

ภาคผนวก ข-30

HyCO Alarm & Trip setting

Alarm and Trip Setting HyCO

SEP'2019

HyCO Alarm&Trip setting (Main Plant)

Update SEP'2019

PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
10PP01	F10001	FALL10001.A	Recycle N2 flow	0	1600	kg/h	-	700	-	-		
10PP01	F10001	FALL10001.A	Recycle N2 flow	0	1600	kg/h	600	-	-	-		
10PP01	F10001	FSSL10001.A	Recycle N2 flow				-	-	-	-		
10PP01	F10002	FDA10002	NG feed flow			%	-	-	-	-		
10PP01	F10002	FALL10002	NG feed flow	0	1900	kg/h	-	500	-	-		
10PP01	F10002	FALL10002	NG feed flow				-	-	-	-	15 min	
10PP01	F10002	FALL10002.A	NG feed flow	0	1900	kg/h	-	500	-	-		
10PP01	F10002	FALL10002.A	NG feed flow	0	1900	kg/h	250	-	-	-	15 min	
10PP01	F10002	FSSL10002.A					-	-	-	-	15 min	
10PP01	F10002	FALL10002.B	NG feed flow	0	1900	kg/h	-	500	-	-		
10PP01	F10002	FALL10002.B	NG feed flow	0	1900	kg/h	250	-	-	-	15 min	
10PP01	F10002	FSSL10002.B					-	-	-	-	15 min	
10PP01	F10002	FALL10002.C	NG feed flow	0	1900	kg/h	-	500	-	-		
10PP01	F10002	FALL10002.C	NG feed flow	0	1900	kg/h	250	-	-	-	15 min	
10PP01	F10002	FSSL10002.C					-	-	-	-	15 min	
10PP01	P10002	PDA10002	NG feed pres.			%	-	-	-	-		
10PP01	T10002	TDA10002	NG feed temp.(TOC FEED TEMP.)			%	-	-	-	-		
10PP01	F10003	FALL10003.A	H2 recycle flow	0	16	kg/h	-	8	-	-		
10PP01	F10003	FAH10003.A	H2 recycle flow	0	16	kg/h	-	-	15	-		
10PP03	T10003	TAH10003	FDG Temp. control R1001	0	500	°C	-	-	390	-		
10PP03	T10003	TAL10003	FDG Temp. control R1002	0	500	°C	-	300	-	-		
10PP04	L10004	LAHH10004	Level in E1012	0	100	%	-	-	-	-	5 sec.	
10PP04	L10004	LSHH10004	Level in E1012	0	100	%	-	-	-	-	5 sec.	
10PP02	F10005	FDA10005	LPG feed flow			%	-	-	-	-		
10PP02	F10005	FALL10005	LPG feed flow	0	2200	kg/h	-	550	-	-		
10PP02	F10005	FALL10005					-	-	-	-	15 min.	
10PP02	F10005	FALL10005.A	LPG feed flow	0	2200	kg/h	-	550	-	-		
10PP02	F10005	FALL10005.A	LPG feed flow	0	2200	kg/h	380	-	-	-	15 min.	
10PP02	F10005	FSSL10005.A					-	-	-	-	15 min.	
10PP02	F10005	FALL10005.B	LPG feed flow	0	2200	kg/h	-	550	-	-		
10PP02	F10005	FALL10005.B	LPG feed flow	0	2200	kg/h	380	-	-	-	15 min.	
10PP02	F10005	FSSL10005.B					-	-	-	-	15 min.	
10PP02	F10005	FALL10005.C	LPG feed flow	0	2200	kg/h	-	550	-	-		
10PP02	F10005	FALL10005.C	LPG feed flow	0	2200	kg/h	380	-	-	-	15 min.	
10PP02	F10005	FSSL10005.C					-	-	-	-	15 min.	
10PP02	F10005	FAHH10005.D					-	-	-	700	5 sec.	
10PP02	F10005	FSHH10005.D					-	-	-	-	5 sec.	
10PP02	F10005	FAHH10005.E					-	-	-	700	5 sec.	
10PP02	F10005	FSHH10005.E					-	-	-	-	5 sec.	
10PP02	F10005	FAHH10005.F					-	-	-	700	5 sec.	
10PP02	F10005	FSHH10005.F					-	-	-	-	5 sec.	
10PP02	P10005	PDA10005	LPG feed pres.			%	-	-	-	-		
10PP02	T10005	TDA10005	LPG feed temp.			%	-	-	-	-		
10PP04	F10006	FALL1006	Steam to carbon ratio (LPG feed)				2.06	-	-	-	5 sec.	
10PP04	F10006	FALL1006.A	Steam to carbon ratio (LPG feed)	0	100	mol/mol	2.06	-	-	-	5 sec.	
10PP04	F10006	FSSL1006.A	Steam to carbon ratio (LPG feed)	0	100	mol/mol	-	-	-	-	5 sec.	
10PP04	F10006		Steam to carbon ratio (LPG feed)	0	100	mol/mol	2.06	-	-	-	5 sec.	
10PP04	F10006	FSSL1006.B	Steam to carbon ratio (LPG feed)	0	100	mol/mol	-	-	-	-	5 sec.	
10PP04	F10006	FALL1006.C	Steam to carbon ratio (LPG feed)	0	100	mol/mol	2.06	-	-	-	5 sec.	
10PP04	F10006	FSSL1006.C	Steam to carbon ratio (LPG feed)	0	100	mol/mol	-	-	-	-	5 sec.	
10PP02	P10006	PDAH10006	Pres. Drop of E1011	0	1	barg	-	-	0.5	-	5 sec.	
10PP04	F10008	FALL1008	Total steam flow (LPG feed)				1300	-	-	-	5 sec.	
10PP04	F10008	FALL1008.A	Total steam flow (LPG feed)	0	6000	kg/h	1300	-	-	-	5 sec.	
10PP04	F10008	FSSL1008.A	Total steam flow (LPG feed)	0	6000	kg/h	-	-	-	-	5 sec.	
10PP04	F10008	FALL1008.B	Total steam flow (LPG feed)	0	6000	kg/h	1300	-	-	-	5 sec.	
10PP04	F10008	FSSL1008.B	Total steam flow (LPG feed)	0	6000	kg/h	-	-	-	-	5 sec.	
10PP04	F10008	FALL1008.C	Total steam flow (LPG feed)	0	6000	kg/h	1300	-	-	-	5 sec.	
10PP04	F10008	FSSL1008.C	Total steam flow (LPG feed)	0	6000	kg/h	-	-	-	-	5 sec.	
10PP03	T10008	TAH10008					-	-	-	-		
10PP05	F10011	FDA10011	R1105 steam flow			%	-	-	-	-		

BMS trip

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
10PP05	F10011	FDA10011.A					-	-	-	-		
10PP05	F10011	FDA10011.A					-	-	-	-		
10PP05	T10011	TDA10011	Process steam temp.			%	-	-	-	-		
10PP05	F10012	FDA10012	Reformer steam flow			%	-	-	-	-		
10PP04	H10012	HA10012					-	-	-	-		
10PP05	P10012	PDA10012	Reformer steam pres.			%	-	-	-	-		
10PP05	T10012	TAL10012	Feed Gas Temp.	0	500	°C	-	350	-	-		
10PP06	P10013	PDAL10013	Pres.Drop CO2 import valve	0	60	barg	-	0.15	-	-		
10PP06	P10013	PDALL10013	Pres.Drop CO2 import valve	0	60	barg	0.1	-	-	-		
10PP06	P10013	PDSSL10013	Pres.Drop CO2 import valve	0	60	barg	0.1	-	-	-		
10PP06	T10013	TAL10013	CO2 import temp.	0	60	°C	-	7	-	-		
10PP04	H10014	HA10014					-	-	-	-		
10PP03	T10014	TAHH10014					-	-	-	420	5 sec.	
10PP03	T10014	TAH10014.A	Temp.1st.Bed of R1001	0	500	°C	-	-	410	-	5 sec.	
10PP03	T10014	TAHH10014.A	Temp.1st.Bed of R1001	0	500	°C	-	-	-	420	5 sec.	
10PP03	T10014	TSHH10014.A					-	-	-	-	5 sec.	
10PP03	T10014	TAH10014.B	Temp.1st.Bed of R1001	0	500	°C	-	-	410	-	5 sec.	
10PP03	T10014	TAHH10014.B	Temp.1st.Bed of R1001	0	500	°C	-	-	-	420	5 sec.	
10PP03	T10014	TSHH10014.B					-	-	-	-	5 sec.	
10PP03	T10014	TAH10014.C	Temp.1st.Bed of R1001	0	500	°C	-	-	410	-	5 sec.	
10PP03	T10014	TAHH10014.C	Temp.1st.Bed of R1001	0	500	°C	-	-	-	420	5 sec.	
10PP03	T10014	TSHH10014.C					-	-	-	-	5 sec.	
10PP03	T10014	TAH10014.C	Temp.1st.Bed of R1001	0	500	°C	-	-	410	-	5 sec.	
10PP03	T10014	TAHH10014.C	Temp.1st.Bed of R1001	0	500	°C	-	-	-	420	5 sec.	
10PP03	T10014	TSHH10014.C					-	-	-	-	5 sec.	
10PP06	F10016	FDA10016				%	-	-	-	-		
10PP06	F10016	FAL10016	CO2/LPG Ratio	0	4500	kg/h	-	400	-	-		
10PP06	F10016	FSL10016	CO2/LPG Ratio	0	100		-	1.2	-	-		
10PP06	F10016	FSSL10016.H	CO2/LPG Ratio	0	100		-	-	-	-		
10PP01	T10016	TAH10016	Ref.gas temp.	0	500	°C	-	-	400	-		
10PP06	F10017	FDA10017				%	-	-	-	-		
10PP03	T10017	TAH10017	OUTLET TEMP. OF R1001	0	500	°C	-	-	400	-		
10PP03	T10017	TAL10017	OUTLET TEMP. OF R1002	0	500	°C	-	370	-	-		
10PP04	F10018	FALL10018	Total steam ratio (LPG feed)				-	-	-	-		
10PP04	F10018	FALL10018.A	Flow ratio steam/LPG	0	100		1.45	-	-	-	5 sec.	
10PP04	F10018	FSL10018.A	Flow ratio steam/LPG	0	100		-	-	-	-	5 sec.	
10PP04	F10018	FALL10018.B	Flow ratio steam/LPG	0	100		1.45	-	-	-	5 sec.	
10PP04	F10018	FSSL10018.B	Flow ratio steam/LPG	0	100		-	-	-	-	5 sec.	
10PP04	F10018	FALL10018.C	Flow ratio steam/LPG	0	100		1.45	-	-	-	5 sec.	
10PP04	F10018	FSL10018.C	Flow ratio steam/LPG	0	100		-	-	-	-	5 sec.	
10PP04	F10506	FALL10506	Total ratio steam (NG feed)	0	100	mol/mol	2.08	-	-	-	5 sec.	
10PP04	F10506	FALL10506.A	Total ratio steam (NG feed)	0	100	mol/mol	2.08	-	-	-	5 sec.	
10PP04	F10506	FSL10506.A	Total ratio steam (NG feed)	0	100	mol/mol	-	-	-	-	5 sec.	
10PP04	F10506	FALL10506.B	Total ratio steam (NG feed)	0	100	mol/mol	2.08	-	-	-	5 sec.	
10PP04	F10506	FSL10506.B	Total ratio steam (NG feed)	0	100	mol/mol	-	-	-	-	5 sec.	
10PP04	F10506	FALL10506.C	Total ratio steam (NG feed)	0	100	mol/mol	2.08	-	-	-	5 sec.	
10PP04	F10506	FSSL10506.C	Total ratio steam (NG feed)	0	100	mol/mol	-	-	-	-	5 sec.	
10PP04	F10508	FALL10508	Total steam flow(NG feed)				-	-	-	-	5 sec.	
10PP04	F10508	FALL10508.A	Total steam flow(NG feed)	0	6000	kg/h	1200	-	-	-	5 sec.	
10PP04	F10508	FSSL10508.A	Total steam flow(NG feed)	0	6000	kg/h	-	-	-	-	5 sec.	
10PP04	F10508	FALL10508.B	Total steam flow(NG feed)	0	6000	kg/h	1200	-	-	-	5 sec.	
10PP04	F10508	FSL10508.B	Total steam flow(NG feed)	0	6000	kg/h	-	-	-	-	5 sec.	
10PP04	F10508	FALL10508.C	Total steam flow(NG feed)	0	6000	kg/h	1200	-	-	-	5 sec.	
10PP04	F10508	FSSL10508.C	Total steam flow(NG feed)	0	6000	kg/h	-	2.17	-	-	5 sec.	
10PP04	F10511	FALL10511.A	Steam to carbon ratio	0	100	mol/mol	2.08	-	-	-		
10PP04	F10511	FALL10511.A	Steam to carbon ratio	0	100	mol/mol	-	1.72	-	-		
10PP04	F10511	FALL10511.B	Total ratio steam to carbon ratio	0	5	mol/mol	1.63	-	-	-		
10PP04	F10511	FALL10511.B	Total ratio steam to carbon ratio	0	5	mol/mol	-	-	-	-		
10PP04	H10512	HA10513					-	-	-	-		
10PP06	F10516	FSSL10516	CO2/TOC ratio	0	100	mol/mol	-	-	-	-		

