tension | <input type="checkbox"/> replacement | remark _____ | | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | |
| 15 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | |
| Check at suction duct on fume hood. | | | | | | |
| Position | A | B | C | D | E |  |
| Air velocity (m/s) | 9 | 9 | 9 | 9 | 9 | |
| Air velocity average (A+B+C+D+E)/5 = 9 m/s | | | | | | |
| <u>Conclusion.</u> | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | |
| Item | Description | | | | Follow up by | |
| | MACHINE NOT RUN | | | | | |
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| Done by E&M Technician : | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | NIKON | | Production Staff : | | Assistant / E&M Manager : | |
| Date : 15-JAN-24 | Date : 16-JAN-24 | | NARUPON | | NIKON | |
| | | | Date: 16-JAN-24 | | Date: 16-JAN-24 | |

| | | | | | |
|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Melting furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| | | | | | |
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|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | <input checked="" type="checkbox"/> | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greas</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | |
| 12 Furnace roof general cleaning; | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | |

13 Furnace common stack fan ; (check only MFEI)

Bearing greasing (EP0= 4 stroke

☒ greasing ☐ cleaning remark _____

Belt condition and tension check

☐ swing ☒ good tension ☐ replacement remark _____

Fan unit visual for vibration and noise

☐ *vibration* ☐ *noise* ☒ *acceptable* *remark* _____


14 Furnace common fume fan ; (check only MFE1)

Belt condition and tension check

☐ swing ☒ good tension ☐ replacement remark _____

Fan unit visual for vibration and noise

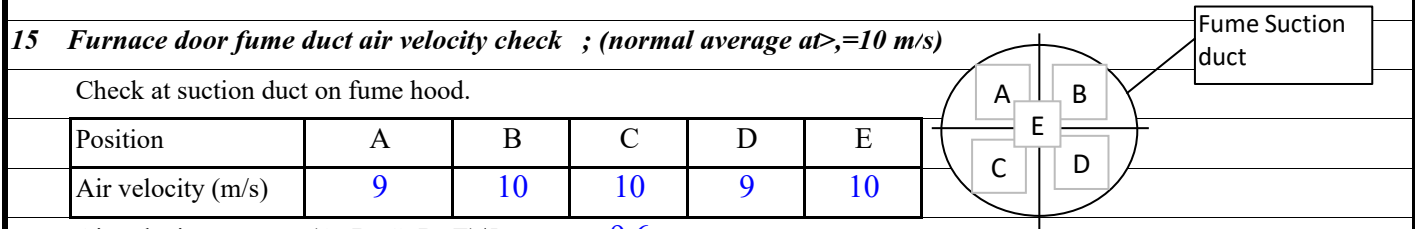
☐ *vibration* ☐ *noise* ☒ *acceptable* *remark* _____

| | | | |
|----|---|--|----------------------|
| 15 | Furnace door fume duct air velocity check ; (normal average $at \geq 10$ m/s) |  | Fume Suction duct |
|----|---|--|----------------------|

Check at suction duct on fume hood.

| | | | | | |
|--------------------|---|----|----|---|----|
| Position | A | B | C | D | E |
| Air velocity (m/s) | 9 | 10 | 10 | 9 | 10 |

| | |
|--------------------------------------|-----|
| Air velocity average (A+B+C+D+E)/5 = | 9.6 |
|--------------------------------------|-----|



Conclusion.

☒ no need follow up. ☐ need follow up.

[illegible]

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|--------------------------|---------------------------|---------------|-------------|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by | Approved by |
|--------------------------|---------------------------|---------------|-------------|

| | | | |
|---------|-------|-------------------------------|------------------------------------|
| Somparn | NIKON | Production Staff : NARUPON | Assistant / E&M Manager : NIKON |
|---------|-------|-------------------------------|------------------------------------|

Date : 12-FEB-24 Date : 14-FEB-24 Date: 14-FEB-24 Date: 14-FEB-24

| | | | |
|--------------------------|---------------------------|---------------|-------------|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by | Approved by |
|--------------------------|---------------------------|---------------|-------------|

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|---------|-------|-------------------------------|------------------------------------|
| Somparn | NIKON | Production Staff : NARUPON | Assistant / E&M Manager : NIKON |
|---------|-------|-------------------------------|------------------------------------|

Date : 12-FEB-24 Date : 14-FEB-24 Date: 14-FEB-24 Date: 14-FEB-24

| | | | |
|--------------------------|---------------------------|---------------|-------------|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by | Approved by |
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| | | | |
|---------|-------|-------------------------------|------------------------------------|
| Somparn | NIKON | Production Staff : NARUPON | Assistant / E&M Manager : NIKON |
|---------|-------|-------------------------------|------------------------------------|

Date : 12-FEB-24 Date : 14-FEB-24 Date: 14-FEB-24 Date: 14-FEB-24

Date : 12-FEB-24 Date : 14-FEB-24 Date: 14-FEB-24 Date: 14-FEB-24

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|--------------------------|---------------------------|---------------|-------------|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by | Approved by |
|--------------------------|---------------------------|---------------|-------------|

| | | | |
|---------|-------|-------------------------------|------------------------------------|
| Somparn | NIKON | Production Staff : NARUPON | Assistant / E&M Manager : NIKON |
|---------|-------|-------------------------------|------------------------------------|

Date : 12-FEB-24 Date : 14-FEB-24 Date: 14-FEB-24 Date: 14-FEB-24

Date : 12-FEB-24 Date : 14-FEB-24 Date: 14-FEB-24 Date: 14-FEB-24

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|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| <u>For Melting furnace maintenance</u> | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
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|--|------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | ✓ | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greasi</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | | | remark _____ |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 stroke</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 12 Furnace roof general cleaning; | | | | |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |

Bearing greasing (EP0= 4 stroke

Belt condition and tension check

Fan unit visual for vibration and noise

14 Furnace common fume fan; (check only MFE1)

Belt condition and tension check

Fan unit visual for vibration and noise

15 Furnace door fume duct air velocity check ; (normal average at ≥ 10 m/s)

Check at suction duct on fume hood.

Air velocity average $(A+B+C+D+E)/5 =$ **9.4** m/s

Fume Suction
duct

Conclusion.

☒ no need follow up. ☐ need follow up.

| | | | |
|--------------------------|---------------------------|-------------------------------------|--|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by Production Staff : | Approved by Assistant / E&M Manager : |
| <u>Somparn</u> | <u>NIKON</u> | <u>NARUPON</u> | <u>NIKON</u> |
| Date : <u>12-FEB-24</u> | Date : <u>13-FEB-24</u> | Date: <u>13-FEB-24</u> | Date: <u>13-FEB-24</u> |

| | | | | | |
|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Melting furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| | | | | | |
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| | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | <input checked="" type="checkbox"/> | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greas</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |
| 12 Furnace roof general cleaning; | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |

13 Furnace common stack fan ; (check only MFEI)

Bearing greasing (EP0= 4 stroke

☒ greasing ☐ cleaning remark _____

Belt condition and tension check

☐ swing ☒ good tension ☐ replacement remark _____

Fan unit visual for vibration and noise

☐ *vibration* ☐ *noise* ☒ *acceptable* *remark* _____

14 Furnace common fume fan ; (check only MFE1)

Belt condition and tension check


☐ swing ☒ good tension ☐ replacement remark _____

Fan unit visual for vibration and noise

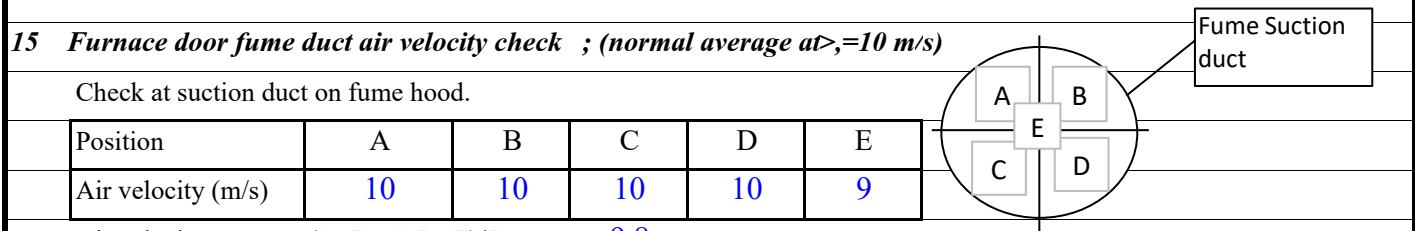
☐ *vibration* ☐ *noise* ☒ *acceptable* *remark* _____

| | | | | |
|----|--|--|-------------------|--|
| 15 | Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | Fume Suction duct | |
|----|--|--|-------------------|--|

Check at suction duct on fume hood.

| | | | | | | |
|--------------------|----|----|----|----|---|---|
| Position | A | B | C | D | E |  |
| Air velocity (m/s) | 10 | 10 | 10 | 10 | 9 | |

| | |
|--------------------------------------|-----|
| Air velocity average (A+B+C+D+E)/5 = | 9.8 |
|--------------------------------------|-----|



Conclusion.

☒ no need follow up. ☐ need follow up.[illegible]

| | | | |
|--------------------------|---------------------------|---------------|-------------|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by | Approved by |
|--------------------------|---------------------------|---------------|-------------|

| | | | |
|---------|-------|-------------------------------|------------------------------------|
| Somparn | NIKON | Production Staff : NARUPON | Assistant / E&M Manager : NIKON |
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Date : 12-MAR-24 Date : 13-MAR-24 Date: 13-MAR-24 Date: 13-MAR-24

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| | | Production Staff : | Assistant / E&M Manager : |
|--|--|--------------------|---------------------------|

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| Somparn | NIKON | NARUPON | NIKON |
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Date : 12-MAR-24 Date : 13-MAR-24 Date: 13-MAR-24 Date: 13-MAR-24

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| | | Production Staff : | Assistant / E&M Manager : |
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| Somparn | NIKON | NARUPON | NIKON |
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Date : 12-MAR-24 Date : 13-MAR-24 Date: 13-MAR-24 Date: 13-MAR-24

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| | | Production Staff : | Assistant / E&M Manager : |
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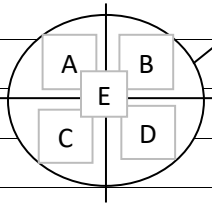
| | | | |
|---------|-------|---------|-------|
| Somparn | NIKON | NARUPON | NIKON |
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Date : 12-MAR-24 Date : 13-MAR-24 Date: 13-MAR-24 Date: 13-MAR-24

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|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Melting furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
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|--|------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | ✓ | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greasi</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | | | remark _____ |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 stroke</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 12 Furnace roof general cleaning; | | | | |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |

| | | | | | | |
|---|--|--|--------------------|----|---------------------------|---|
| 13 Furnace common stack fan ; (check only MFE1) | | | | | | |
| Bearing greasing (EP0= 4 stroke | | | | | | |
| <input checked="" type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | <input checked="" type="checkbox"/> good tension | <input type="checkbox"/> replacement | remark _____ | | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | |
| 14 Furnace common fume fan ; (check only MFE1) | | | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | <input checked="" type="checkbox"/> good tension | <input type="checkbox"/> replacement | remark _____ | | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | |
| 15 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | |
| Check at suction duct on fume hood. | | | | | | |
| Position | A | B | C | D | E |  |
| Air velocity (m/s) | 10 | 10 | 10 | 10 | 11 | |
| Air velocity average (A+B+C+D+E)/5 = 10.2 m/s | | | | | | |
| <u>Conclusion.</u> | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | |
| Item | Description | | | | Follow up by | |
| | MACHINE NOT RUN | | | | | |
| | | | | | | |
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| | | | | | | |
| Done by E&M Technician : | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | NIKON | | Production Staff : | | Assistant / E&M Manager : | |
| Date : 12-MAR-24 | Date : 14-MAR-24 | | NARUPON | | NIKON | |
| | | | Date: 14-MAR-24 | | Date: 14-MAR-24 | |

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|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Melting furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | <input checked="" type="checkbox"/> | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greas</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | |
| 12 Furnace roof general cleaning; | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | |

13 Furnace common stack fan ; (check only MFEI)

Bearing greasing (EP0= 4 stroke

☒ greasing ☐ cleaning remark _____

Belt condition and tension check

☐ swing ☒ good tension ☐ replacement remark _____

Fan unit visual for vibration and noise

☐ *vibration* ☐ *noise* ☒ *acceptable* *remark* _____

14 Furnace common fume fan ; (check only MFE1)

Belt condition and tension check


☐ swing ☒ good tension ☐ replacement remark _____

Fan unit visual for vibration and noise

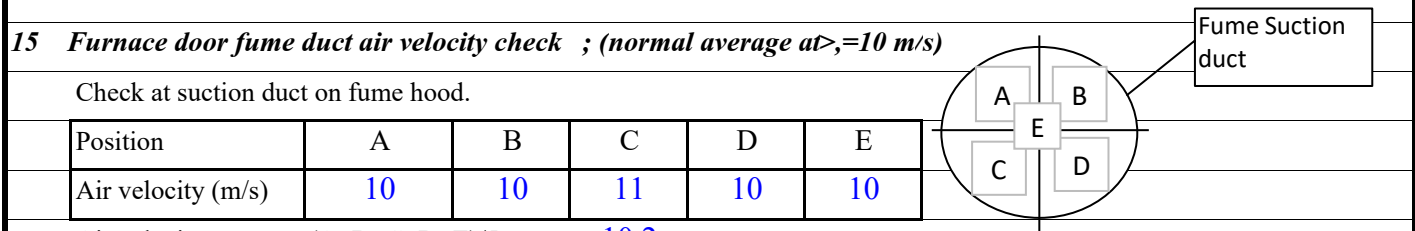
☐ *vibration* ☐ *noise* ☒ *acceptable* *remark* _____

| | | | |
|---|--|-------------------|--|
| 15 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | Fume Suction duct | |
|---|--|-------------------|--|

Check at suction duct on fume hood.

| | | | | | | |
|--------------------|----|----|----|----|----|---|
| Position | A | B | C | D | E |  |
| Air velocity (m/s) | 10 | 10 | 11 | 10 | 10 | |

| | |
|--------------------------------------|------|
| Air velocity average (A+B+C+D+E)/5 = | 10.2 |
|--------------------------------------|------|



Conclusion.