PV10009, BMS

BMS trip

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
10PP06	F10516	FFSL10516.H					-	-	-	-		
10PP04	F10518	FALL10518	Flow ratio steam/toc	0	100	mol/mol	1.63	-	-	-	5 sec.	
10PP04	F10518	FALL10518.A	Flow ratio steam/toc	0	100	mol/mol	1.63	-	-	-	5 sec.	
10PP04	F10518	FSL10518.A	Flow ratio steam/toc	0	100	mol/mol	-	-	-	-	5 sec.	
10PP04	F10518	FALL10518.B	Flow ratio steam/toc	0	100	mol/mol	1.63	-	-	-	5 sec.	
10PP04	F10518	FSL10518.B	Flow ratio steam/toc	0	100	mol/mol	-	-	-	-	5 sec.	
10PP04	F10518	FALL10518.C	Flow ratio steam/toc	0	100	mol/mol	1.63	-	-	-	5 sec.	
10PP04	F10518	FSL10518.C	Flow ratio steam/toc	0	100	mol/mol	-	-	-	-	5 sec.	
10PP04	H10521	HA10521					-	-	-	-		
10PP04	H10523	HA10524					-	-	-	-		
11PP01	A11001	AAH11001	Conductivityblowdown	0	150	µs/cm	-	-	50	-		
11PP04	B11001	BAL11001	Burner AL				-	Low	-	-		
11PP04	B11001	BSL11001	Burner AL				-	-	-	-		
11PP06	E11001	EALL11001	Fault CM1107				-	-	-	-		
11PP07	F11001	FAL11001				%	-	-	-	-		
11PP07	F11001	FALL11001		0	15000	kg/h	-	-	-	-		
11PP07	F11001	FAL11001.A	Com.air flow	0	15000	kg/h	-	6100	-	-		
11PP07	F11001	FALL11001.A	Com.air flow	0	15000	kg/h	6000	-	-	-	5 sec.	
11PP07	F11001	FSL11001.A	Com.air flow	0	15000	kg/h	-	-	-	-	5 sec.	
11PP07	F11001	FAL11001.B	Com.air flow	0	15000	kg/h	-	6100	-	-		
11PP07	F11001	FALL11001.B	Com.air flow	0	15000	kg/h	6000	-	-	-	5 sec.	
11PP07	F11001	FSL11001.B	Com.air flow	0	15000	kg/h	-	-	-	-	5 sec.	
11PP07	F11001	FAL11001.C	Com.air flow	0	15000	kg/h	-	6100	-	-		
11PP07	F11001	FALL11001.C	Com.air flow	0	15000	kg/h	6000	-	-	-	5 sec.	
11PP07	F11001	FSL11001.C	Com.air flow	0	15000	kg/h	-	-	-	-	5 sec.	
11PP01	L11001	LAH11001	Level control of D1131	0	100	%	-	-	70	-		
11PP01	L11001	LAL11001	Level control of D1132	0	100	%	-	50	-	-		
11PP01	T11001	TAH11001	REF gas temp. control E1122	0	600	°C	-	-	430	-		
11PP01	T11001	TAL11001	REF gas temp. control E1122	0	600	°C	-	390	-	-		
11PP05	U11001	UA11001	Remote lamp reformer start-up				-	-	-	-		
11PP02	Z11001	ZAH11001	IndicHV11001 open				-	-	-	-		
11PP02	Z11001	ZSH11001					-	-	-	-		
11PP04	B11002	BAL11002	Burner AL				-	Low	-	-		
11PP04	B11002	BSL11002	Burner AL				-	-	-	-		
11PP07	E11002	EAL11002	Fault CM1109				-	-	-	-		
11PP07	F11002	FAL11002	Comb. Air flow control	0	15000	kg/h	-	5500	-	-		
11PP01	H11002	HA11002.A	Override				-	-	-	-		
11PP01	H11002	HA11002.B	Override				-	-	-	-		
11PP01	H11002	HA11002.C	Override				-	-	-	-		
11PP01	L11002	LALL11002		0	100	%	50	-	-	-	2 sec.	
11PP01	L11002	LALL11002.A		0	100	%	50	-	-	-	2 sec.	
11PP01	L11002	LSL11002.A		0	100	%	-	-	-	-	2 sec.	
11PP01	L11002	LALL11002.B		0	100	%	50	-	-	-	2 sec.	
11PP01	L11002	LSL11002.B		0	100	%	-	-	-	-	2 sec.	
11PP01	L11002	LALL11002.C		0	100	%	50	-	-	-	2 sec.	
11PP01	L11002	LSL11002.C		0	100	%	-	-	-	-	2 sec.	
11PP02	T11002	TAH11002.C	LPG feed gas temp. R1105	0	600	°C	-	-	440	-		
11PP02	T11002	TAHH11002.C	LPG feed gas temp. R1105	0	600	°C	-	-	-	460		
11PP02	T11002	TAL11002.C	LPG feed gas temp. R1105	0	600	°C	-	370	-	-		
11PP02	T11002	TAH11002.D	NG feed gas temp. R1105	0	600	°C	-	-	530	-		
11PP02	T11002	TAHH11002.D	NG feed gas temp. R1105	0	600	°C	-	-	-	540		
11PP02	T11002	TAL11002.D	NG feed gas temp. R1105	0	600	°C	-	370	-	-		
11PP05	U11002	UA11002	Remote lamp normal operation				-	-	-	-		
11PP02	Z11002	ZAL11002	IndicXV11002 closed				-	-	-	-		
11PP02	Z11002	ZSL11002	IndicXV11002 closed				-	-	-	-		
11PP02	A11003	ADA11003				%	-	-	-	-		
11PP02	A11003	AAL11003	O2 conc. in flue gas	0	10	Vol%	-	1	-	-		
11PP02	A11003	AALL11003.A	O2 conc. in flue gas	0	10	Vol%	0.5	-	-	-		
11PP02	A11003	ASLL11003.A	O2 conc. in flue gas	0	10	Vol%	-	-	-	-		
11PP02	A11003	AALL11003.B	O2 conc. in flue gas	0	10	Vol%	0.5	-	-	-		

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
11PP02	A11003	ASLL11003.B	O2 conc. in flue gas	0	10	Vol%	-	-	-	-		
11PP06	E11003	EL11003	Running CM1107				-	-	-	-		
11PP08	F11003	FAL11003	LPG fuel flow	0	800	kg/h	-	100	-	-		
11PP05	U11003	UA11003	Remote Ready for tightness test				-	-	-	-		
11PP04	B11004	BAL11004	Burner AL				-	-	-	-		
11PP04	B11004	BSL11004	Burner AL				-	-	-	-		
11PP07	E11004	EL11004	Running CM1109				-	-	-	-		
11PP08	F11004	FAL11004	NG fuel flow	0	800	kg/h	-	65	-	-		
11PP02	T11005	TAH11005.A	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.B	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.C	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.D	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.E	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.F	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.G	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.H	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.I	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.K	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.L	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.M	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.N	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.O	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.P	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.Q	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.R	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.S	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP02	T11005	TAH11005.T	Temp. gradient R1105	0	600	°C	-	-	520	-		
11PP05	U11005	UA11005	Remote lamp tightness test processing				-	-	-	-		
11PP01	Z11005	ZA11005	Calibr. AT11001				-	-	-	-		
11PP05	U11006	UL11006	Local lamp tightness test processing				-	-	-	-		
11PP06	E11007	EALL11007	Fault CM1107				-	-	-	-		
11PP05	P11007	PAH11007.A	Reformer boxpres.	-10	1	mbar	-	-	-0.5	-		
11PP05	P11007	PAL11007.A	Reformer boxpres.	-10	1	mbar	-	-3	-	-		
11PP05	P11007	PALL11007.A	Reformer boxpres.	-10	1	mbar	-5	-	-	-	30 sec.	
11PP05	P11007	PSLL11007.A	Reformer boxpres.	-10	1	mbar	-	-	-	-	30 sec.	
11PP05	P11007	PAH11007.B	Reformer boxpres.	-10	1	mbar	-	-	-0.5	-	30 sec.	
11PP05	P11007	PAL11007.B	Reformer boxpres.	-10	1	mbar	-	-3	-	-	30 sec.	
11PP05	P11007	PALL11007.B	Reformer boxpres.	-10	1	mbar	-5	-	-	-	30 sec.	
11PP05	P11007	PSLL11007.B	Reformer boxpres.	-10	1	mbar	-	-	-	-	30 sec.	
11PP05	P11007	PAH11007.C	Reformer boxpres.	-10	1	mbar	-	-	-0.5	-		
11PP05	P11007	PAL11007.C	Reformer boxpres.	-10	1	mbar	-	-3	-	-		
11PP05	P11007	PALL11007.C	Reformer boxpres.	-10	1	mbar	-5	-	-	-	30 sec.	
11PP05	P11007	PSLL11007.C	Reformer boxpres.	-10	1	mbar	-	-	-	-	30 sec.	
11PP05	P11007	PALL11007.D	Reformer boxpres.				-	-	-	0	30 sec.	
11PP05	P11007	PSLL11007.D	Reformer boxpres.				-	-	-	-	30 sec.	
11PP05	P11007	PALL11007.E	Reformer boxpres.				-	-	-	0	30 sec.	
11PP05	P11007	PSLL11007.E	Reformer boxpres.				-	-	-	-	30 sec.	
11PP05	P11007	PALL11007.F	Reformer boxpres.				-	-	-	0	30 sec.	
11PP05	P11007	PSLL11007.F	Reformer boxpres.				-	-	-	-	30 sec.	
11PP05	P11007	PALL11007.G	Reformer boxpres.				-	-	-	-	30 sec.	
11PP05	P11007	PAHH11007.G	Reformer boxpres.				-	-	-	-	30 sec.	
11PP05	U11007	UA11007	Remote lamp ready for ignition				-	-	-	-		
11PP07	E11008	EAL11008	Fault alarm				-	-	-	-		
11PP05	U11008	UL11008	Local lamp ready for ignition				-	-	-	-		
11PP05	P11009	PAH11009	Reformer boxpres. control	-10	1	mbar	-	-	-0.5	-		
11PP05	P11009	PDAH11009				%	-	-	-	-		
11PP05	P11009	PAL11009	Reformer boxpres. control	-10	1	mbar	-	-3	-	-		
11PP02	T11009	TAH11009	Feed gas temp.	0	800	°C	-	-	590	-		

BMStrip

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	OVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
11PPF05	U11009	UA11009	Remote lamp ignition proceeding				-	-	-	-		
11PPF01	F11010	FAL11010	Blowdown sampling flow				-	30	-	-		
11PPF01	F11010	FSL11010	Blowdown sampling flow				-	-	-	-		
11PPF08	P11010	PDAL11010	LPG fuel pipe/ref box(igni)	0	250	mbar	-	-	200	-		
11PPF08	P11010	PDAL11010	LPG fuel pipe/ref box(igni)	0	250	mbar	-	100	-	-		
11PPF05	T11010	TDA11010				%	-	-	-	-		
11PPF05	T11010	TAH11010	Reformer outlet temp. control	700	1000	°C	-	-	880	-		
11PPF05	T11010	TAL11010	Reformer outlet temp. control	700	1000	°C	-	810	-	-		
11PPF05	U11010	UL11010	Local lamp ignition proceeding				-	-	-	-		
11PPF05	T11011	TAHH11011	Ref.gas temp.				-	-	-	-		
11PPF05	T11011	TAH11011.A	Ref.gas temp.	0	1000	°C	-	-	880	-		
11PPF05	T11011	TAHH11011.A	Ref.gas temp.	0	1000	°C	-	-	-	900	5 sec.	
11PPF05	T11011	TSHH11011.A	Ref.gas temp.	0	1000	°C	-	-	-	-	5 sec.	
11PPF05	T11011	TAH11011.B	Ref.gas temp.	700	1000	°C	-	-	880	-		
11PPF05	T11011	TAHH11011.B	Ref.gas temp.	700	1000	°C	-	-	-	900	5 sec.	BMS Trip
11PPF05	T11011	TSHH11011.B	Ref.gas temp.	700	1000	°C	-	-	-	-	5 sec.	
11PPF05	T11011	TAH11011.C	Ref.gas temp.	700	1000	°C	-	-	880	-		
11PPF05	T11011	TAHH11011.C	Ref.gas temp.	700	1000	°C	-	-	-	900	5 sec.	
11PPF05	T11011	TSHH11011.C	Ref.gas temp.	700	1000	°C	-	-	-	-	5 sec.	
11PPF02	U11011	UA11011.A	Fault O2 measurem.				-	-	-	-		
11PPF02	U11011	UA11011.B	Fault O2 measurem.				-	-	-	-		
11PPF06	H11012	HAAOTO11012	Remote/local indic. OM11007				-	-	-	-		
11PPF05	T11012	TAH11012.A	FLG Temp.2 stackdraft	0	1300	°C	-	-	1030	-		
11PPF05	T11012	TAH11012.B	FLG Temp.2 stackdraft	0	1300	°C	-	-	1030	-		
11PPF05	T11012	TAL11012.A	FLG Temp.2 stackdraft	0	1300	°C	-	750	-	-		
11PPF05	T11012	TAL11012.B	FLG Temp.2 stackdraft	0	1300	°C	-	750	-	-		
11PPF08	P11013	PAHH11013	Fuel gas pres.	0	1000	mbar g	-	-	-	160	5 sec.	
11PPF08	P11013	PAH11013.A	Fuel gas pres.	0	1000	mbar g	-	-	140	-		
11PPF08	P11013	PAHH11013.A	Fuel gas pres.	0	1000	mbar g	-	-	-	160	5 sec.	
11PPF08	P11013	PSHH11013.A	Fuel gas pres.	0	1000	mbar g	-	-	140	-	5 sec.	
11PPF08	P11013	PAH11013.B	Fuel gas pres.	0	1000	mbar g	-	-	-	160		
11PPF08	P11013	PAHH11013.B	Fuel gas pres.	0	1000	mbar g	-	-	140	-	5 sec.	
11PPF08	P11013	PSHH11013.B	Fuel gas pres.	0	1000	mbar g	-	-	-	-	5 sec.	
11PPF08	P11013	PAH11013.C	Fuel gas pres.	0	1000	mbar g	-	-	-	160		
11PPF08	P11013	PAHH11013.C	Fuel gas pres.	0	1000	mbar g	-	-	140	-	5 sec.	
11PPF08	P11013	PSHH11013.C	Fuel gas pres.	0	1000	mbar g	-	-	-	-	5 sec.	
11PPF08	P11014	PALL11014					-	-	-	-		
11PPF08	P11014	PALL11014.A	Fuel gas pipe/reformerbox	0	250	mbar	-	3.5	-	-		BMS Trip
11PPF08	P11014	PALL11014.A	Fuel gas pipe/reformerbox	0	250	mbar	2.5	-	-	-	5 sec.	
11PPF08	P11014	PSLL11014.A	Fuel gas pipe/reformerbox	0	250	mbar	2.5	-	-	-	5 sec.	
11PPF08	P11014	PALL11014.B	Fuel gas pipe/reformerbox	0	250	mbar	-	3.5	-	-		
11PPF08	P11014	PALL11014.B	Fuel gas pipe/reformerbox	0	250	mbar	2.5	-	-	-	5 sec.	
11PPF08	P11014	PSLL11014.B	Fuel gas pipe/reformerbox	0	250	mbar	2.5	-	-	-	5 sec.	
11PPF08	P11014	PALL11014.C	Fuel gas pipe/reformerbox	0	250	mbar	-	3.5	-	-		
11PPF08	P11014	PALL11014.C	Fuel gas pipe/reformerbox	0	250	mbar	2.5	-	-	-	5 sec.	
11PPF08	P11014	PSLL11014.C	Fuel gas pipe/reformerbox	0	250	mbar	2.5	-	-	-	5 sec.	
11PPF06	T11014	TAH11014	Comb. Air temp.	0	600	°C	-	-	420	-		
11PPF08	P11015	PAHH11015	Fuel gas pres.	0	1000	mbar g	-	-	-	500	5 sec.	
11PPF08	P11015	PSHH11016	Fuel gas pres.	0	1000	mbar g	-	-	-	-		
11PPF02	T11015	TAH11015	Fug temp. 3 chem. Draught	0	900	°C	-	-	760	-		
11PPF02	P11016	PAL11016	Inlet Press.Prereformer	0	60	barg	-	27	-	-		
11PPF08	P11017	PDAL11017	TOC Fuel Pipe/REF. Box(igni)	0	250	mbar g	-	-	200	-		
11PPF08	P11017	PDAL11017	TOC Fuel Pipe/REF. Box(igni)	0	250	mbar g	-	50	-	-		
11PPF07	H11018	HAAUTO11018	Auto Status indic. OM1109				-	-	-	-		
11PPF06	T11018	TAH11018	FUG TEMP.5 CHIM.DRAUGHT	0	900	°C	-	-	650	-		
11PPF06	T11019	TAH11019	FUG OUT.TEMP. CHIM.DRAUGHT	0	200	°C	-	-	200	-		
11PPF06	T11019	TAL11019	FUG OUT.TEMP. CHIM.DRAUGHT	0	200	°C	-	110	-	-		
11PPF08	P11020	PAHH11020	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	-	-		
11PPF08	P11020	PAH11020.A	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	1900	-		
11PPF08	P11020	PAHH11020.A	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	-	2100	5 sec.	

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
11PP08	P11020	PSHH11020.A	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	-	-	5 sec.	BMS Trip
11PP08	P11020	PAH11020.B	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	1900	-		
11PP08	P11020	PAHH11020.B	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	-	2100	5 sec.	
11PP08	P11020	PSHH11020.B	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	-	-	5 sec.	
11PP08	P11020	PAH11020.C	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	1900	-		
11PP08	P11020	PAHH11020.C	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	-	2100	5 sec.	
11PP08	P11020	PSHH11020.C	LPG FUEL GAS PRES.	0	1000	mbar g	-	-	-	-	5 sec.	
11PP08	P11021	PDAL11021.A	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	250	-	-		
11PP08	P11020	PDALL11021.A	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	-	-	-		
11PP08	P11020	PDALL11021.A	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	-	-	-		
11PP08	P11020	PDALL11021.B	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	250	-	-		
11PP08	P11020	PDALL11021.B	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	-	-	-		
11PP08	P11020	PDALL11021.B	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	-	-	-		
11PP08	P11020	PDALL11021.C	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	250	-	-		
11PP08	P11020	PDALL11021.C	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	-	-	-		
11PP08	P11020	PDALL11021.C	LPG FUEL GAS PRES./REF. BOX	-50	250	mbar g	-	-	-	-		
11PP01	T11024	TAHH11024	REF. GAS TEMP.	0	600	°C	-	-	-	440	5 sec.	
11PP01	T11024	TSHH11024	REF. GAS TEMP.	0	600	°C	-	-	-	-	5 sec.	
11PP02	H11027	HA11027					-	-	-	-		
11PP01	P11027	PAL11027	Process Steam Pres. Control	0	60	barg	-	38	-	-		
11PP02	P11028	PAH11028	Feed Gas Pres.	-60	60	barg	-	-	40	-		
11PP02	T11028	TAHH11028.C	LPG FEED TEMP. CONTROL R1105	0	600	°C	-	-	-	460	5 sec.	
11PP02	T11028	TSHH11028.C	LPG FEED TEMP. CONTROL R1105	0	600	°C	-	-	-	-	5 sec.	
11PP02	T11028	TAHH11028.D	TOC FEED TEMP. CONTROL R1105	0	600	°C	-	-	-	540	5 sec.	
11PP02	T11028	TSHH11028.D	TOC FEED TEMP. CONTROL R1105	0	600	°C	-	-	-	-	5 sec.	
11PP09	P11029	PDAL11029	PRES. DROP FV11006	-50	250	mbar g	-	-5	-	-		
11PP09	P11029	PSL11029	PRES. DROP FV11007	-50	250	mbar g	-	-	-	-		
11PP02	H11031	HO11031	HV ON CONTROL				-	-	-	-		
11PP05	H11034	HA11034	MAIN TRIP REMOTE				-	-	-	-		
11PP05	H11035	HA11035	TRIP INDICATION				-	-	-	-		
11PP05	H11036	HA11036	MAIN TRIP LOCAL				-	-	-	-		
11PP08	H11041	HA11041					-	-	-	-		
11PP08	H11043	HA11043					-	-	-	-		
11PP05	H11057	HA11057	EMERGENCY SHUT DOWN				-	-	-	-		
11PP02	T11505	TAH11505.A	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.B	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.C	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.D	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.E	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.F	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.G	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.H	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.I	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.J	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.K	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.L	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.M	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.N	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.O	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.P	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.Q	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.R	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.S	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
11PP02	T11505	TAH11505.T	Temp. gradient R1105 (For TOC)	0	600	°C	-	-	520	-		
12PP02	E12001	EL12001	Running ME1216.1				-	-	-	-		
12PP02	P12001	PAH12001.A	REF. GAS INLET T1401	0	40	barg	-	-	34	-		
12PP02	P12001	PAL12001.A	REF. GAS INLET T1401	0	40	barg	-	27	-	-		
14PP02	T12001	TAH12001	REF. GAS INLET TEMP. OF E1412	0	300	°C	-	-	205	-		
14PP02	T12001	TAL12001	REF. GAS INLET TEMP. OF E1412	0	300	°C	-	150	-	-		
12PP02	E12002	EAL12002	Fault ME1216.1				-	-	-	-		

HyCO Alarm&Trip setting (Main Plant)

Update SEP'2019

PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
12PP01	L12002	LALL12002	Level of D1231	0	100	%	50	-	-	-	5 sec.	
12PP01	L12002	LSLL12002	Level of D1231	0	100	%	50	-	-	-	5 sec.	
12PP01	T12002	TAH12002	Outlet temp. of E1212	0	300	°C	-	-	250	-		
12PP01	T12002	TAL12002	Outlet temp. of E1212	0	300	°C	-	150	-	-		
12PP02	E12003	EL12003	Running ME1216.2				-	-	-	-		
12PP01	L12003	LAH12003	Level Control of D1231	0	100	%	-	-	64	-		
12PP01	L12003	LAL12003	Level Control of D1231	0	100	%	-	24	-	-		
12PP02	T12003	TAH12003	REF.GAS INLET TEMP. OF D1232	0	120	°C	-	-	80	-		
12PP02	E12004	EAL12004	Fault ME1216.2				-	-	-	-		
12PP02	P12004	PDHH12004	Pres.DROP OF XV12001	0	300	mbar g	-	-	120	-		
12PP02	P12004	PDHHH12004	Pres.DROP OF XV12001	0	300	mbar g	-	-	-	200	5 sec.	
12PP02	P12004	PDSHH12004	Pres.DROP OF XV12001	0	300	mbar g	-	-	-	-	5 sec.	
12PP02	L12005	LALL12005	Level of D1232	0	100	%	50	-	-	-	5 sec.	
12PP02	L12005	LSLL12005	Level of D1232	0	100	%	50	-	-	-	5 sec.	
12PP02	L12006	LAH12006	Level Control. Of D1232	0	100	%	-	-	64	-		
12PP02	L12006	LAL12006	Level Control. Of D1232	0	100	%	-	44	-	-		
12PP02	T12007	TAHH12007	REF. GAS OUTLET TEMP. OF D1232				-	-	-	-		
12PP02	T12007	TAH12007.A	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	65	-		
12PP02	T12007	TAHH12007.A	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	-	90	5 sec.	
12PP02	T12007	TSHH12007.A	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	-	-	5 sec.	
12PP02	T12007	TAH12007.B	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	65	-		
12PP02	T12007	TAHH12007.B	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	-	90	5 sec.	
12PP02	T12007	TSHH12007.B	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	-	-	5 sec.	
12PP02	T12007	TAH12007.C	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	65	-		
12PP02	T12007	TAHH12007.C	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	-	90	5 sec.	
12PP02	T12007	TSHH12007.C	REF. GAS OUTLET TEMP. OF D1232	0	120	°C	-	-	-	-	5 sec.	
12PP02	H12012	HAAUTO12012	AUTO Status Indic. ME1216A				-	-	-	-		
12PP02	H12014	HAAUTO12014	AUTO Status Indic. ME1216B				-	-	-	-		
13PP02	A13001	AAH13001	Demin. Water conductivity	0	2	µs/cm	-	-	0.9	-		
13PP01	E13001	EAL13001	Fault PM1371A				-	L	-	-		
13PP01	L13001	LAH13001	Level in D1332				-	-	50	-		
13PP01	L13001	LSH13001	Level in D1333				-	-	-	-		
13PP02	Z13001	ZA13001	Fault conductivity measurem.				-	-	-	-		
13PP01	E13002	EL13002	Running PM1371A				-	-	-	-		
14PP02	F13002	FAH13002	HP steam flow control	0	1200	kg/h	-	-	950	-		
13PP01	H13002	HAAUTO13002	Remote/local indic. P1371A				-	-	-	-		
13PP01	X13002	XSI3002					-	-	-	-		
13PP01	E13003	EAL13003	Fault PM1371B				-	L	-	-		
13PP02	P13003	PAH13003	Peres. Control of D1331	0	600	mbar g	-	-	500	-		
13PP01	P13003	PAL13004	Peres. Control of D1331	0	600	mbar g	-	200	-	-		
13PP01	P13017	PAL13017	Press. Discharge PM1371A	0	60	barg	-	48	-	-		
13PP01	P13018	PAL13018	Press. Discharge PM1371B	0	60	barg	-	48	-	-		
13PP01	E13004	EL13004	Running PM1371B				-	-	-	-		
13PP02	L13004	LALL13004	Level in D1331			%	40	-	-	-	1 min.	
13PP02	L13004	LSLL13004	Level in D1331			%	-	-	-	-	1 min.	
13PP01	E13005	EAL13005	Running PM1371B				-	-	-	-		
13PP01	H13005	HAAUTO13005	Remote/local indic. P1371B				-	-	-	-		
13PP02	L13005	LAH13005	Level control of D1331	0	100	%	-	-	80	-		
13PP02	L13005	LAL13005	Level control of D1332	0	100	%	-	40	-	-		
13PP03	T13005	TAL13005	HP-steam temp.	0	350	°C	-	240	-	-		
13PP01	E13008	EAL13008	EMERGENCY Steam				-	-	-	-		
13PP02	F13008	FAL13008	Demin water sampling flow			kg/h	-	30	-	-		
13PP02	F13008	FSL13008	Demin water sampling flow			kg/h	-	-	-	-		
14PP03	E14001	EL14001	Running PM1474A				-	-	-	-		
14PP01	F14001	FAL14001	BFW flow to T1401	0	300	kg/h	-	180	-	-		
14PP03	E14002	EAL14002	Fault PM1474A				-	L	-	-		
14PP01	F14002	FAL14002	Lean MDEA flow	0	45000	kg/h	-	12000	-	-		
14PP01	F14002	FALL14002	Lean MDEA flow	0	45000	kg/h	10000	-	-	-	5 sec.	- XV12001, Dose
14PP01	F14002	FSLL14002	Lean MDEA flow	0	45000	kg/h	-	-	-	-	5 sec.	- P1474A/B, Stop
14PP01	L14002	LALL14002.A	Level in T1401	0	100	%	27.5	-	-	-	5 sec.	