☒ no need follow up. ☐ need follow up.[illegible]

| | | | |
|--------------------------|---------------------------|---------------|-------------|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by | Approved by |
|--------------------------|---------------------------|---------------|-------------|

| | | | |
|---------|-------|-------------------------------|------------------------------------|
| Somparn | NIKON | Production Staff : NARUPON | Assistant / E&M Manager : NIKON |
|---------|-------|-------------------------------|------------------------------------|

Date : 20-APR-24 Date : 21-APR-24 Date: 21-APR-24 Date: 21-APR-24

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|--|--|--------------------|---------------------------|
| | | Production Staff : | Assistant / E&M Manager : |
|--|--|--------------------|---------------------------|

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| Somparn | NIKON | NARUPON | NIKON |
|---------|-------|---------|-------|

Date : 20-APR-24 Date : 21-APR-24 Date: 21-APR-24 Date: 21-APR-24

| | | | |
|--|--|--------------------|---------------------------|
| | | Production Staff : | Assistant / E&M Manager : |
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| Somparn | NIKON | NARUPON | NIKON |
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Date : 20-APR-24 Date : 21-APR-24 Date: 21-APR-24 Date: 21-APR-24

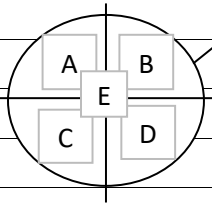
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| | | Production Staff : | Assistant / E&M Manager : |
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| Somparn | NIKON | NARUPON | NIKON |
|---------|-------|---------|-------|

Date : 20-APR-24 Date : 21-APR-24 Date: 21-APR-24 Date: 21-APR-24

| | | | | | |
|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| <u>For Melting furnace maintenance</u> | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
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|--|------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | ✓ | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greasi</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | | | remark _____ |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 stroke</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 12 Furnace roof general cleaning; | | | | |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |

| | | | | | | |
|---|--|--|--------------------|---|---------------------------|---|
| 13 Furnace common stack fan ; (check only MFEI) | | | | | | |
| Bearing greasing (EP0= 4 stroke | | | | | | |
| <input checked="" type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | <input checked="" type="checkbox"/> good tension | <input type="checkbox"/> replacement | remark _____ | | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | |
| 14 Furnace common fume fan ; (check only MFEI) | | | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | <input checked="" type="checkbox"/> good tension | <input type="checkbox"/> replacement | remark _____ | | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | |
| 15 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | |
| Check at suction duct on fume hood. | | | | | | |
| Position | A | B | C | D | E |  |
| Air velocity (m/s) | 9 | 9 | 9 | 9 | 9 | |
| Air velocity average (A+B+C+D+E)/5 = 9 m/s | | | | | | |
| <u>Conclusion.</u> | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | |
| Item | Description | | | | Follow up by | |
| | MACHINE NOT RUN | | | | | |
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| Done by E&M Technician : | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | NIKON | | Production Staff : | | Assistant / E&M Manager : | |
| Date : 20-APR-24 | Date : 22-APR-24 | | NARUPON | | NIKON | |
| | | | Date: 22-APR-24 | | Date: 22-APR-24 | |

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|--|--|--|--|--|-----------------------------|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Melting furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> not leak | | remark _____ | |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> not leak | | remark _____ | |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| | | | | | |
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| | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | <input checked="" type="checkbox"/> | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greas</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | remark _____ |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |
| 12 Furnace roof general cleaning; | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | |

13 Furnace common stack fan ; (check only MFEI)

Bearing greasing (EP0= 4 stroke

☒ greasing ☐ cleaning remark _____

Belt condition and tension check

☐ swing ☒ good tension ☐ replacement remark _____

Fan unit visual for vibration and noise

☐ *vibration* ☐ *noise* ☒ *acceptable* *remark* _____

14 Furnace common fume fan ; (check only MFE1)

Belt condition and tension check

☐ swing ☒ good tension ☐ replacement remark _____

Fan unit visual for vibration and noise

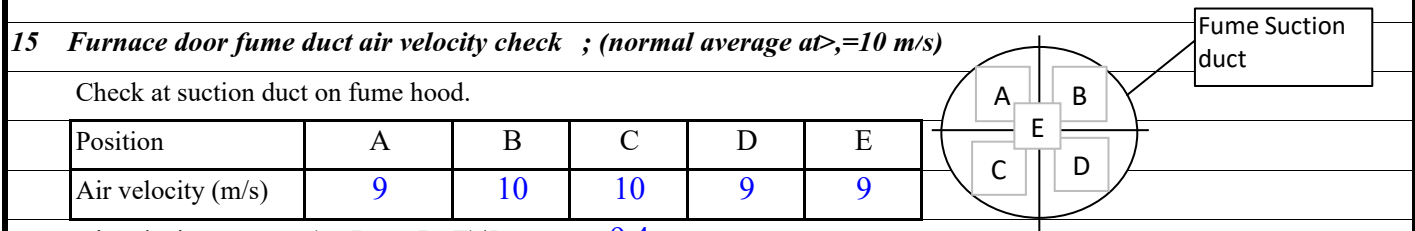
☐ *vibration* ☐ *noise* ☒ *acceptable* *remark* _____

| | | | |
|----|---|--|-------------------|
| 15 | Furnace door fume duct air velocity check ; (normal average $at \geq 10$ m/s) | | Fume Suction duct |
|----|---|--|-------------------|

Check at suction duct on fume hood.

| | | | | | |
|--------------------|---|----|----|---|---|
| Position | A | B | C | D | E |
| Air velocity (m/s) | 9 | 10 | 10 | 9 | 9 |

| | |
|--------------------------------------|-----|
| Air velocity average (A+B+C+D+E)/5 = | 9.4 |
|--------------------------------------|-----|



Conclusion.

☒ no need follow up. ☐ need follow up.

[illegible]

| | | | |
|--------------------------|---------------------------|---------------|-------------|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by | Approved by |
|--------------------------|---------------------------|---------------|-------------|

| | | | |
|---------|-------|-------------------------------|------------------------------------|
| Somparn | NIKON | Production Staff : NARUPON | Assistant / E&M Manager : NIKON |
|---------|-------|-------------------------------|------------------------------------|

Date : 17-MAY-24 Date : 18-MAY-24 Date: 18-MAY-24 Date: 18-MAY-24

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| | | Production Staff : | Assistant / E&M Manager : |
|--|--|--------------------|---------------------------|

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| Somparn | NIKON | NARUPON | NIKON |
|---------|-------|---------|-------|

Date : 17-MAY-24 Date : 18-MAY-24 Date: 18-MAY-24 Date: 18-MAY-24

| | | | |
|--|--|--------------------|---------------------------|
| | | Production Staff : | Assistant / E&M Manager : |
|--|--|--------------------|---------------------------|

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| Somparn | NIKON | NARUPON | NIKON |
|---------|-------|---------|-------|

Date : 17-MAY-24 Date : 18-MAY-24 Date: 18-MAY-24 Date: 18-MAY-24

| | | | |
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| | | Production Staff : | Assistant / E&M Manager : |
|--|--|--------------------|---------------------------|

| | | | |
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| Somparn | NIKON | NARUPON | NIKON |
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Date : 17-MAY-24 Date : 18-MAY-24 Date: 18-MAY-24 Date: 18-MAY-24

| | | | | | |
|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| <u>For Melting furnace maintenance</u> | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
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|--|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | <input checked="" type="checkbox"/> | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greasi</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | | | remark _____ |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 stroke</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | remark _____ |
| 12 Furnace roof general cleaning; | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | remark _____ |

13 Furnace common stack fan ; (check only MFE1)

Bearing greasing (EP0= 4 stroke)

☒ greasing
☐ cleaning

remark _____

Belt condition and tension check

☐ swing
☒ good tension
☐ replacement

remark _____

Fan unit visual for vibration and noise

☐ vibration
☐ noise
☒ acceptable

remark _____

14 Furnace common fume fan ; (check only MFE1)

Belt condition and tension check

☐ swing
☒ good tension
☐ replacement

remark _____

Fan unit visual for vibration and noise

☐ vibration
☐ noise
☒ acceptable

remark _____

15 Furnace door fume duct air velocity check ; (normal average at>=10 m/s)

Check at suction duct on fume hood.

| | | | | | |
|--|---|---|---|----|----|
| Position | A | B | C | D | E |
| Air velocity (m/s) | 9 | 9 | 9 | 10 | 10 |
| Air velocity average (A+B+C+D+E)/5 = 9.4 m/s | | | | | |

Fume Suction duct

Conclusion.