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
14PP01	L14002	LSSL14002.A	Level in T1401	0	100	%	-	-	-	-	5 sec.	LV14003A/B, Dose
14PP01	L14002	LALL14002.B	Level in T1401	0	100	%	27.5	-	-	-	5 sec.	
14PP01	L14002	LSSL14002.B	Level in T1401	0	100	%	-	-	-	-	5 sec.	
14PP01	L14002	LALL14002.B	Level in T1401 (Input of LI14003)	0	100	%	27.5	-	-	-	5 sec.	
14PP01	L14002	LSSL14002.B	Level in T1401 (Input of LI14003)	0	100	%	-	-	-	-	5 sec.	
14PP03	E14003	EL14003	Running PM14748				-	-	-	-		
14PP01	L14003	LAH14003	Level control of T1401	0	100	%	-	-	72.5	-		
14PP01	L14003	LAL14003	Level control of T1402	0	100	%	-	27.5	-	-		
14PP01	P14003	PDAH14003	Pres. Drop of T1401	0	100	mbar g	-	-	60	-		
14PP03	E14004	EAL14004	Fault PM14748				-	L	-	-		
14PP03	H14004	HAAUTO14004	Remote/local indic. P1474A				-	-	-	-		
14PP02	L14004	LAH14004	Level in T1404	0	100	%	-	-	60.5	-		
14PP02	L14004	LAL14004	Level in T1405	0	100	%	-	24.5	-	-		
14PP01	P14004	PDAH14004	Pres. Drop of MDEA filters	0	4	bar	-	-	2.2	-		
14PP04	E14005	EL14005	Running PM1473A				-	-	-	-		
14PP02	L14005	LALL14005	Level in T1404	0	100	%	24.5	-	-	-	5 sec.	P1474A/B, Stop
14PP02	L14005	LALL14005.A	Level in T1404	0	100	%	24.5	-	-	-	5 sec.	
14PP02	L14005	LSSL14005.A	Level in T1404	0	100	%	-	-	-	-	5 sec.	
14PP02	L14005	LALL14005.B	Level in T1404	0	100	%	24.5	-	-	-	5 sec.	
14PP02	L14005	LSSL14005.B	Level in T1404	0	100	%	-	-	-	-	5 sec.	
14PP02	L14005	LALL14005.C	Level in T1404	0	100	%	24.5	-	-	-	5 sec.	
14PP02	L14005	LSSL14005.C	Level in T1404	0	100	%	-	-	-	-	5 sec.	
14PP04	E14006	EAL14006	Fault PM1473A				-	L	-	-		
14PP02	T14006	TAH14006	Temp. control of T1404	0	150	°C	-	-	130	-		
14PP02	T14006	TAL14006	Temp. control of T1404	0	150	°C	-	60	-	-		
14PP04	E14007	EL14007	Running PM1473B				-	-	-	-		
14PP03	H14007	HAAUTO14007	Remote/local indic. P1474A				-	-	-	-		
14PP04	E14008	EAL14008	Fault PM1473B				-	L	-	-		
14PP04	L14008	LAHH14008	High level AL of D1441	0	100	%	-	-	-	60		
14PP04	L14008	LSHH14008	High level AL of D1441	0	100	%	-	-	-	-		
14PP02	T14008	TAH14008	CO2 outlet temp. of T1404	0	150	°C	-	120	-	-		
14PP04	L14009	LALL14009	Low level AL of D1441	0	100	%	40	-	-	-		
14PP04	L14009	LSSL14009	Low level AL of D1442	0	100	%	-	-	-	-		
14PP02	P14009	PDAH14009	Pres. Drop of T1404	0	100	mbar	-	-	60	-		
14PP02	T14009	TAH14009	Ref. gas outlet temp. of E1412	0	250	°C	-	-	230	-		
14PP04	L14010	LAH14010	Level control of D1441	0	100	%	-	-	60	-		
14PP04	L14010	LAL14010	Level control of D1441	0	100	%	-	40	-	-		
99PP01	E14011	EL14011	Running CM1408A				-	-	-	-		
14PP04	H14011	HAAUTO140011	Remote/local indic. P1474A				-	-	-	-		
99PP01	E14012	EAL14012	Running CM1408B				-	-	-	-		
14PP05	T14012	TAH14012	Inlet temp. of C1408	0	120	°C	-	-	60	-		
99PP01	E14013	EL14013	Running CM1408B				-	-	-	-		
99PP01	E14014	EAL14014	Fault alarm CM14008B				-	L	-	-		
14PP04	H14014	HAAUTO140014	Remote/local indic. P1473B				-	-	-	-		
14PP05	P14015	PAH14015	Release CO2 pres. Control	0	1	bar g	-	-	0.7	-		
14PP05	P14015	PAL14015	Release CO2 pres. Control	0	1	bar g	-	0.3	-	-		
14PP05	P14020	PAH14020	CO2 COMP Suct. Press. CONTROL	0	1	bar g	-	-	0.7	-		
14PP05	P14020	PAL14020	CO2 COMP Suct. Press. CONTROL	0	1	bar g	-	0.3	-	-		
KR00-12-026	P14310	PAH14310	1 STG. SUC. GAS PRESS	0	6	bar g	-	0.3	-	-		
KR00-12-026	P14310	PAH14310	1 STG. SUC. GAS PRESS	0	6	bar g	0.001	-	-	-		
14PP03	T14021	TAH14021	MDEA outlet temp. of E1414	0	120	°C	-	-	60	-		
14PP04	T14022	TAH14022	QWR temp. of E1415	0	120	°C	-	-	60	-		
14PP01	H14025	HA14025	Override				-	-	-	-		
KR00-12-026	P14312	PAH14312	3 STG. DIS. GAS PRESS	0	60	bar g	-	-	43	-		
KR00-12-026	P14312	PAH14312	3 STG. DIS. GAS PRESS	0	60	bar g	-	-	-	46		
KR00-12-026	T14315	TAH14315	CO2 comp 1st stagedisch	0	200	°C	-	-	155	-		
KR00-12-026	T14315	TAHH14315	CO2 comp 1st stagedisch	0	200	°C	-	-	-	165		
KR00-12-026	T14317	TAH14317	CO2 comp 2nd stagedisch	0	200	°C	-	-	155	-		
KR00-12-026	T14317	TAHH14317	CO2 comp 2nd stagedisch	0	200	°C	-	-	-	165		
KR00-12-026	T14319	TAH14319	CO2 comp 3th stagedisch	0	200	°C	-	-	155	-		

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
KR00-12-026	T14319	TAHH14319	CO2 comp 3th stagedisch	0	200	°C	-	-	-	165		
99PP01	H14031	HAAUTO140031	Auto status indic. CM1408A				-	-	-	-		
99PP01	H14035	HAAUTO140035	Auto status indic. CM1408B				-	-	-	-		
15PP02	F15001	FAH15001.A	SG inlet flow drying stat	0	9000	Nm3/h	-	-	8000	-		
15PP02	F15001	FAH15001.B	SG inlet flow drying stat	0	3500	kg/h	-	-	-	-		
15PP02	F15001	FAL15001.B	SG inlet flow drying stat	0	3500	kg/h	-	-	-	-		
15PP02	F15001	FAH15001.C	SG inlet flow drying stat	0	7500	Nm3/h	-	-	7000	-		
15PP02	F15001	FAL15001.C	SG inlet flow drying stat	0	7500	Nm3/h	-	3000	-	-		
15PP01	T15001	TAH15001	SG outlet temp. of D1531	0	100	°C	-	-	60	-		
15PP01	T15001	TAL15001	SG outlet temp. of D1531	0	100	°C	-	10	-	-		
15PP02	U15001	UA15001	Monitoring time expired				-	-	-	-		
15PP01	L15002	LAH15002	Level AL of D1531				-	-	H	-		
15PP01	L15002	LSH15002	Level AL of D1532				-	-	H	-		
15PP02	P15002	PDAH15002.A	Pressure diff. PI15004-PI15002				-	-	1	-		
15PP02	P15002	PDSH15002.A	Pressure diff. PI15004-PI15002				-	-	-	-		
15PP02	P15002	PDAH15002.A	Pressure diff. PI15004-PI15002				-	-	-	3	5 sec.	
15PP02	P15002	PDSH15002.A	Pressure diff. PI15004-PI15002				-	-	-	-	5 sec.	
15PP02	P15002	PDAH15002.B	Pressure diff. PI15002-PI15013				-	-	3	-		
15PP02	P15002	PDSH15002.B	Pressure diff. PI15002-PI15013				-	-	-	-		
15PP02	T15002	TAH15002	SG inlet temp. of A15001A	0	200	°C	-	-	50	-		
15PP02	T15002	TSH15002	SG inlet temp. of A15001A	0	200	°C	-	-	-	-		
15PP02	T15002	TAL15002	SG inlet temp. of A15001A	0	200	°C	-	120	-	-		
15PP02	T15002	TSL15002	SG inlet temp. of A15001A	0	200	°C	-	-	-	-		
15PP02	U15002	UA15002	ADS stop				-	-	-	-		
15PP02	F15003	FAL15003	H2 Reg. gas flow control	0	150	kg/h	-	13	-	-		
15PP02	T15003	TAH15003	SG outlet temp. of A1501A	0	200	°C	-	-	70	-		
15PP02	T15003	TSH15003	SG outlet temp. of A1501A	0	200	°C	-	-	-	-		
15PP02	T15003	TAL15003	SG outlet temp. of A1501A	0	200	°C	-	130	-	-		
15PP02	T15003	TSL15003	SG outlet temp. of A1501A	0	200	°C	-	-	-	-		
15PP02	P15004	PDAH15004.A	PRESSURE DIFF.PI15002-PI15004	0	10	bar	-	-	1	-		
15PP02	P15004	PDSH15004.A	PRESSURE DIFF.PI15002-PI15004	0	10	bar	-	-	-	-		
15PP02	P15004	PDAH15004.A	PRESSURE DIFF.PI15002-PI15004	0	10	bar	-	-	-	3	5 sec.	
15PP02	P15004	PDSH15004.A	PRESSURE DIFF.PI15002-PI15004	0	10	bar	-	-	-	-	5 sec.	
15PP02	P15004	PDAH15004.B	PRESSURE DIFF.PI15004-PI15013	0	10	bar	-	-	3	-		
15PP02	P15004	PDSH15004.B	PRESSURE DIFF.PI15004-PI15013	0	10	bar	-	-	-	-		
15PP02	T15004	TAH15004	SG INLET TEMP. of A1501B	0	200	°C	-	-	50	-		
15PP02	T15004	TSH15004	SG INLET TEMP. of A1501B	0	200	°C	-	-	-	-		
15PP02	T15004	TAL15004	SG INLET TEMP. of A1501B	0	200	°C	-	120	-	-		
15PP02	T15004	TSL15004	SG INLET TEMP. of A1501B	0	200	°C	-	-	-	-		
15PP03	F15005	FAL15005	Start- up N2 Flow	0	1300	Nm3/h	-	450	-	-		
15PP03	P15005	PDAH15005	PRES. DROP OF XV15002	0	1	bar	-	-	0.2	-		
15PP03	P15005	PDSH15005	PRES. DROP OF XV15002	0	1	bar	-	-	-	-		
15PP02	T15005	TAH15005	SG OUTLET TEMP. OF A1501B	0	200	°C	-	-	70	-		
15PP02	T15005	TSH15005	SG OUTLET TEMP. OF A1501B	0	200	°C	-	-	-	-		
15PP02	T15005	TAL15005	SG OUTLET TEMP. OF A1501B	0	200	°C	-	130	-	-		
15PP02	T15005	TSL15005	SG OUTLET TEMP. OF A1501B	0	200	°C	-	-	-	-		
15PP04	L15006	LAH15006	Level AL of D1541				-	-	-	50	5 sec	
15PP04	L15006	LSH15006	Level AL of D1542				-	-	-	-	5 sec	
15PP01	L15007	LAL15007	Switch alarm of D1531				35	-	-	-	5 sec	
15PP01	L15007	LSL15007	Switch alarm of D1531				-	-	-	-	5 sec	
15PP04	L15008	LAL15008	Switch alarm of D1541				35	-	-	-	5 sec	
15PP04	L15008	LSL15008	Switch alarm of D1541				-	-	-	-	5 sec	
15PP03	T15012	TAHH15012	SG OUTLET TEMP. OF E1526	0	60	°C	-	-	-	-	5 sec	
15PP03	T15012	TAH15012.A	SG OUTLET TEMP. OF E1526	0	60	°C	-	-	45	-		
15PP03	T15012	TAHH15012.A	SG OUTLET TEMP. OF E1526	0	60	°C	-	-	-	50	5 sec	
15PP03	T15012	TSHH15012.A	SG OUTLET TEMP. OF E1526	0	60	°C	-	-	-	-	5 sec	
15PP03	T15012	TAH15012.B	SG OUTLET TEMP. OF E1526	0	60	°C	-	-	45	-		
15PP03	T15012	TAHH15012.B	SG OUTLET TEMP. OF E1526	0	60	°C	-	-	-	50	5 sec	
15PP03	T15012	TSHH15012.B	SG OUTLET TEMP. OF E1526	0	60	°C	-	-	-	-	5 sec	
15PP03	T15012	TAH15012.C	SG OUTLET TEMP. OF E1526	0	60	°C	-	-	45	-		