☒ no need follow up.
☐ need follow up.

| Item | Description | Follow up by |
|------|-----------------|--------------|
| | MACHINE NOT RUN | |
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Done by E&M Technician :

Somchai

Date : 17-MAY-24

Checked by E&M Engineer :

NIKON

Date : 18-MAY-24

Acceptance by

Production Staff :

NARUPON

Date: 18-MAY-24

Approved by

Assistant / E&M Manager :

NIKON

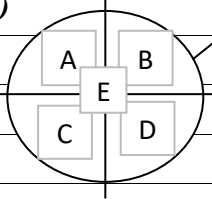
Date: 18-MAY-24

FM-04-156

Rev.02 / 15 Jan 14

| | | | | | |
|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Melting furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak | remark _____ |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | | |
|---|------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | ✓ | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greas</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | | | remark _____ |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 12 Furnace roof general cleaning; | | | | |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |

| | | | | | | |
|---|--|--|--------------------|----|---------------------------|---|
| 13 Furnace common stack fan ; (check only MFEI) | | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | | |
| <input checked="" type="checkbox"/> greasing | <input type="checkbox"/> cleaning | remark _____ | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | <input checked="" type="checkbox"/> good tension | <input type="checkbox"/> replacement | remark _____ | | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | |
| 14 Furnace common fume fan ; (check only MFEI) | | | | | | |
| Belt condition and tension check | | | | | | |
| <input type="checkbox"/> swing | <input checked="" type="checkbox"/> good tension | <input type="checkbox"/> replacement | remark _____ | | | |
| Fan unit visual for vibration and noise | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | |
| 15 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | |
| Check at suction duct on fume hood. | | | | | | |
| Position | A | B | C | D | E |  |
| Air velocity (m/s) | 9 | 10 | 9 | 10 | 10 | |
| Air velocity average (A+B+C+D+E)/5 = 9.6 | | | | | | |
| <u>Conclusion.</u> | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | |
| Item | Description | | | | Follow up by | |
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| | | | | | | |
| Done by E&M Technician : | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somchai | NIKON | | Production Staff : | | Assistant / E&M Manager : | |
| Date : 20-JUN-24 | Date : 22-JUN-24 | | NARUPON | | NIKON | |
| Date : 20-JUN-24 | Date : 22-JUN-24 | | Date: 22-JUN-24 | | Date: 22-JUN-24 | |

| | | | | | |
|--|--|-------------------------------------|--|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Melting furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>3</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>MFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| 2 Flue gas fan; | | | | | |
| Bearing greasing (EP0= 4 stroke) | | | | | |
| <input checked="" type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | remark _____ | |
| Coupling visual for vibration check | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan unit visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Fan impeller cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Suction flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| Discharge flexible joint check leak | | | | | |
| <input type="checkbox"/> leak | | <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| 3 Flue gas duct reversal valve ; | | | | | |
| For burner #1 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| For burner #2 reversal valve function check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Regenerative ball box unit ; | | | | | |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Hot air leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| Suction flexible joint check leak | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak remark _____ |
| | | | | | |
| | | | | | |
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|--|------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|
| 5 Damper; | | | | |
| <i>Wire rope sling function and damage chec</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | |
| <input type="checkbox"/> low | ✓ | <input type="checkbox"/> mid | <input type="checkbox"/> high | refill _____ |
| 6 Charging door; | | | | |
| <i>Check condition for door seal and clamp conditio</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greasi</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> changed | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | | | remark _____ |
| 7 Male spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| 8 Female down spout; | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Refractory condition check</i> | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 9 Furnace tilting cylinder; | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 stroke</i> | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | ✓ | <input type="checkbox"/> acceptable | remark _____ |
| 10 All furnace Gas pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 11 All furnace air pipe leak check and cleaning ; | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | ✓ | <input type="checkbox"/> not leak |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |
| 12 Furnace roof general cleaning; | | | | |
| ✓ <input type="checkbox"/> clean | <input type="checkbox"/> not clean | | | remark _____ |

Bearing greasing (EP0= 4 stroke

Belt condition and tension check

Fan unit visual for vibration and noise

14 Furnace common fume fan; (check only MFE1)

Belt condition and tension check

Fan unit visual for vibration and noise

15 Furnace door fume duct air velocity check ; (normal average at $\Delta T = 10$ m/s)

Check at suction duct on fume hood.

Air velocity average $(A+B+C+D+E)/5 =$ **9.6** m/s

Fume Suction
duct

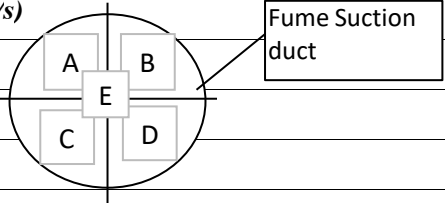
Conclusion.

☒ no need follow up. ☐ need follow up.

| | | | |
|--------------------------|---------------------------|-------------------------------------|--|
| Done by E&M Technician : | Checked by E&M Engineer : | Acceptance by Production Staff : | Approved by Assistant / E&M Manager : |
| <u>Somparn</u> | <u>NIKON</u> | <u>NARUPON</u> | <u>NIKON</u> |
| Date : <u>17-JUN-24</u> | Date : <u>18-JUN-24</u> | Date: <u>18-JUN-24</u> | Date: <u>18-JUN-24</u> |

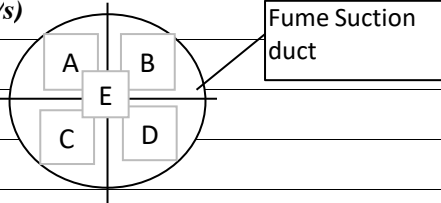
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|--|--|---|-------------------------------|--|-----------------------------|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| <i>For Holding Furnace maintenance</i> | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>HFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| <i>Air inlet filter cleaning</i> | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| <i>Fan impeller visual for vibration and noise</i> | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Flexible joint leak check</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| <i>Wire rope sling function and damage check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| <i>Check condition for door seal and clamp condition</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greasing</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| <i>Refractory condition check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

| | | | | | |
|---|------------------------------------|--|--|---|----|
| 6 Spout lid; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| 7 Furnace tilting cylinder; | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 8 Hydraulic main tank; | | | | | |
| <i>Hydraulic system check leak</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 11 Furnace roof general cleaning; | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | |
| Check at suction duct on fume hood. | | | | | |
| Position | A | B | C | D | E |
| Air velocity (m/s) | 10 | 10 | 10 | 9 | 10 |
| Air velocity average (A+B+C+D+E)/5 = 9.8 | | | | | |

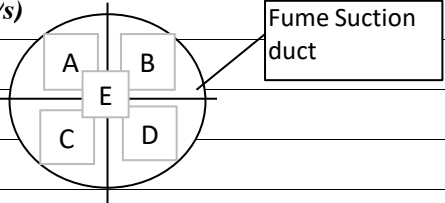


| | | | |
|--|---------------------------------|--|--|
| Conclusion. | | | |
| <input checked="" type="checkbox"/> no need follow up. | | <input type="checkbox"/> need follow up. | |
| Item | Description | Follow up by | |
| | - Repairing roof fume duct leak | Saythong | |
| | | | |
| | | | |
| | | | |
| | | | |
| Done by E&M Technician: | Checked by E&M Engineer : | Acceptance by Production Staff : | Approved by Assistant / E&M Manager : |
| Somparn | Nikon | NARUPON | NIKON |
| Date : 18-Jan-24 | Date : 19-Jan-24 | Date: 19-Jan-24 | Date: 19-Jan-24 |

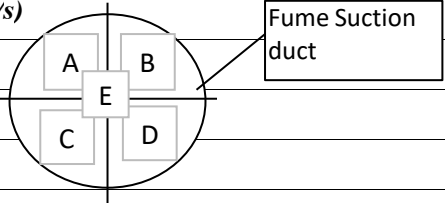
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|--|--|---|-------------------------------|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| <i>For Holding Furnace maintenance</i> | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>HFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| <i>Air inlet filter cleaning</i> | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| <i>Fan impeller visual for vibration and noise</i> | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Flexible joint leak check</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| <i>Wire rope sling function and damage check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| <i>Check condition for door seal and clamp condition</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| <i>Wire rope sling condition check and paint greasing</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| <i>Refractory condition check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

| | | | | | | | |
|--|--------------------|---------------------------|---|-------------------------------------|----|--|---|
| 6 Spout lid; | | | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | | | |
| <input type="checkbox"/> damage <input type="checkbox"/> repaired ✓ <input type="checkbox"/> acceptable remark _____ | | | | | | | |
| Leak at _____ <input type="checkbox"/> repaired ✓ <input type="checkbox"/> not leak remark _____ | | | | | | | |
| 7 Furnace tilting cylinder; | | | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | | | |
| Leak at _____ <input type="checkbox"/> repaired ✓ <input type="checkbox"/> not leak remark _____ | | | | | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok.</i> | | | | | | | |
| <input type="checkbox"/> greasing <input type="checkbox"/> cleaning ✓ <input type="checkbox"/> acceptable remark _____ | | | | | | | |
| 8 Hydraulic main tank; | | | | | | | |
| <i>Hydraulic system check leak</i> | | | | | | | |
| Leak at _____ <input type="checkbox"/> repaired ✓ <input type="checkbox"/> not leak remark _____ | | | | | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration <input type="checkbox"/> noise ✓ <input type="checkbox"/> acceptable remark _____ | | | | | | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration <input type="checkbox"/> noise ✓ <input type="checkbox"/> acceptable remark _____ | | | | | | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ <input type="checkbox"/> repaired ✓ <input type="checkbox"/> not leak remark _____ | | | | | | | |
| <input checked="" type="checkbox"/> clean <input type="checkbox"/> not clean remark _____ | | | | | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ <input type="checkbox"/> repaired ✓ <input type="checkbox"/> not leak remark _____ | | | | | | | |
| <input checked="" type="checkbox"/> clean <input type="checkbox"/> not clean remark _____ | | | | | | | |
| 11 Furnace roof general cleaning; | | | | | | | |
| <input checked="" type="checkbox"/> clean <input type="checkbox"/> not clean remark _____ | | | | | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | | |
| Check at suction duct on fume hood. | | | | | | | |
| | Position | A | B | C | D | E |  |
| | Air velocity (m/s) | 9 | 9 | 9 | 10 | 9 | |
| Air velocity average (A+B+C+D+E)/5 = | | 9.2 | | | | | |
| <u>Conclusion.</u> | | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | | |
| Item | Description | | | | | Follow up by | |
| | MACHINE NOT RUN | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Done by E&M Technician: | | Checked by E&M Engineer : | | Acceptance by Production Staff : | | Approved by Assistant / E&M Manager : | |
| Somparn | | Nikon | | NARUPON | | NIKON | |
| Date : 18-JAN-24 | | Date : 20-JAN-24 | | Date: 20-JAN-24 | | Date: 20-JAN-24 | |

| | | | | | |
|--|--|---|-------------------------------|--|-----------------------------|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| <i>For Holding Furnace maintenance</i> | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>HFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| <i>Air inlet filter cleaning</i> | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| <i>Fan impeller visual for vibration and noise</i> | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Flexible joint leak check</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| 2 Damper; | | | | | |
| <i>Wire rope sling function and damage check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Gear drive for damper control lube oil level check</i> | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| <i>Check condition for door seal and clamp condition</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>All Steel block lining condition check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| <i>Wire rope sling condition check and paint greasing</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| 5 Female down spout; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired <input checked="" type="checkbox"/> | | <input type="checkbox"/> not leak remark _____ | |
| <i>Refractory condition check</i> | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

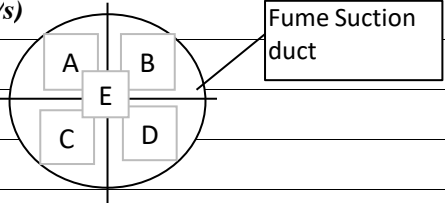
| | | | | | | | |
|---|---|--|--------------|--------------------|--------------|---|--|
| 6 Spout lid; | | | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | | | |
| 7 Furnace tilting cylinder; | | | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 8 Hydraulic main tank; | | | | | | | |
| <i>Hydraulic system check leak</i> | | | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 11 Furnace roof general cleaning; | | | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | | |
| Check at suction duct on fume hood. | | | | | | | |
| Position | A | B | C | D | E |  | |
| Air velocity (m/s) | 10 | 9 | 9 | 9 | 10 | | |
| Air velocity average (A+B+C+D+E)/5 = 9.4 | | | | | | | |
| Conclusion. | | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | | |
| Item | Description | | | | Follow up by | | |
| | -Change seal of solenoid valve transfer spout lic | | | | Somparn | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Done by E&M Technician: | | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | | Nikon | | Production Staff : | | Assistant / E&M Manager : | |
| | | | | NARUPON | | NIKON | |
| Date : 12-Feb-24 | | Date : 14-Feb-24 | | Date: 14-Feb-24 | | Date: 14-Feb-24 | |

| | | | | | |
|---|--|---|-------------------------------|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Holding Furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>HFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Gear drive for damper control lube oil level check | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| All Steel block lining condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Wire rope sling condition check and paint greasing | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Refractory condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

| | | | | | | | |
|---|------------------------------------|--|--|--------------------|--------------|---|--|
| 6 Spout lid; | | | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| 7 Furnace tilting cylinder; | | | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 8 Hydraulic main tank; | | | | | | | |
| <i>Hydraulic system check leak</i> | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 11 Furnace roof general cleaning; | | | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | | |
| Check at suction duct on fume hood. | | | | | | | |
| Position | A | B | C | D | E |  | |
| Air velocity (m/s) | 9 | 9 | 9 | 9 | 9 | | |
| Air velocity average (A+B+C+D+E)/5 = 9 | | | | | | | |
| <u>Conclusion.</u> | | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | | |
| Item | Description | | | | Follow up by | | |
| | MACHINE NOT RUN | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Done by E&M Technician: | | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | | Nikon | | Production Staff : | | Assistant / E&M Manager : | |
| | | | | NARUPON | | NIKON | |
| Date : 12-FEB-24 | | Date : 14-FEB-24 | | Date: 14-FEB-24 | | Date: 14-FEB-24 | |

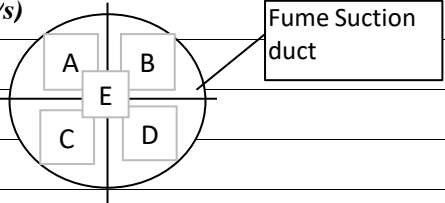
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| Meyer Aluminium (Thailand) | | E&M Department | | Mechanical Section | |
| Monthly maintenance check sheet For Holding Furnace maintenance | | | | E&M form No. Rev. 2 Sheet 1 of 2 | |
| Plant | | Casting | | | |
| Equipment | | HFE | | #1 | #2 |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| | | <input checked="" type="checkbox"/> Clean | <input type="checkbox"/> not clean | remark | |
| Fan impeller visual for vibration and noise | | | | | |
| | | <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark |
| Flexible joint leak check | | | | | |
| Leak at | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark | |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> acceptable | remark |
| Gear drive for damper control lube oil level check | | | | | |
| | | <input type="checkbox"/> low | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | refill |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark |
| All Steel block lining condition check | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark |
| Air cylinder for door closing check leak and function | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark |
| Leak at | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark | |
| Wire rope sling condition check and paint greasing | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> acceptable | remark |
| | | <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark |
| Leak at | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark | |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark |
| Leak at | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark | |
| Refractory condition check | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark |

| | | | | | |
|---|------------------------------------|--|--|---|----|
| 6 Spout lid; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| 7 Furnace tilting cylinder; | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 8 Hydraulic main tank; | | | | | |
| <i>Hydraulic system check leak</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 11 Furnace roof general cleaning; | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | |
| Check at suction duct on fume hood. | | | | | |
| Position | A | B | C | D | E |
| Air velocity (m/s) | 10 | 10 | 10 | 9 | 10 |
| Air velocity average (A+B+C+D+E)/5 = 9.8 | | | | | |