- KV15010 and KV15011, Do
- XV15002, Dose

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	ASHI		
15PP03	T15012	TAHH15012.C	SG OUTLET TEMP .OF E1526	0	60	°C	-	-	-	50	5 sec	
15PP03	T15012	TSHH15012.C	SG OUTLET TEMP .OF E1526	0	60	°C	-	-	-	-	5 sec	
15PP04	T15014	TAH15014	REGEN.GAS INLET TEMP.OF D1541	0	150	°C	-	-	50	60		PN 18004 Close
16PP07	E16001	EL16001	QM 16008 RUNNING				-	-	-	-		
16PP03	L16001	LAH16001	LevelControl.T1601 (LV16001)	0	100	%	-	-	60	-		
16PP03	L16001	LAL16001	LevelControl.T1601 (LV16001)	0	100	%	-	40	-	-		
16PP03	P16001	PDAH16001	PRES.DROP OF T1601	0	400	mbar	-	-	280	-		
16PP07	E16002	EAL16002	FAULT QM1608				-	-	-	-		
16PP03	L16002	LAH16002	LEVEL CONTROL.T1601 (LV16002)	0	100	%	-	-	60	-		
16PP03	L16002	LAL16002	LEVEL CONTROL.T1601 (LV16002)	0	100	%	-	40	-	-		
16PP04	P16002	PDAH16002	PRES.DROP OF T1602	0	100	mbar	-	-	50	-		
16PP06	E16003	EAL16003	FAULT PM1671A				-	-	-	-		
16PP03	F16003	FAL16003	GH4 WASH FLOW CONTROL.T1601	0	1300	kg/h	-	450	-	-		
16PP04	L16003	LAH16003	LEVEL CONTROL.OF T1602	0	100	%	-	-	60	-		
16PP04	L16003	LAL16003	LEVEL CONTROL.OF T1602	0	100	%	-	40	-	-		
16PP04	P16003	PAH16003	TAIL GAS PRES. CONTROL	0	12	Bar	-	-	8.5	-		
16PP04	P16003	PAL16003	TAIL GAS PRES. CONTROL	0	12	Bar	-	6	-	-		
16PP06	E16004	EL16004	RUNNING PM1671A				-	-	-	-		
16PP10	P16004	PAH16004.A	TAIL GAS FLARE PRES.CONTROL	0	1	Bar	-	-	0.8	-		
16PP06	E16005	EAL16005	FAULT PM1671B				-	-	-	-		
16PP05	L16005	LDA16005	LEVEL CONTROL.OF T1603				-	8	-	-		
16PP05	L16005	LAL16005	LEVEL CONTROL.OF T1603	0	100	%	-	25	-	-		
16PP05	L16005	LALL16005	LEVEL CONTROL.OF T1603	0	100	%	5	-	-	-	5 sec	
16PP05	L16005	LAL16005.A	LEVEL CONTROL.OF T1603	0	100	%	-	25	-	-		
16PP05	L16005	LALL16005.A	LEVEL CONTROL.OF T1603	0	100	%	5	-	-	-	5 sec	
16PP05	L16005	LSL16005.A	LEVEL CONTROL.OF T1603	0	100	%	-	-	-	-	5 sec	
16PP05	L16005	LAL16005.B	LEVEL CONTROL.OF T1603	0	100	%	-	25	-	-		
16PP05	L16005	LALL16005.B	LEVEL CONTROL.OF T1603	0	100	%	5	-	-	-	5 sec	
16PP05	L16005	LSL16005.B	LEVEL CONTROL.OF T1603	0	100	%	-	-	-	-	5 sec	
16PP05	L16005	LAL16005.C	LEVEL CONTROL.OF T1603	0	100	%	-	25	-	-		
16PP05	L16005	LALL16005.C	LEVEL CONTROL.OF T1603	0	100	%	5	-	-	-	5 sec	
16PP05	L16005	LSL16005.C	LEVEL CONTROL.OF T1603	0	100	%	-	-	-	-	5 sec	
16PP05	P16005	PDAH16005	PRES.DROP OF T1603	0	250	mbar	-	-	210	-		
16PP06	E16006	EL16006	RUNNING PM1671B				-	-	-	-		
16PP03	L16006	LAH16006	LEVEL D1633	0	100	%	-	-	95	-		
16PP03	L16006	LAL16006	LEVEL D1633	0	100	%	-	85	-	-		
98PP02	A16009	AAH16009	GH4 ANALYZER	0	200	ppm	-	-	7,8,9	-		
98PP02	A16009	AAHH16009	GH4 ANALYZER	0	200	ppm	-	-	-	10		
98PP02	A16009	ASHH16009	GH4 ANALYZER	0	200	ppm	-	-	-	-		PN16020 Close
98PP02	A16010	AAH16010	H2 ANALYZER	0	3000	ppm	-	-	1500	-		
98PP02	A16010	AAHH16010	H2 ANALYZER	0	3000	ppm	-	-	-	2000		
98PP02	A16010	ASHH16010	H2 ANALYZER	0	3000	ppm	-	-	-	-		PN16020 Close
16PP01	SI6101	SI6101	X1606 SPEED			Hz	390	-	-	-		
16PP02	SI6101	PDH16101	X1606			bar			1.5	2.5		
98PP02	A16011	AAL16011	CO purity ANALYZER	0	100	%	-	97.8	-	-		
98PP02	A16011	ASLL16011	CO purity ANALYZER	0	100	%	97.62	-	-	-		
98PP02	A16011	AALL16011	CO purity ANALYZER	0	100	%	-	-	-	-		PN16020 Close
98PP02	A16013	AAH16013	GH4 ANALYZER	0	100	ppm	-	-	9	-		
98PP02	A16013	AAHH16013	GH4 ANALYZER	0	100	ppm	-	-	-	10		
98PP02	A16013	ASHH16013	GH4 ANALYZER	0	100	%	-	-	-	-		PN16020 Close
99PP01	E16010	EL16010	RUNNING QM1608A				-	-	-	-		
99PP01	E16011	EAL16011	FAULT QM1608A				-	-	-	-		
16PP05	F16011	FAL16011	N2 PURGING OF COLD BOX INSUL.				-	10	-	-		
16PP05	F16011	FSL16011	N2 PURGING OF COLD BOX INSUL.				-	-	-	-		
99PP01	E16012	EL16012	RUNNING QM1608B				-	-	-	-		
16PP10	T16012	TALL16012	H2 fraction temp.				-	-	-	-	5 sec	
16PP10	T16012	TAL16012.A	H2 fraction temp.	0	60	°C	-	20	-	-		

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
16PPF10	T16012	TALL16012.A	H2 fraction temp.	0	60	°C	10	-	-	-	5 sec	- P1671A/B, Stop - KV15015 and KV15017, Dos
16PPF10	T16012	TSLL16012.A	H2 fraction temp.	0	60	°C	-	-	-	-	5 sec	
16PPF10	T16012	TAH16012.A	H2 fraction temp.	0	60	°C	-	-	50	-		
16PPF10	T16012	TAL16012.B	H2 fraction temp.	0	60	°C	-	20	-	-		
16PPF10	T16012	TALL16012.B	H2 fraction temp.	0	60	°C	10	-	-	-	5 sec	- P1671A/B, Stop - KV15015 and KV15017, Dos
16PPF10	T16012	TSLL16012.B	H2 fraction temp.	0	60	°C	-	-	-	-	5 sec	
16PPF10	T16012	TAH16012.B	H2 fraction temp.	0	60	°C	-	-	50	-		
16PPF10	T16012	TAL16012.C	H2 fraction temp.	0	60	°C	-	20	-	-		
16PPF10	T16012	TALL16012.C	H2 fraction temp.	0	60	°C	10	-	-	-	5 sec	- P1671A/B, Stop - KV15015 and KV15017, Dos
16PPF10	T16012	TSLL16012.C	H2 fraction temp.	0	60	°C	-	-	-	-	5 sec	
16PPF10	T16012	TAH16012.C	H2 fraction temp.	0	60	°C	-	-	50	-		
99PPF01	E16013	EAL16013	FAULT CM1608B				-	-	-	-		
16PPF05	F16013	FALL16013	N2 PURGING OF COLD BOX INSUL.				-	10	-	-		
16PPF05	F16013	FSL16013	N2 PURGING OF COLD BOX INSUL.				-	-	-	-		
99PPF01	E16014	EL16014	RUNNING CM1608B				-	-	-	-		
99PPF01	E16015	EAL16015	FAULT CM1608C				-	-	-	-		
16PPF10	T16016	TALL16016	Tail gas temp.				-	-	-	-		
16PPF10	T16016	TAL16016.A	Tail gas temp.	-20	60	°C	-	10	-	-		
16PPF10	T16016	TALL16016.A	Tail gas temp.	-20	60	°C	-10	-	-	-	5 sec	HN16003 and PN16003, Dos
16PPF10	T16016	TSLL16016.A	Tail gas temp.	-20	60	°C	-	-	-	-	5 sec	
16PPF10	T16016	TAL16016.B	Tail gas temp.	-20	60	°C	-	10	-	-		
16PPF10	T16016	TALL16016.B	Tail gas temp.	-20	60	°C	-10	-	-	-	5 sec	HN16003 and PN16003, Dos
16PPF10	T16016	TSLL16016.B	Tail gas temp.	-20	60	°C	-	-	-	-	5 sec	
16PPF10	T16016	TAL16016.C	Tail gas temp.	-20	60	°C	-	10	-	-		
16PPF10	T16016	TALL16016.C	Tail gas temp.	-20	60	°C	-10	-	-	-	5 sec	HN16003 and PN16003, Dos
16PPF10	T16016	TSLL16016.C	Tail gas temp.	-20	60	°C	-	-	-	-	5 sec	
16PPF07	T16024	TALL16024	CO temp. suction side C1608				-	-	-	-	5 sec	
16PPF07	T16024	TAL16016.A	CO temp. suction side C1608	-20	60	°C	-	10	-	-		
16PPF07	T16024	TALL16016.A	CO temp. suction side C1608	-20	60	°C	-10	-	-	-	5 sec	
16PPF07	T16024	TSLL16016.A	CO temp. suction side C1608	-20	60	°C	-	-	-	-	5 sec	
16PPF07	T16024	TAL16016.B	CO temp. suction side C1608	-20	60	°C	-	10	-	-		
16PPF07	T16024	TALL16016.B	CO temp. suction side C1608	-20	60	°C	-10	-	-	-	5 sec	
16PPF07	T16024	TSLL16016.B	CO temp. suction side C1608	-20	60	°C	-	-	-	-	5 sec	
16PPF07	T16024	TAL16016.C	CO temp. suction side C1608	-20	60	°C	-	10	-	-		
16PPF07	T16024	TALL16016.C	CO temp. suction side C1608	-20	60	°C	-10	-	-	-	5 sec	
16PPF07	T16024	TSLL16016.C	CO temp. suction side C1608	-20	60	°C	-	-	-	-	5 sec	
16PPF05	T16023	TSLL16023	T1603 - TOP COL. TEMP.	-200	50	°C	-	-183	-	-		
16PPF05	P16026	PAH16026	Pres. AL of cold boxinsul.			mbar g	-	-	5	-		
16PPF05	P16026	PSH16026	Pres. AL of cold boxinsul.			mbar g	-	-	-	-		
16PPF05	P16027	PAL16027	Pres. AL of cold boxinsul.			mbar g	-	0	-	-		
16PPF05	P16027	PSL16027	Pres. AL of cold boxinsul.			mbar g	-	-	-	-		
16PPF02	T16031	TAL16031	Tail gas inlet temp. Of E1611	-200	50	°C	-	-170	-	-		
16PPF10	P16033	PAH16033	LP CO FLARE PRES. CONTROL	0	3	Bar	-	-	2.9	-		
16PPF02	T16032	TAL16032	CO inlet temp. of E1611	-200	50	°C	-	-170	-	-		
16PPF07	T16035	TAH16035	CO outlet temp. C1608	0	60	°C	-	-	50	-		
16PPF08	T16040	TAHH16040	Outlet temp. 4th stage C1608				-	-	-	-	5 sec	
16PPF08	T16040	TAH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	45	-		
16PPF08	T16040	TAHH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	-	50	5 sec	
16PPF08	T16040	TSHH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	-	-	5 sec	
16PPF08	T16040	TAH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	45	-		
16PPF08	T16040	TAHH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	-	50	5 sec	
16PPF08	T16040	TSHH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	-	-	5 sec	
16PPF08	T16040	TAH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	45	-		
16PPF08	T16040	TAHH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	-	50	5 sec	
16PPF08	T16040	TSHH16040.A	Outlet temp. 4th stage C1608	0	60	°C	-	-	-	-	5 sec	
16PPF06	H16041	HAAUTO16041	Remote/local indic. P1671A				-	-	-	-		
16PPF06	H16043	HAAUTO16043	Remote/local indic. P1671A				-	-	-	-		

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AAH		
16PPF02	T16047	TAH16047	H2 Outlet temp.E1612	-150	-130	°C	-	-	-130	-		
16PPF02	T16047	TAL16047	H2 Outlet temp.E1613	-150	-130	°C	-	-150	-	-		
16PPF09	T16050	TALL16050	Temp.of CO Export from D1633				-	-	-	-	5 sec	
16PPF09	T16050	TAL16050.A	Temp.of CO Export from D1633	-20	60	°C	-	10	-	-		
16PPF09	T16050	TALL16050.A	Temp.of CO Export from D1633	-20	60	°C	-10	-	-	-	5 sec	
16PPF09	T16050	TSL16050.A	Temp.of CO Export from D1633	-20	60	°C	-	-	-	-	5 sec	
16PPF09	T16050	TAL16050.B	Temp.of CO Export from D1633	-20	60	°C	-	10	-	-		
16PPF09	T16050	TALL16050.B	Temp.of CO Export from D1633	-20	60	°C	-10	-	-	-	5 sec	
16PPF09	T16050	TSL16050.B	Temp.of CO Export from D1633	-20	60	°C	-	-	-	-	5 sec	
16PPF09	T16050	TAL16050.C	Temp.of CO Export from D1633	-20	60	°C	-	10	-	-		
16PPF09	T16050	TALL16050.C	Temp.of CO Export from D1633	-20	60	°C	-10	-	-	-	5 sec	
16PPF09	T16050	TSL16050.C	Temp.of CO Export from D1633	-20	60	°C	-	-	-	-	5 sec	
16PPF10	T16059	TALL16059	CO Product Temp.				-	-	-	-	5 sec	
16PPF10	T16059	TAL16059.A	CO Product Temp.	-20	60	°C	-	10	-	-		
16PPF10	T16059	TALL16059.A	CO Product Temp.	-20	60	°C	-10	-	-	-	5 sec	
16PPF10	T16059	TSL16059.A	CO Product Temp.	-20	60	°C	-	-	-	-	5 sec	
16PPF10	T16059	TAL16059.B	CO Product Temp.	-20	60	°C	-	10	-	-		
16PPF10	T16059	TALL16059.B	CO Product Temp.	-20	60	°C	-10	-	-	-	5 sec	
16PPF10	T16059	TSL16059.B	CO Product Temp.	-20	60	°C	-	-	-	-	5 sec	
16PPF10	T16059	TAL16059.C	CO Product Temp.	-20	60	°C	-	10	-	-		
16PPF10	T16059	TALL16059.C	CO Product Temp.	-20	60	°C	-10	-	-	-	5 sec	
16PPF10	T16059	TSL16059.C	CO Product Temp.	-20	60	°C	-	-	-	-	5 sec	
99PPF01	H16062	HAAUTO16062	Remote/local indic. CM1608A				-	-	-	-		
16PPF06	T16063	TAL16063	N2 coupling purging of P1671A	0	60	°C	-	10	-	-		
16PPF06	T16064	TAL16064	N2 coupling purging of P1671B	0	60	°C	-	10	-	-		
99PPF01	H16066	HAAUTO16066	Remote/local indic. CM1608B				-	-	-	-		
99PPF01	H16070	HAAUTO16070	Remote/local indic. CM1608C				-	-	-	-		
16PPF09	P16109	PALL16109	Pres. Of CO Export from D1633	0	16	bar g	7	-	-	-		
16PPF09	P16109	PAL16109	Pres. Of CO Export from D1633	0	16	bar g	-	12.8	-	-		
16PPF09	P16109	PAH16109	Pres. Of CO Export from D1633	0	16	bar g	-	-	13.5	-		
16PPF01	P16104	PDAH16104	Break Pres. Diff	0	15	bar g	-	-	9.5			
16PPF02	P16105	PDAH16104	Break Pres. Diff	0	15	bar g	-	-	-	10.05		
16PPF08	P16500A	PAH	C1608 DISCH. PRESS. 4TH STAGE	0	50	bar g	-	-	27.5	-		
16PPF08	P16500A	PAHH	C1608 DISCH. PRESS. 4TH STAGE	0	50	bar g	-	-	-	29		
16PPF08	P16500B	PAH	C1608 DISCH. PRESS. 4TH STAGE	0	50	bar g	-	-	27.5	-		
16PPF08	P16500B	PAHH	C1608 DISCH. PRESS. 4TH STAGE	0	50	bar g	-	-	-	29		
16PPF08	P16500C	PAH	C1608 DISCH. PRESS. 4TH STAGE	0	50	bar g	-	-	27.5	-		
16PPF08	P16500C	PAHH	C1608 DISCH. PRESS. 4TH STAGE	0	50	bar g	-	-	-	29		
18PPF01	P18001	PAL18001	PSA feed pres.	0	40	bar g	-	27	-	-		
18PPF01	T18001	TAH18001	PSA feed temp.	0	60	°C	-	-	45	-		
18PPF01	T18001	TSHH18001	PSA feed temp.	0	60	°C	-	-	-	-		
18PPF01	A18015	AAH	CO analyzer in H2 product	0	50	ppm	-	-	0.5	-		
18PPF01	A18015	AAHH	CO analyzer in H2 product	0	50	ppm	-	-	-	1		PN18002A Close
18PPF01	A18016	AAH	CH4 analyzer in H2 product	0	50	ppm	-	-	5	-		
18PPF01	A18016	AAHH	CH4 analyzer in H2 product	0	50	ppm	-	-	-	10		PN18002A Close
18PPF01	X18001	XAL18001	Status PSA S/D logic				-	-	-	-		
18PPF01	F18002	FAL18002	PSA N2 purging flow AL			kg/h	-	0.7	-	-		
18PPF01	F18002	FSL18002	PSA N2 purging flow AL			kg/h	-	-	-	-		
18PPF01	P18003	PAH18003	Purge gas to flare pres. Control	0	1.2	bar g	-	-	0.8	-		
89PPF01	A89001	AAH89001.A	GAS DETECT. (BUT.,H2) C1 408				-	-	H	-		
89PPF01	A89001	ASH89001.A	GAS DETECT. (BUT.,H2) C1 408				-	-	-	H		
89PPF01	A89001	AAHH89001.B	GAS DETECT. (BUT.,H2) C1 408				-	-	-	HH		
89PPF01	A89001	ASHH89001.B	GAS DETECT. (BUT.,H2) C1 408				-	-	-	HH		
89PPF01	U89001	UA89001	GAS DETECT. (BUT.,H2) C1 408				-	-	-	-		
89PPF01	A89002	AAL89002	GAS DETECT. (O2) C1 408				-	L	-	-		
89PPF01	A89002	ASL89002	GAS DETECT. (O2) C1 408				-	L	-	-		
89PPF01	U89002	UA89002	GAS DETECT. (O2) C1 408				-	-	-	-		
89PPF01	A89003	AAHH89003	GAS DETECT.(CO)MDEA REGEN.				-	-	-	HH		
89PPF01	A89003	ASHH89003	GAS DETECT.(CO)MDEA REGEN.				-	-	-	HH		
89PPF01	U89003	UA89003	GAS DETECT.(CO)MDEA REGEN.				-	-	-	-		