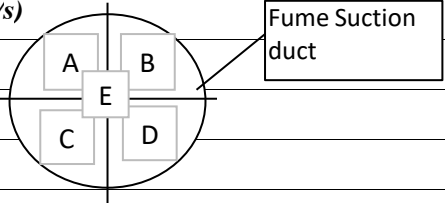
| | | | |
|---|---------------------------|-------------------------------------|--|
| <u>Conclusion.</u> | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | |
| Item | Description | Follow up by | |
| | | | |
| | | | |
| | | | |
| | | | |
| Done by E&M Technician: | Checked by E&M Engineer : | Acceptance by Production Staff : | Approved by Assistant / E&M Manager : |
| Somparn | Nikon | NARUPON | NIKON |
| Date : 12-MAR-24 | Date : 15-MAR-24 | Date: 15-MAR-24 | Date: 15-MAR-24 |

| | | | | | |
|---|--|---|-------------------------------|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet For Holding Furnace maintenance | | | | E&M form No. Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | Casting | | | |
| Equipment | | HFE | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Gear drive for damper control lube oil level check | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| All Steel block lining condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Wire rope sling condition check and paint greasing | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Refractory condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

| | | | | | | | |
|---|------------------------------------|--|--|--------------------|--------------|---|--|
| 6 Spout lid; | | | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| 7 Furnace tilting cylinder; | | | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 8 Hydraulic main tank; | | | | | | | |
| <i>Hydraulic system check leak</i> | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 11 Furnace roof general cleaning; | | | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | | |
| Check at suction duct on fume hood. | | | | | | | |
| Position | A | B | C | D | E |  | |
| Air velocity (m/s) | 9 | 10 | 10 | 9 | 9 | | |
| Air velocity average (A+B+C+D+E)/5 = 9.4 | | | | | | | |
| <u>Conclusion.</u> | | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | | |
| Item | Description | | | | Follow up by | | |
| | MACHINE NOT RUN | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Done by E&M Technician: | | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | | Nikon | | Production Staff : | | Assistant / E&M Manager : | |
| | | | | NARUPON | | NIKON | |
| Date : 12-MAR-24 | | Date : 13-MAR-24 | | Date: 13-MAR-24 | | Date: 13-MAR-24 | |

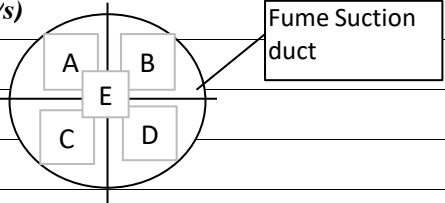
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| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Holding Furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>HFE</u> | | #1 <input checked="" type="checkbox"/> | #2 <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Gear drive for damper control lube oil level check | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| All Steel block lining condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Wire rope sling condition check and paint greasing | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Refractory condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

| | | | | | |
|--|------------------------------------|--|--------------|----|----|
| 6 Spout lid; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| 7 Furnace tilting cylinder; | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok.</i> | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 8 Hydraulic main tank; | | | | | |
| <i>Hydraulic system check leak</i> | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 11 Furnace roof general cleaning; | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | |
| Check at suction duct on fume hood. | | | | | |
| Position | A | B | C | D | E |
| Air velocity (m/s) | 10 | 10 | 11 | 10 | 10 |
| Air velocity average (A+B+C+D+E)/5 = 10.2 | | | | | |

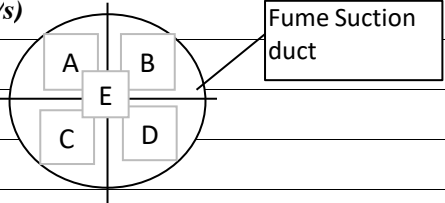


| | | | |
|---|---------------------------|-------------------------------------|--|
| Conclusion. | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | |
| Item | Description | Follow up by | |
| | | | |
| | | | |
| | | | |
| | | | |
| Done by E&M Technician: | Checked by E&M Engineer : | Acceptance by Production Staff : | Approved by Assistant / E&M Manager : |
| Somchai | Nikon | NARUPON | NIKON |
| Date : 19-APR-24 | Date : 22-APR-24 | Date: 22-APR-24 | Date: 22-APR-24 |

| | | | | | |
|---|--|---|-------------------------------|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Holding Furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>HFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Gear drive for damper control lube oil level check | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| All Steel block lining condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Wire rope sling condition check and paint greasing | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Refractory condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

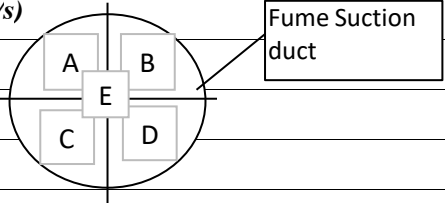
| | | | | | | | |
|---|------------------------------------|--|--|--------------------|--------------|---|--|
| 6 Spout lid; | | | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| 7 Furnace tilting cylinder; | | | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok.</i> | | | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 8 Hydraulic main tank; | | | | | | | |
| <i>Hydraulic system check leak</i> | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 11 Furnace roof general cleaning; | | | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | | |
| Check at suction duct on fume hood. | | | | | | | |
| Position | A | B | C | D | E |  | |
| Air velocity (m/s) | 9 | 9 | 10 | 9 | 9 | | |
| Air velocity average (A+B+C+D+E)/5 = 9.2 | | | | | | | |
| Conclusion. | | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | | |
| Item | Description | | | | Follow up by | | |
| | MACHINE NOT RUN | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Done by E&M Technician: | | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | | Nikon | | Production Staff : | | Assistant / E&M Manager : | |
| | | | | NARUPON | | NIKON | |
| Date : 19-APR-24 | | Date : 20-APR-24 | | Date: 20-APR-24 | | Date: 20-APR-24 | |

| | | | | | |
|---|--|---|-------------------------------|--|--------|
| Meyer Aluminium (Thailand) | | E&M Department | | Mechanical Section | |
| Monthly maintenance check sheet For Holding Furnace maintenance | | | | E&M form No. Rev. 2 Sheet 1 of 2 | |
| Plant | | Casting | | | |
| Equipment | | HFE | | #1 | #2 |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark |
| Flexible joint leak check | | | | | |
| Leak at | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark |
| Gear drive for damper control lube oil level check | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark |
| All Steel block lining condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark |
| Leak at | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark |
| Wire rope sling condition check and paint greasing | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark |
| Leak at | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark |
| Leak at | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark |
| Refractory condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark |

| | | | | | | | |
|---|------------------------------------|--|--|--------------------|--------------|---|--|
| 6 Spout lid; | | | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| 7 Furnace tilting cylinder; | | | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok.</i> | | | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 8 Hydraulic main tank; | | | | | | | |
| <i>Hydraulic system check leak</i> | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | | | |
| | | remark _____ | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 11 Furnace roof general cleaning; | | | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | | | |
| Check at suction duct on fume hood. | | | | | | | |
| Position | A | B | C | D | E |  | |
| Air velocity (m/s) | 9 | 9 | 10 | 10 | 9 | | |
| Air velocity average (A+B+C+D+E)/5 = 9.4 | | | | | | | |
| <u>Conclusion.</u> | | | | | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | | | | | |
| Item | Description | | | | Follow up by | | |
| | - Change male and down spout | | | | Somparn | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Done by E&M Technician: | | Checked by E&M Engineer : | | Acceptance by | | Approved by | |
| Somparn | | Nikon | | Production Staff : | | Assistant / E&M Manager : | |
| | | | | NARUPON | | NIKON | |
| Date : 18-MAY-24 | | Date : 20-MAY-24 | | Date: 20-MAY-24 | | Date: 20-MAY-24 | |

| | | | | | |
|--|--|---|-------------------------------|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| <u>For Holding Furnace maintenance</u> | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>HFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Gear drive for damper control lube oil level check | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| All Steel block lining condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Wire rope sling condition check and paint greasing | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Refractory condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

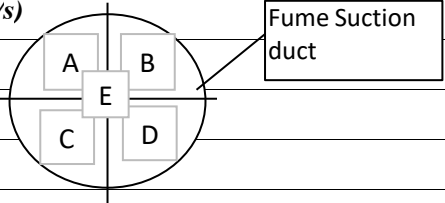
| | | | | | |
|--|------------------------------------|--|--------------|---|---|
| 6 Spout lid; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| 7 Furnace tilting cylinder; | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok.</i> | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 8 Hydraulic main tank; | | | | | |
| <i>Hydraulic system check leak</i> | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | | remark _____ | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | |
| Leak at _____ | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | remark _____ | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | | remark _____ | | |
| 11 Furnace roof general cleaning; | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | | remark _____ | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | |
| Check at suction duct on fume hood. | | | | | |
| Position | A | B | C | D | E |
| Air velocity (m/s) | 9 | 9 | 9 | 9 | 9 |
| Air velocity average (A+B+C+D+E)/5 = 9 | | | | | |



| | | | |
|---|---------------------------|-------------------------------------|--|
| <u>Conclusion.</u> | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | |
| Item | Description | Follow up by | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Done by E&M Technician: | Checked by E&M Engineer : | Acceptance by Production Staff : | Approved by Assistant / E&M Manager : |
| Somparn | Nikon | NARUPON | NIKON |
| Date : 18-MAY-24 | Date : 20-MAY-24 | Date: 20-MAY-24 | Date: 20-MAY-24 |

| | | | | | |
|---|--|---|-------------------------------------|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | Mechanical Section | |
| Monthly maintenance check sheet For Holding Furnace maintenance | | | | E&M form No. Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | Casting | | | |
| Equipment | | HFE | | #1 | #2 |
| | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| | | <input checked="" type="checkbox"/> Clean | <input type="checkbox"/> not clean | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| | | <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Gear drive for damper control lube oil level check | | | | | |
| | | <input type="checkbox"/> low | <input checked="" type="checkbox"/> | <input type="checkbox"/> mid | <input type="checkbox"/> high refill _____ |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| All Steel block lining condition check | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Air cylinder for door closing check leak and function | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak | remark _____ |
| Wire rope sling condition check and paint greasing | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> changed | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| | | <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> not leak | remark _____ |
| Refractory condition check | | | | | |
| | | <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> | <input type="checkbox"/> acceptable remark _____ |

| | | | | | |
|--|------------------------------------|--|--|----|----|
| 6 Spout lid; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| 7 Furnace tilting cylinder; | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok.</i> | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 8 Hydraulic main tank; | | | | | |
| <i>Hydraulic system check leak</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 11 Furnace roof general cleaning; | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | |
| Check at suction duct on fume hood. | | | | | |
| Position | A | B | C | D | E |
| Air velocity (m/s) | 10 | 10 | 11 | 10 | 10 |
| Air velocity average (A+B+C+D+E)/5 = 10.2 | | | | | |

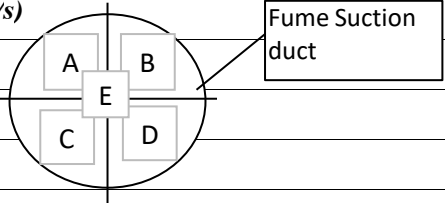


| | | | |
|---|-------------|--------------|--|
| Conclusion. | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | |
| Item | Description | Follow up by | |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|-------------------------|---------------------------|-------------------------------------|--|
| Done by E&M Technician: | Checked by E&M Engineer : | Acceptance by Production Staff : | Approved by Assistant / E&M Manager : |
| Somchai | Nikon | NARUPON | NIKON |
| Date : 21-JUN-24 | Date : 22-JUN-24 | Date: 22-JUN-24 | Date: 22-JUN-24 |

| | | | | | |
|---|--|---|-------------------------------|--|--|
| Meyer Aluminium (Thailand) | | E&M Department | | <u>Mechanical</u> Section | |
| Monthly maintenance check sheet | | | | E&M form No. | |
| For Holding Furnace maintenance | | | | Rev. <u>2</u> Sheet <u>1</u> of <u>2</u> | |
| Plant | | <u>Casting</u> | | | |
| Equipment | | <u>HFE</u> | | #1 <input type="checkbox"/> | #2 <input checked="" type="checkbox"/> |
| 1 Combustion fan; | | | | | |
| Air inlet filter cleaning | | | | | |
| <input checked="" type="checkbox"/> Clean | | <input type="checkbox"/> not clean | | remark _____ | |
| Fan impeller visual for vibration and noise | | | | | |
| <input type="checkbox"/> vibration | | <input type="checkbox"/> noise | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Flexible joint leak check | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 2 Damper; | | | | | |
| Wire rope sling function and damage check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Gear drive for damper control lube oil level check | | | | | |
| <input type="checkbox"/> low | | <input checked="" type="checkbox"/> mid | <input type="checkbox"/> high | | refill _____ |
| 3 Charging door; | | | | | |
| Check condition for door seal and clamp condition | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| All Steel block lining condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Wire rope sling condition check and paint greasing | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> changed | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| <input type="checkbox"/> greasing | | <input type="checkbox"/> cleaning | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| 4 Male spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| 5 Female down spout; | | | | | |
| Air cylinder for door closing check leak and function | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |
| Leak at _____ | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> not leak | remark _____ |
| Refractory condition check | | | | | |
| <input type="checkbox"/> damage | | <input type="checkbox"/> repaired | | <input checked="" type="checkbox"/> acceptable | remark _____ |

| | | | | | |
|---|------------------------------------|--|--|---|---|
| 6 Spout lid; | | | | | |
| <i>Air cylinder for door closing check leak and function</i> | | | | | |
| <input type="checkbox"/> damage | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| 7 Furnace tilting cylinder; | | | | | |
| <i>Hydraulic cylinder check leak</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <i>Hydraulic cylinder turning point greasing for dowel pin and bush (EP0= 3 strok</i> | | | | | |
| <input type="checkbox"/> greasing | <input type="checkbox"/> cleaning | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 8 Hydraulic main tank; | | | | | |
| <i>Hydraulic system check leak</i> | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <i>Hydraulic pump visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| <i>Hydraulic pump coupling visual check for vibration and nois</i> | | | | | |
| <input type="checkbox"/> vibration | <input type="checkbox"/> noise | <input checked="" type="checkbox"/> acceptable | remark _____ | | |
| 9 All furnace Gas pipe leak check and cleaning ; | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 10 All furnace air pipe leak check and cleaning ; | | | | | |
| Leak at _____ | | <input type="checkbox"/> repaired | <input checked="" type="checkbox"/> not leak | | |
| | | remark _____ | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 11 Furnace roof general cleaning; | | | | | |
| <input checked="" type="checkbox"/> clean | <input type="checkbox"/> not clean | remark _____ | | | |
| 12 Furnace door fume duct air velocity check ; (normal average at >=10 m/s) | | | | | |
| Check at suction duct on fume hood. | | | | | |
| Position | A | B | C | D | E |
| Air velocity (m/s) | 9 | 9 | 10 | 9 | 9 |
| Air velocity average (A+B+C+D+E)/5 = 9.2 | | | | | |