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	ASH		
89FPF01	A89004	AAH89004	GAS DETECT.(BUT., H2) R1001				-	-	H	-		
89FPF01	A89004	ASHH89004	GAS DETECT.(BUT., H2) R1001				-	-	-	HH		
89FPF01	U89004	UA89004	GAS DETECT.(BUT., H2) R1001				-	-	-	-		
89FPF01	A89005	AAH89005	GAS DETECT.(CO) D1331				-	-	-	HH		
89FPF01	A89005	ASHH89005	GAS DETECT.(CO) D1331				-	-	-	HH		
89FPF01	U89005	UA89005	GAS DETECT.(CO) D1331				-	-	-	-		
89FPF01	A89006	AAH89006	GAS DETECT.(CO) FURNACE				-	-	-	HH		
89FPF01	A89006	ASHH89006	GAS DETECT.(CO) FURNACE				-	-	-	HH		
89FPF01	U89006	UA89006	GAS DETECT.(CO) FURNACE				-	-	-	-		
89FPF01	A89007	AAH89007	GAS DETECT.(BUT., H2) FURNACE				-	-	-	HH		
89FPF01	A89007	ASHH89007	GAS DETECT.(BUT., H2) FURNACE				-	-	-	HH		
89FPF01	U89007	UA89007	GAS DETECT.(BUT., H2) FURNACE				-	-	-	-		
89FPF01	A89008	AAH89008.A	GAS DETECT.(H2) CONT.				-	-	H	-		
89FPF01	A89008	ASHH89008.A	GAS DETECT.(H2) CONT.				-	-	H	-		
89FPF01	A89008	AAH89008.B	GAS DETECT.(H2) CONT.				-	-	-	HH		
89FPF01	A89008	ASHH89008.B	GAS DETECT.(H2) CONT.				-	-	-	HH		
89FPF01	U89008	UA89008	GAS DETECT.(H2) CONT.				-	-	-	-		
89FPF01	A89009	AAH89009.A	GAS DETECT.(CO) CONT.				-	-	H	-		
89FPF01	A89009	ASHH89009.A	GAS DETECT.(CO) CONT.				-	-	H	-		
89FPF01	A89009	AAH89009.B	GAS DETECT.(CO) CONT.				-	-	-	HH		
89FPF01	A89009	ASHH89009.B	GAS DETECT.(CO) CONT.				-	-	-	HH		
89FPF01	U89009	UA89009	GAS DETECT.(CO) CONT.				-	-	-	-		
89FPF01	A89010	AAH89010.A	GAS DETECT.(BUT., H2) CONT.				-	-	H	-		
89FPF01	A89010	ASHH89010.A	GAS DETECT.(BUT., H2) CONT.				-	-	-	HH		
89FPF01	A89010	AAH89010.B	GAS DETECT.(BUT., H2) CONT.				-	-	-	HH		
89FPF01	A89010	ASHH89010.B	GAS DETECT.(BUT., H2) CONT.				-	-	-	HH		
99FPF02	U89010	UAL89010	SYSTEM FAULT HYCO-C-GD01				-	-	-	-		
99FPF02	U89010	USL89010	SYSTEM FAULT HYCO-C-GD01				-	-	-	-		
89FPF01	A89011	AAL89011	GAS DETECT.(O2) CONT.				-	L	-	-		
89FPF01	A89011	ASL89011	GAS DETECT.(O2) CONT.				-	-	-	HH		
89FPF01	A89012	AAH89012	GAS DETECT.(H2) PSA UNIT				-	-	-	HH		
89FPF01	A89012	ASHH89012	GAS DETECT.(H2) PSA UNIT				-	-	-	HH		
89FPF01	A89013	AAH89013	GAS DETECT.(H2) PSA UNIT				-	-	-	HH		
89FPF01	A89013	ASHH89013	GAS DETECT.(H2) PSA UNIT				-	-	-	HH		
89FPF01	A89014	AAH89014	GAS DETECT.(H2) H2 RECYCLE				-	-	-	HH		
89FPF01	A89014	ASHH89014	GAS DETECT.(H2) H2 RECYCLE				-	-	-	HH		
89FPF01	A89015	AAH89015	GAS DETECT.(H2) H2 RECYCLE				-	-	-	HH		
89FPF01	A89015	ASHH89015	GAS DETECT.(H2) H2 RECYCLE				-	-	-	HH		
89FPF01	A89016	AAH89016	GAS DETECT.(CO) DRYING STAT.				-	-	-	HH		
89FPF01	A89016	ASHH89016	GAS DETECT.(CO) DRYING STAT.				-	-	-	HH		
89FPF01	A89017	AAH89017	GAS DETECT.(H2) DRYING STAT.				-	-	-	HH		
89FPF01	A89017	ASHH89017	GAS DETECT.(H2) DRYING STAT.				-	-	-	HH		
89FPF01	A89018	AAH89018	GAS DETECT.(CH4) P1671A				-	-	-	HH		
89FPF01	A89018	ASHH89018	GAS DETECT.(CH4) P1671A				-	-	-	HH		
89FPF01	A89019	AAH89019	GAS DETECT.(CH4) P1671B				-	-	-	HH		
89FPF01	A89019	ASHH89019	GAS DETECT.(CH4) P1671B				-	-	-	HH		
89FPF01	A89020	AAH89020	GAS DETECT.(CO) COLD BOX				-	-	-	HH		
89FPF01	A89020	ASHH89020	GAS DETECT.(CO) COLD BOX				-	-	-	HH		
89FPF01	A89021	AAH89021	GAS DETECT.(H2) COLD BOX				-	-	-	HH		
89FPF01	A89021	ASHH89021	GAS DETECT.(H2) COLD BOX				-	-	-	HH		
89FPF01	A89022	AAH89022.A	GAS DETECT.(CO) C1606				-	-	H	-		
89FPF01	A89022	ASHH89022.A	GAS DETECT.(CO) C1606				-	-	-	HH		
89FPF01	A89022	AAH89022.B	GAS DETECT.(CO) C1606				-	-	-	HH		
89FPF01	A89022	ASHH89022.B	GAS DETECT.(CO) C1606				-	-	-	HH		
89FPF01	A89023	AAH89023.A	GAS DETECT.(CO) C1608				-	-	H	-		
89FPF01	A89023	ASHH89023.A	GAS DETECT.(CO) C1608				-	-	H	-		
89FPF01	A89023	AAH89023.B	GAS DETECT.(CO) C1608				-	-	-	HH		
89FPF01	A89023	ASHH89023.B	GAS DETECT.(CO) C1608				-	-	-	HH		
89FPF01	A89024	AAH89024	GAS DETECT.(CO) CO COMPR.				-	-	-	HH		
89FPF01	A89024	ASHH89024	GAS DETECT.(CO) CO COMPR.				-	-	-	HH		

HyCO Alarm&Trip setting (Main Plant)

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PID	LOOP_NAME	Tag_number	Description	DVS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	ASH		
89FPF01	A89025	AAHH89025	GAS DETECT.(CO)CO EXPANDER				-	-	-	HH		
89FPF01	A89025	ASHH89025	GAS DETECT.(CO)CO EXPANDER				-	-	-	HH		
89FPF01	A89028	ASHH89028	GAS DETECT.(CO2)CO2 COMPR.				-	-	0.5	1.5		UA89000_Y/UA89000_R
89FPF01	A89029	ASHH89029	GAS DETECT.(CO2)CO2 COMPR.				-	-	0.5	1.5		UA89000_Y/UA89000_R
90FPF01	F90001	FAL90001	WARM FLARE GAS HEAD.PURG.AL				-	25	-	-		
90FPF01	F90001	FSL90001	WARM FLARE GAS HEAD.PURG.AL				-	-	-	-		
90FPF02	L90001	LAH90001	LEVEL STAND PIPE WARM FLARE				-	-	50	-		
90FPF02	L90001	LSH90001	LEVEL STAND PIPE WARM FLARE				-	-	-	-		
90FPF02	T90001	TAL90001.A	FLAME TEMP.PILOT BURNER				-	250	-	-		
90FPF02	T90001	TSL90001.A	FLAME TEMP.PILOT BURNER				-	-	-	-		
90FPF02	T90001	TAL90001.B	FLAME TEMP.PILOT BURNER				-	250	-	-		
90FPF02	T90001	TSL90001.B	FLAME TEMP.PILOT BURNER				-	-	-	-		
90FPF02	T90001	TAL90001.C	FLAME TEMP.PILOT BURNER				-	250	-	-		
90FPF02	T90001	TSL90001.C	FLAME TEMP.PILOT BURNER				-	-	-	-		
90FPF02	U90001	UA90001	FAULT IGNITION PANEL				-	-	-	-		
90FPF02	F90002	FAL90002	LPG PILOT GAS FLOW AL	0	14	Nm3/h	-	2	-	-		
90FPF02	F90002	FAH90002	LPG PILOT GAS FLOW AL	0	14	Nm3/h	-	-	7	-		
90FPF02	P90002	PAL90002	IMPORT PRES.LPG PILOT GAS	0	10	bar g	-	1	-	-		
90FPF02	P90002	PAH90002	IMPORT PRES.LPG PILOT GAS	0	10	bar g	-	-	8	-		
90FPF02	L90003	LAH90003	LEVEL AL.FLARE				-	80	-	-		
90FPF02	L90003	LSH90003	LEVEL AL.FLARE				-	-	-	-		
91FPF01	F91001	FAL91001	COLD FLARE GAS HEAD. PURG. AL				-	2	-	-		
91FPF01	F91001	FSL91001	COLD FLARE GAS HEAD. PURG. AL				-	-	-	-		
91FPF01	L91001	LAH91001	LEVEL AL.OF D9131				-	-	50	-		
91FPF01	L91001	LSH91001	LEVEL AL.OF D9131				-	-	-	-		
91FPF01	F91002	FAL91002	COLD LIQUID DRAIN HEADER .AL			Nm3/h	-	3	-	-		
91FPF01	F91002	FSL91002	COLD LIQUID DRAIN HEADER .AL				-	-	-	-		
94FPF01	P94001	PAL94001	N2 IMPORT PRESS. FROM. B.L	0	25	bar g	-	4	-	-		
14FPF01	U94001	UA94001					-	-	-	-		
95FPF01	P95001	PAL95001	Intrument air import press.F	0	10	bar g	-	2	-	-		
98FPF01	H98001	HA98001	Shut down cont.				-	-	-	-		
98FPF02	U98001	UAL98001	Analyzer status AT16009/16010				-	L	-	-		
98FPF02	U98001	USL98001	Analyzer status AT16009/16011				-	L	-	-		
98FPF02	Z98001	ZA98001	Maintenance AL.AT16009				-	-	-	-		
98FPF02	Z98001	ZS98001	Maintenance AL.AT16010				-	-	-	-		
98FPF02	F98002	FSL98002					-	L	-	-		
98FPF02	U98002	UAL98002					-	L	-	-		
98FPF02	U98002	USL98002					-	L	-	-		
98FPF02	Z98002	ZA98002	Maintenance AL.AT16010				-	-	-	-		
98FPF02	Z98002	ZS98002	Maintenance AL.AT16010				-	-	-	-		
98FPF03	U98003	UAL98003	Analyzer status AT15001/15003				-	L	-	-		
98FPF03	U98003	USL98003	Analyzer status AT15001/15003				-	L	-	-		
98FPF03	Z98003	ZA98003	Maintenance AL.AT15003				-	-	-	-		
98FPF03	Z98003	ZS98003	Maintenance AL.AT15003				-	-	-	-		
98FPF02	F98004	FSL98004					-	L	-	-		
98FPF03	U98004	UAL98004	Analyzer status AT15006/15007				-	L	-	-		
98FPF03	U98004	USL98004	Analyzer status AT15006/15007				-	L	-	-		
98FPF03	Z98004	ZA98004	Maintenance AL.AT15006				-	-	-	-		
98FPF03	Z98004	ZS98004	Maintenance AL.AT15006				-	-	-	-		
98FPF03	U98005	UAL98005	Analyzer status AT15002				-	L	-	-		
98FPF03	U98005	USL98005	Analyzer status AT15002				-	L	-	-		
98FPF04	U98006	UAL98006	Analyzer status AT16013				-	L	-	-		
98FPF04	U98006	USL98006	Analyzer status AT16013				-	L	-	-		
98FPF04	Z98006	ZA98006	Maintenance AL.AT15001				-	-	-	-		
98FPF04	Z98006	ZS98006	Maintenance AL.AT15001				-	-	-	-		
98FPF03	F98007	FSL98007					-	L	-	-		
98FPF04	Z98007	ZA98007	Calibr. And zero gas AP11003A				-	-	-	-		
98FPF04	Z98007	ZS98007	Calibr. And zero gas AP11003A				-	-	-	-		
98FPF04	Z98008	ZA98008	Calibr. And zero gas AP11003B				-	-	-	-		
98FPF04	Z98008	ZS98008	Calibr. And zero gas AP11003B				-	-	-	-		