| | | | |
|---|-----------------|--|---|
| Conclusion. | | | |
| <input checked="" type="checkbox"/> no need follow up. <input type="checkbox"/> need follow up. | | | |
| Item | Description | Follow up by | |
| | MACHINE NOT RUN | | |
| | | | |
| | | | |
| | | | |
| Done by E&M Technician: <u>Somparn</u> | | Checked by E&M Engineer : <u>Nikon</u> | Acceptance by Production Staff : <u>NARUPON</u> |
| Date : <u>21-JUN-24</u> | | Date : <u>24-JUN-24</u> | Date: <u>24-JUN-24</u> |
| | | Approved by Assistant / E&M Manager : <u>NIKON</u> | Date: <u>24-JUN-24</u> |

FM-04-188

Rev. 0 Sheet 1 of 1

| AC Motor condition check | | | | | | | | | | | | | | |
|--------------------------|----------------------------------|---|---------|---|---------|--|---------|---|---------|---|-------------------------|---------------------------------|--------------|--------------|
| Item | Description | Condition frame Cooling fan&cover | Remarks | Bolt & Nut Base Motor | Remarks | Cable gland Terminal cover | Remarks | Bearing noise | | | | Running current Test on load | | |
| | | | | | | | | DE | Remarks | NDE | Remarks | | | |
| 1 | Flue gas extraction fan M104 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 28.9A | U(A) 10.2 | V(A) 10.1 | W(A) 10.0 |
| 2 | Flume gas extraction fan M107 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 32.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| 3 | Flue Gas Damper M111 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 3.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| 4 | By pass damper M113 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 3.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |

| AC Motor Contactor and Overload set point condition check | | | | | | |
|---|---|------|--------|------------------------|------------------------|--------|
| Item | Description | Good | Damage | Motor Rate Current (A) | Overload Set point (A) | Remark |
| 1 | Flue gas extraction fan Contactor (Good/Damage) | Good | | 32.8A | 38.5 | |
| 2 | Flume gas extraction fan Contactor (Good/Damage) | Good | | 36.5A | 24.5 | |
| 3 | Flue Gas Damper Contactor (Good/Damage) | Good | | 2A | 2 | |
| 4 | By pass damper Contactor (Good/Damage) | Good | | 2A | 2 | |
| | | | | | | |

| All equipment in the machine condition check | | | |
|--|---|-----------------------------|--------|
| Item | Description | Action | Remark |
| 1 | Control Panel Cleaning Inside and Outside | Cleaning inside and outside | |
| 2 | PLC Cleaning and tightening | Cleaning and tightening | |
| 3 | Sensor and limit SW. Cleaning and tightening | Cleaning and tightening | |
| 4 | AC Drive Cleaning | - | |

Remarks :

☒ To make line in square box.

| E&M Department | | | |
|----------------|---------------|-----------|------------|
| Checked | PremprachaoD. | Pichet T. | Supervisor |
| Date | 20 Feb 24 | 4 Mar 24 | Date |
| | | | Somkiead |
| | | | 4 Mar 24 |

| AC Motor condition check | | | | | | | | | | | | | | |
|--------------------------|----------------------------------|---|---------|---|---------|--|---------|---|---------|---|-------------------------|---------------------------------|--------------|-------------|
| Item | Description | Condition frame Cooling fan&cover | Remarks | Bolt & Nut Base Motor | Remarks | Cable gland Terminal cover | Remarks | Bearing noise | | | | Running current Test on load | | |
| | | | | | | | | DE | Remarks | NDE | Remarks | | | |
| 1 | Flue gas extraction fan M104 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 28.9A | U(A) 9.5 | V(A) 10.0 | W(A) 9.8 |
| 2 | Flume gas extraction fan M107 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 32.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| 3 | Flue Gas Damper M111 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 3.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| 4 | By pass damper M113 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 3.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
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| AC Motor Contactor and Overload set point condition check | | | | | | |
|---|---|------|--------|------------------------|------------------------|--------|
| Item | Description | Good | Damage | Motor Rate Current (A) | Overload Set point (A) | Remark |
| 1 | Flue gas extraction fan Contactor (Good/Damage) | Good | | 32.8A | 38.5 | |
| 2 | Flume gas extraction fan Contactor (Good/Damage) | Good | | 36.5A | 24.5 | |
| 3 | Flue Gas Damper Contactor (Good/Damage) | Good | | 2A | 2 | |
| 4 | By pass damper Contactor (Good/Damage) | Good | | 2A | 2 | |
| | | | | | | |

| All equipment in the machine condition check | | | |
|--|---|-----------------------------|--------|
| Item | Description | Action | Remark |
| 1 | Control Panel Cleaning Inside and Outside | Cleaning inside and outside | |
| 2 | PLC Cleaning and tightening | Cleaning and tightening | |
| 3 | Sensor and limit SW. Cleaning and tightening | Cleaning and tightening | |
| 4 | AC Drive Cleaning | - | |

Remarks : ☒ To make line in square box.

| E&M Department | | | |
|----------------|---------------|-----------|------------|
| Checked | PremprachaoD. | Pichet T. | Supervisor |
| Date | 20 Mar 24 | 29 Mar 24 | Date |
| | | | Somkiead |
| | | | 28 Mar 24 |

Routine check

AC.Motor and Aux. monthly check

Plant:

Machine Name

Casting Plant

Extraction Fan System

E&M form No.

Rev. 0

FM-04-188

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| AC Motor condition check | | | | | | | | | | | | | | |
|--------------------------|----------------------------------|---|---------|---|---------|--|---------|---|---------|---|-------------------------|---------------------------------|--------------|--------------|
| Item | Description | Condition frame Cooling fan&cover | Remarks | Bolt & Nut Base Motor | Remarks | Cable gland Terminal cover | Remarks | Bearing noise | | | | Running current Test on load | | |
| | | | | | | | | DE | Remarks | NDE | Remarks | | | |
| 1 | Flue gas extraction fan M104 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 28.9A | U(A) 10.6 | V(A) 10.9 | W(A) 10.3 |
| 2 | Flume gas extraction fan M107 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 32.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| 3 | Flue Gas Damper M111 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 3.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| 4 | By pass damper M113 | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Loose | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input checked="" type="checkbox"/> OK <input type="checkbox"/> Not Ok | Limit 80% Load 3.1A | U(A) 0 | V(A) 0 | W(A) 0 |
| | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Not OK | | <input type="checkbox"/> OK <input type="checkbox"/> Loose | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | <input type="checkbox"/> OK <input type="checkbox"/> Not Ok | | U(A) | V(A) | W(A) |
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| AC Motor Contactor and Overload set point condition check | | | | | | |
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| All equipment in the machine condition check | | | |
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| Item | Description | Action | Remark |
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Remarks :

☒ To make line in square box.

E&M Department

Checked

Date

PremprachaoD.

26 Apr 24

Supervisor

Date

Pichet T.

30 Apr 24

Somkiead

30 Apr 24

FM-04-188

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