HyCO Alarm&Trip setting (Main Plant)

Update SEP'2019

PID	LOOP_NAME	Tag_number	Description	DCS RANGE							Delay	Effect
				MIN	MAX	UNIT	ALL	AL	AH	AHH		
98PFP03	F98009	FSL98009					-	L	-	-		
98PFP03	Z98009	ZS98009	1=A15002 aktiv,0=A16012 aktiv				-	-	-	-		
98PFP03	F98010	FSL98010					-	L	-	-		
98PFP01	U98010	UA98010					-	-	-	-		
98PFP03	Z98010	ZA98010	Maintenance AL AT15007				-	-	-	-		
98PFP03	Z98010	ZS98010	Maintenance AL AT15007				-	-	-	-		
98PFP03	F98011	FAL98011	Flow AL input AT15002				-	L	-	-		
98PFP03	F98011	FSL98011	Flow AL input AT15002				-	L	-	-		
98PFP03	U98011	UAL98011					-	L	-	-		
98PFP03	U98011	USL98011					-	-	-	-		
98PFP04	F98013	FSL98013					-	-	-	-		
98PFP03	F98019	FSL98019					-	-	-	-		
99PFP02	U99000	UAL99000	System fault HyCO-C-DCS01				-	L	-	-		
99PFP02	U99000	USL99000	System fault HyCO-C-DCS01				-	L	-	-		
99PFP02	U99001	UAL99001	System fault HyCO-C-M01				-	L	-	-		
99PFP02	U99001	USL99001	System fault HyCO-C-M01				-	L	-	-		
99PFP02	U99002	UAL99002					-	L	-	-		
99PFP02	U99002	USL99002					-	L	-	-		
99PFP02	U99003	UAL99003	System fault HyCO-C-ESD01				-	L	-	-		
99PFP02	U99003	USL99003	System fault HyCO-C-ESD01				-	L	-	-		
99PFP02	U99004	UAL99004					-	L	-	-		
99PFP02	U99004	USL99004					-	L	-	-		
99PFP02	U99005	UAL99005	Switch gear 1-PMCC-A				-	L	-	-		
99PFP02	U99005	USL99005	Switch gear 1-PMCC-A				-	L	-	-		
99PFP02	U99006	UAL99006	Switch gear 1-PMCC-B				-	L	-	-		
99PFP02	U99006	USL99006	Switch gear 1-PMCC-B				-	L	-	-		
99PFP02	U99007	UAL99007	Switch gear 1-HV-A				-	L	-	-		
99PFP02	U99007	USL99007	Switch gear 1-HV-A				-	L	-	-		
99PFP02	U99008	UAL99008	Switch gear 1-HV-B				-	L	-	-		
99PFP02	U99008	USL99008	Switch gear 1-HV-B				-	L	-	-		
99PFP02	U99015	UAL99015	Switch gear 1-PMCC-A				-	L	-	-		
99PFP02	U99015	USL99015	Switch gear 1-PMCC-A				-	L	-	-		
99PFP02	U99016	UAL99016	Switch gear 1-PMCC-B				-	L	-	-		
99PFP02	U99016	USL99016	Switch gear 1-PMCC-B				-	L	-	-		
99PFP02	U99017	UAL99017	Switch gear 1-HV-A				-	L	-	-		
99PFP02	U99017	USL99017	Switch gear 1-HV-A				-	L	-	-		
99PFP02	U99018	UAL99018	Switch gear 1-HV-B				-	L	-	-		
99PFP02	U99018	USL99018	Switch gear 1-HV-B				-	L	-	-		
99PFP02	U99019	UAL99019					-	L	-	-		
99PFP02	U99019	USL99019					-	L	-	-		
99PFP02	U99020	UAL99020	UPS FAULT				-	L	-	-		
99PFP02	U99020	USL99020	UPS FAULT				-	L	-	-		
99PFP02	U99021	UAL99021	UPS FAULT DC- DISTRIBUTION				-	L	-	-		
99PFP02	U99021	USL99021	UPS FAULT DC- DISTRIBUTION				-	L	-	-		
99PFP02	U99022	UAL99022	UPS FAULT AC- DISTRIBUTION				-	L	-	-		
99PFP02	U99022	USL99022	UPS FAULT AC- DISTRIBUTION				-	L	-	-		
99PFP02	U99023	UAL99023					-	L	-	-		
99PFP02	U99023	USL99023					-	L	-	-		
99PFP02	U99024	UAL99024					-	L	-	-		
99PFP02	U99024	USL99024					-	L	-	-		
99PFP02	U99025	UAL99025					-	L	-	-		
99PFP02	U99025	USL99025					-	L	-	-		
99PFP02	U99026	UAL99026					-	L	-	-		
99PFP02	U99026	USL99026					-	L	-	-		
99PFP02	U99027	UAL99027					-	L	-	-		
99PFP02	U99027	USL99027					-	L	-	-		

HyCO Alarm&Trip setting (UT)

Update SEP'2019

Tag_In_WW	Tag_PL_C_AB	Description	Alarm(Limit)			
			ALL	AL	AH	AHH
PT81-1	PT81_1	T81 LINTANK PRESSURE	-	35 BarG	44 BarG	-
FT101_1	FT101_1	GAN - UT TO SMR PLANT - LOW RANGE FLOW	-	-	145 Nm2/H	-
FT101_2	FT101_2	GAN - UT TO SMR PLANT - HIGH RANGE FLOW	-	-	-	-
PT101	PT101	GAN SUPPLY PRESSURE	-	10 BarG	-	-
FT201	FT201	INSTRUMENT GAS TO SMR FLOW	-	100 Nm2/Hr	550 Nm2/Hr	-
PT201	PT201	INSTRUMENT GAS TO SMR PRESSURE	-	4 BarG	-	-
LT81-1	LT81_1	T81 LINTANK LEVEL	-	30%	85%	-
PT1301	PT1301	R-938 SUPPLY PRESSURE	-	-	-	-
PT1303	PT1303	NG > FUEL SUPPLY PRESSURE	-	18 BarG	-	-
PT1308	PT1308	NG > FEED SUPPLY PRESSURE	-	39 BarG	-	-
GAS0109	GAS0109	%LEL AT LPG TANK				
PT611	PT611	LPG T611 PRESSURE	-	4.5 BarG	-	-
TT611B	PT612	P90611B - BEARING TEMP	-	-	-	-
PT613	PT613	LPG PUMP DISCH. PRESSURE	-	-	-	-
PT614	PT614	LPG PRESSURE SUCTION P90611A	2 BarG	-	-	-
PT615	PT615	LPG PRESSURE SUCTION P90611B	2 BarG	-	-	-
LT611	LT611	LPG TANK LEVEL	-	-	-	85%
FT612	FT612	LPG PUMP RECIR. FLOWRATE	-	-	-	-
FT611A	FT611A	LPG PUMP RECIR. FLOW A	1025 Kg/Hr	-	-	-
FT611B	FT611B	LPG PUMP RECIR. FLOW B	1026 Kg/Hr	-	-	-
FT611C	FT611C	LPG PUMP RECIR. FLOW C	1027 Kg/Hr	-	-	-
TT611	TT611 No use	LPG TANK TEMPERATURE	-	-	-	-
TT611A	TT611A	P90611A - BEARING TEMP	-	-	-	-
GAS0101	GAS0101	%LEL PIPELINE NEAR REFORMER	-	-	-	-
GAS0110	GAS0110	%LEL AT TOP OF TANK LPG	-	-	-	-
TT911C-1	TT911C_1	TEMP CW SUPPLY TO HYCO	-	20 C	45 C	-
TT91C-1	TT91C_1	TEMP CW RETURN	-	-	50 C	-
PT911C-1	PT911C_1	CW SUPPLY PRESSURE	-	3.5 BarG	-	-
GAS0111	GAS0111	%LEL AT NG COMP	-	-	-	-
FT911C-1	FT911C_1	CW SUPPLY FLOWRATE	-	350 M3/Hr	790 M3/Hr	-
GAS102	GAS102	%LEL H2 VALVE STATION 1	-	-	20	-
GAS103	GAS103	%LEL H2 VALVE STATION 2	-	-	20	-
GAS104	GAS104	%LEL AT T611 OUTLET	-	-	20	-
GAS105	GAS105	%LEL AT T611 OUTSIDE AREA	-	-	20	-
GAS106	GAS106	%LEL AT LPG PUMP	-	-	20	-
GAS107	GAS107	%LEL AT COOLING TOWER	-	-	20	-
GAS108	GAS108	%LEL AT LPG CYLINDER 1	-	-	20	-
PY1303	PY1303	NG > FUEL SUPPLY PRESSURE CONTROL VALVE	-	-	-	-
PY1308	PY1308	NG > FEED SUPPLY PRESSURE CONTROL VALVE	-	-	-	-
LYV611	LYV611	LPG > T611 SUPPLY VALVE SOV90611	-	-	-	-
FYV612	FYV612	LPG PUMP RECIR. FLOW CONTROL SOV90612	-	-	-	-
PT613A	PT613A	Pressure Control VSD P90611A				
PT613B	PT613B	Pressure Control VSD P90611B				
LT91C_1	LT91C_1	WATER LEVEL CT9091C	60	85	90	95
FT100	FT100	MAIN GAN SUPPLY TO HYCO	-	-	-	-
P611A_CT	P611A_CT	LPG PUMP P90611A CURRENT HIGH	-	-	-	-
P611B_CT	P611B_CT	LPG PUMP P90611B CURRENT HIGH	-	-	-	-
LT911	LT911	LEVEL RAW WATER TANK	-	-	-	-
PT85B-1	PT85B_1	T85B HP TANK PRESSURE	38 BarG	-	-	42 BarG
PT851-1	PT851_1	LCO2 DISC PUMP PRESSURE	-	-	44 BarG	45 BarG
PT85A-1	PT85A_1	T85A LP TANK PRESSURE	-	15 BarG	20.5 BarG	-
LT85B-1	LT85B-1	T85A LP TANK LEVEL	20%	30%	85%	95%
LT85A-1	LT85A-1	T85B HP TANK LEVEL	20%	30%	85%	-
TT901202	TT901202	E852 VAP TEMPERATURE	-	60 C	90 C	-
TT851-A	TIS851A_1	P90851A DISC TEMPERATURE	-	-	-5 C	0 C
TISL851A-2	TAH851A_RTD	P90851A DISTANCE PIECE TEMPERATURE	0 C	-	-	-
FT1202	FT1202	NG FUEL > PACKAGE BOILER	-	-	-	-
PT1202	PT1202	STEAM > CO2 VAPORIZER PRESSRE	-	-	-	-
PT1201	PT1201	STEAM PACKAGE BOILER PRESSURE	-	-	-	-
FT1201-1	FT1201_1	STEAM PACKAGE BOILER FLOW 1	-	-	-	-
TT1201	TT1201	STEAM PACKAGE BOILER TEMP.	-	-	-	-
FT1201-2	FT1201_2	STEAM PACKAGE BOILER FLOW 2	-	-	-	-
TI851B_1	TI851B_1	P90851B DISC TEMPERATURE	-	-	-5 C	0 C
TISL851B-2	TAH851B_RTD	P90851B DISTANCE PIECE TEMPERATURE	0 C	-	-	-
PY851-1	PY851_1	CO2 RECIRC. T85A < HP PUMP VALVE PCV90851-1	-	-	-	-

Tag_In_WW	Tag_PLC_AB	Description	Alarm(Limit)			
			ALL	AL	AH	AHH
PY1202	PY1202	STEAM > CO2 VAPORIZER PRESSRE CONTROL VALVE	-	-	-	-
PT81-1	PT81-1_F		-	-	-	-
LT81-1	LT81-1_F		-	-	-	-
	TT0105	TEMP STREAM HEADER	-	-	-	-
EYV612-1	EYV612-1	LPG P90611B SUCTION VALVE ECV90612-1 COMM	-	-	-	-
FIC612	FIC612	LPG PUMP RECIR. FLOWRATE CONTROL	-	-	-	-
LAHH91C_1_OUT	LAHH91C_1_OUT	CW TOWER LEVEL HIGH HIGH	-	-	Yes	-
PIC1303	PIC1303	NG > FUEL SUPPLY PRESSURE CONTROL	-	18 BarG	-	-
FY612	FY612	LPG PUMP RECIR. FLOWRATE CONTROL VALVE	-	-	-	-
PIC1308	PIC1308	NG FEED SUPPLY PRESSURE	-	39 BarG	-	-
PIC1202	PIC1202	STEAM > CO2 VAPORIZER PRESSRE CONTROL	-	-	-	-
PIC851-1	PIC851_1	CO2 RECIRC. T85A < HP PUMP CONTROL	-	-	-	-
LIT914		DMW TANK LEVEL	-	-	-	-
LI90916	L90916	Waster water tank	5	10	85	90

Update SEP'2019

C10501 Alarm And Trip Setting														
PID	LOOP_NAME	Tag_Number	Description	Normal	DCS RANGE			Alarm Setpoint				Delay	Effect	
					MIN	MAX	UNIT	ALL	AL	AH	AHH			
BD50.001	TI10539 (1002D)	TAH10539A	Temperature discharge side	70	0	160	°c	-	-	80	-	No	C10501 SHUTDOWN	
		TAH10539B						-	-	80	-	No		
		TAHH10539A						-	-	-	110	No		
		TAHH10539B						-	-	-	110	No		
BD50.001	PI10535 (1002D)	PAH10535A	Pressure discharge side	44	0	60	Barg	-	-	48	-	No	C10501 SHUTDOWN	
		PAH10535B						-	-	48	-	No		
		PAHH10535A						-	-	-	49	No		
		PAHH10535B						-	-	-	49	No		
BD50.001	PI10534 (1002D)	PAL10534A	Pressure suction side	27.5	0	60	Barg	-	26	-	-	No	C10501 SHUTDOWN	
		PAL10534B						-	26	-	-	No		
		PALL10534A						25	-	-	-	No		
		PALL10534B						25	-	-	-	No		
BD50.001	TI10543 (1002D)	TAH10543A	Temperature discharge side	40	0	100	°c	-	-	50	-	No	C10501 SHUTDOWN	
		TAH10543B						-	-	50	-	No		
		TAHH10543A						-	-	-	55	No		
		TAHH10543B						-	-	-	55	No		
BD50.001	TI10551	TAH10551	Temperature cooling water outlet	35	0	60	°c	-	-	50	-	No	C10501 SHUTDOWN	
		TAHH10551						-	-	-	55	No		
BD50.001	FS10550	FAL10550	Flow switch low cooling water outlet	-	0	15	qum/hr	-	6	-	-	No	C10501 SHUTDOWN	
BD50.001	PI10571	PAL10571	N2 purge packing	1	0	2.5	Barg	-	0.7	-	-	No		
BD50.001	PI10572	PAL10572	N2 purge inter piece	1	0	2.5	Barg	-	0.7	-	-	No		
BD50.001	PI10561 (1002D)	PAL10561A	Crank case oil pressure	3	0	6	Barg	-	2	-	-	No		C10501 SHUTDOWN
		PAL10561B						-	2	-	-	No		
		PALL10561A						1.5	-	-	-	No		
		PALL10561B						1.5	-	-	-	No		
BD50.001	TI10562	TAH10562	Crank case oil temp	42	0	100	°c	-	-	55	-	No	C10501 SHUTDOWN	
		TAHH10562						-	-	-	65	No		
BD50.001	VT10570	VAH10570	Vibration transmitter	1	0	12.7	mm/s	-	-	8	-	No	C10501 SHUTDOWN	
BD50.001	TS10591	TAH10591	Thermistor Temperature Motor	-			°c	-	-	120	-	No		
		TAHH10591						-	-	-	130	No		
16002312-T-D-101-01	DPI10594	DPAL10594	Differential pressure indicator of M-1905	50	0	1500	mbar	-	35	-	-	No	C10501 SHUTDOWN	
		DPAH10594						-	-	500	-	No		
		DPALL10594						25	-	-	-	No		
16002312-T-D-101-01	PI10594	PAL10594	Pressure outlet M-1905	30	0	60	Barg	-	26	-	-	No		
16002312-T-D-101-01	FI10595	FAL10595	H2 feed mixing	8	0	25	kg/hr	-	5	-	-	2 mins.	Close FV10595	
		FAH10595						-	-	18	-			
		FALL10595						3	-	-	-			

C10502 Alarm And Trip Setting

Update

SEP'2019

PID	LOOP_NAME	Tag_Number	Description	Normal	DCS RANGE							Delay	Effect
					MIN	MAX	UNIT	ALL	AL	AH	AHH		
637400-01-02 Sheet 1 of 4	TI10540 (1002D)	TAH10540A	Temperature discharge side	70	0	160	°C	-	-	80	-	No	C10502 SHUTDOWN
		TAH10540B						-	-	80	-	No	
		TAHH10540A						-	-	-	110	No	
		TAHH10540B						-	-	-	110	No	
637400-01-02 Sheet 1 of 4	PI10537 (1002D)	PAH10537A	Pressure discharge side	44	0	60	Barg	-	-	48	-	No	C10502 SHUTDOWN
		PAH10537B						-	-	48	-	No	
		PAHH10537A						-	-	-	49	No	
		PAHH10537B						-	-	-	49	No	
637400-01-02 Sheet 1 of 4	PI10536 (1002D)	PAL10536A	Pressure suction side	27.5	0	60	Barg	-	26	-	-	No	C10502 SHUTDOWN
		PAL10536B						-	26	-	-	No	
		PALL10536A						25	-	-	-	No	
		PALL10536B						25	-	-	-	No	
637400-01-02 Sheet 1 of 4	TI10544 (1002D)	TAH10544A	Temperature discharge side	40	0	100	°C	-	-	50	-	No	C10502 SHUTDOWN
		TAH10544B						-	-	50	-	No	
		TAHH10544A						-	-	-	55	No	
		TAHH10544B						-	-	-	55	No	
637400-01-02 Sheet 3 of 4	TI10553	TAH10553	Temperature cooling water outlet	35	0	60	°C	-	-	50	-	No	C10502 SHUTDOWN
		TAHH10553						-	-	-	55	No	
637400-01-02 Sheet 3 of 4	FS10552	FAL10552	Flow switch low cooling water outlet	-	0	15	gum/hr	-	6	-	-	No	C10502 SHUTDOWN
637400-01-02 Sheet 4 of 4	PI10573	PAL10573	N2 purge packing	1	0	2.5	Barg	-	0.7	-	-	No	
637400-01-02 Sheet 4 of 4	PI10574	PAL10574	N2 purge inter piece	1	0	2.5	Barg	-	0.7	-	-	No	
637400-01-02 Sheet 2 of 4	PI10563 (1002D)	PAL10563A	Crank case oil pressure	3	0	6	Barg	-	2	-	-	No	
		PAL10563B						-	2	-	-	No	C10502 SHUTDOWN
		PALL10563A						1.5	-	-	-	No	
		PALL10563B						1.5	-	-	-	No	C10502 SHUTDOWN
637400-01-02 Sheet 2 of 4	TI10565	TAH10565	Crank case oil temp	42	0	100	°C	-	-	55	-	No	C10502 SHUTDOWN
		TAHH10565						-	-	-	65	No	
637400-01-02 Sheet 4 of 4	VT10572	VAH10572	Vibration transmitter	1	0	12.7	mm/s	-	-	8	-	No	C10502 SHUTDOWN
637400-01-02 Sheet 3 of 4	TS10593	TAH10593	Thermistor Temperature Motor	-			°C	-	-	120	-	No	
		TAHH10593						-	-	-	130	No	C10502 SHUTDOWN
16002312-T-D-101-01	DPI10594	DPAL10594	Differential pressure indicator of M-1905	50	0	1500	mbar	-	35	-	-	No	C10502 SHUTDOWN
		DPAH10594						-	-	500	-	No	
		DPALL10594						25	-	-	-	No	
16002312-T-D-101-01	PI10594	PAL10594	Pressure outlet M-1905	30	0	60	Barg	-	26	-	-	No	
16002312-T-D-101-01	FI10595	FAL10595	H2 feed mixing	8	0	25	kg/hr	-	5	-	-	2 mins.	Close FV10595
		FAH10595						-	-	18	-		
		FALL10595						3	-	-	-		

ภาคผนวก ข-31

การตรวจสอบ



NEW TATTON LIMITED PARTNERSHIP

Valve Function Test & Calibration Report

Customer: **Linde Thailand Public Co., Ltd.**
Plant: **HyCO-TAR23**

Job No. **2310-0091**
Report No. **CAL-NTT23-0310**
Date Entered: **21/10/2023**

Tag No. **14.FV-11006**

Manufacturer	Samson	S/N	454806/01
Valve Model	3241	Type	Globe valve
Size x Port x Cv	4" x CV 190 ME	Class	ANSI 300 RF
Plug characteristic	EQ%	Trim F.	Un-balanced
Body Material	A216 WCB	Trim	1.4006
Gland Packing	MFGR's std.	Gasket	Graphite
Failure Position	<input checked="" type="radio"/> Fail Closed <input type="radio"/> Fail Open <input type="radio"/> Fail Hold <input type="radio"/> Other		
Actuator Model	3271	Maker	Samson
Actuator Type	Spring-Diaphragm	act.size	700 cm2
Spring Range	0.8 - 2.4 Bar	Supply	4.0 Bar
Max/Min. Stopper	None	Stroke	30 mm.
Positioner maker	SIEMENS	Input	4 - 20 mA
Model	PS2-6DR5010	Type	I/P

Scope Of Work

- ☒ Overhaul body
- ☐ Overhaul actuator
- ☐ Re-gland packing
- ☒ Seat leakage test
- ☒ Body pressure test
- ☒ Calibration
- ☒ Function test



STD	FCI 70-2 CL. IV	AS FOUND	AS LEFT
Seat Leakage Test Table	Test Media	Air	Air
	Test Designation	P1	P1
	Test Pressure	4.0 Bar	4.0 Bar
	Supply air to Act	0 Bar	0 Bar
	Allowance	22.5 l/min	22.5 l/min
	Actual read	6 l/min	10.00 l/min
	Test Result	Passed	

Performance Testing Table

Standard Value(s)			Reading Data (%)							
STD	Source	Opening	BEFORE				AFTER(AS Left)			
	(mA)	(%)	UP	Error	DOWN	Error	UP	Error	DOWN	Error
0	4	0	-0.7	-0.7	-0.7	-0.7	0	0.0	0	0.0
25	8	25	24.4	-0.6	25.1	0.1	24.9	-0.1	25	0.0
50	12	50	49.9	-0.1	50.1	0.1	50	0.0	50.1	0.1
75	16	75	74.9	-0.1	75.4	0.4	75	0.0	75.2	0.2
100	20	100	99.8	-0.2	99.8	-0.2	100	0.0	100.9	0.9
Stroke Time (SEC.)			Shut-Open		7.12		Shut-Open		6.29	
			Open-Shut		8.95		Open-Shut		9.47	
Starting Point			4.400 mA				4.100 mA			
Opening Characteristic			<div><input checked="" type="checkbox"/> Linear <input type="checkbox"/> Customized</div> <div><input type="checkbox"/> EQ% <input type="checkbox"/> On-Off</div> <div><input type="checkbox"/> QO</div>							

Valve Accessories

- ☐ Booster Relay
- ☐ Quick Exhaust
- ☐ Min./Max.stopper
- ☐ Handwheel
- ☐ Lock-up valve
- ☐ FB Transmitter
- ☐ Prox.switches
- ☐ Speed Controller
- ☐ Limit Switches
- ☒ Solenoid Valve

Reference Test Tools	Tester	Model	Serial No.	Cert.No.
	Fluke	789	42970108	E230018
	Kobold	0-10 BAR	1105389402	P230022

Actuator Leak Test

Test Media	Air	Test Media	Nitrogen
Test Press.	4.0 Bar	Test Press.	47.0 Bar
Period	2.0 Minute(s)	Period	5.0 Minute(s)
Result	Passed	Result	Passed

Body Pressure Test

Part Replacement Table

Part name	Description	Q'ty
Gland packing	V-Teflon	1 set
Body gasket	Graphite	1
Feedback	PTFE (Pin Bushing)	1
PRESSURE GAUGE	0 - 6.0 Bar	1

Work Activities

- ☒ External parts visual check
- ☒ Air tubing/fitting leak check
- ☒ Valve movement & travel check
- ☒ Function check
- ☒ Fail Safe Action check
- ☒ Cable connection tightness check
- ☒ Loop Test
- ☒ Sealed device's cover for waterproof

Solenoid Valve Spec.

Maker **HERION**
Model _____
Voltage **24 VDC**
Port conn. **12 mm.**
No.Port **3/2**
Pilot _____

Result Of Testing

All Function Test are correctly & passed

Note

Feedback Transmitter Table

Feedback /IOUT Reading (mA)									
IOUT		AS FOUND				AS LEFT			
STD	Command	UP	Error	DOWN	Error	UP	Error	DOWN	Error
0	4								
25	8								
50	12								
75	16								
100	20								

ACCESSORIES	Maker	De-energized	Energized
	HERION	<input checked="" type="radio"/> Valve CLOSE <input type="radio"/> Valve OPEN	<input type="radio"/> Valve CLOSE <input checked="" type="radio"/> Valve OPEN
	SOV.model	From _____ To _____	From _____ To _____
	Limit Switches Function Display	Position Close <input type="radio"/> YES <input type="radio"/> NO Position Open <input type="radio"/> YES <input type="radio"/> NO	

Add recommend for further information

Picture of Inspection



A condition of valve body before clean.



The condition of the inner of valve body after clean and recondition.



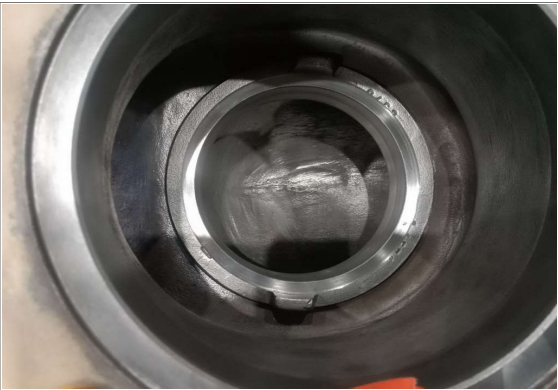
A condition of plug before clean & lapping.



The metal touch surface of seat ring was good after clean and lapping.



A condition of seat ring before clean & lapping.



The metal touch surface of seat ring was good after clean and lapping.



Bonnet before clean.



Bonnet was good after clean and polish.



The new soft parts of body were inspected before replacement on this maintenance period.



The new PRESSURE GAUGE.



This valve has a seat leakage tested and executed a body pressure test, the result of tested was good.



This valve has a seat leakage tested and executed a body pressure test, the result of tested was good.



Overall view of valve before maintenance.



Overall view of valve after maintenance.