





OWNER:  شرکت سست و سویی توهمه ایران (سهامی عامه)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT							EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	
	CAUSE & EFFECT CHART LIST FOR EMERGENCY INSTRUMENT AIR COMPRESSOR							 Netherlands	
MC :  شرکت سست و سویی توهمه ایران (سهامی عامه)								Project	Area
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CAUSE & EFFECT CHART LIST FOR EMERGENCY INSTRUMENT AIR COMPRESSOR

01	12/11/2021	For approval			AV	KP	PW	
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DOCUMENT TITLE: 17811-27B
Cause & Effect chart for instrument air Compressor

CAUSE				EFFECT	Tag. Number	N/A	N/A	XY-71101	XY-71102	XAL-715	XL-71103	XL-71108	XL-71104	XL-71109	PY-1101
Instrument Tag	Signal	Type	Description		Component	MOTOR START / STOP	HEATER START / STOP	LOAD / UNLOAD VALVE	WATER INLET VALVE	COMMON ALARM TO DCS	COMMON ALARM LAMP LCP	COMMON ALARM LAMP UCP	COMMON TRIP LAMP LCP	COMMON TRIP LAMP UCP	RECYCLE VALVE
PB-71103	ESD	BUTTON	EMERGENCY SHUT DOWN LCP							X		X	X		
PB-71107	ESD	BUTTON	EMERGENCY SHUT DOWN UCP							X		X	X		
HS-715-SD-1	ESD	ESD	EMERGENCY SHUT DOWN ESD							X		X	X		
PB-71101	START	BUTTON	START COMPRESSOR LCP	Note 3				E	E						ST
PB-71105	START	BUTTON	START COMPRESSOR UCP	Note 3				E	E						ST
PB-71102	STOP	BUTTON	STOP COMPRESSOR LCP												
PB-71106	STOP	BUTTON	STOP COMPRESSOR UCP												
PIT-71103	TRANSMITTER	HH	PACKAGE INLET PRESSURE HIGH HIGH							X		X	X		
PIT-71103	TRANSMITTER	LL	PACKAGE INLET PRESSURE LOW LOW							X		X	X		
PIT-71104	TRANSMITTER	LL	COMPRESSOR OIL PRESSURE LOW LOW							X		X	X		
TIT-71102	TRANSMITTER	HH	COMPRESSOR OUTLET TEMPERATURE HIGH HIGH							X		X	X		
VT-71101	TRANSMITTER	HH	COMPRESSOR VIBRATION HIGH HIGH							X		X	X		
PIT-71107	TRANSMITTER	HH	PACKAGE OUTLET PRESSURE HIGH HIGH							X		X	X		
PIT-71107	TRANSMITTER	LL	PACKAGE OUTLET PRESSURE LOW LOW							X		X	X		
PIT-71107	TRANSMITTER	H	PACKAGE OUTLET PRESSURE UNLOAD / STOP	Note 2						X					
PIT-71107	TRANSMITTER	L	PACKAGE OUTLET PRESSURE LOAD / START	Note 2						X					
PIT-71107	TRANSMITTER	CONTROL	PACKAGE OUTLET PRESSURE CONTROL	Note 2											C
TIT-71101	TRANSMITTER	H	PACKAGE INLET TEMPERATURE HIGH							X	X	X			
FIT-71101	TRANSMITTER	L	COOLING WATER FLOW LOW							X	X	X			
N/A	MOTOR	CONTROL	MOTOR RUNNING FEEDBACK TRIP	Note 1						X		X	X		
N/A	MOTOR	CONTROL	MOTOR FAULT							X		X	X		
N/A	HEATER	CONTROL	HEATER RUNNING FEEDBACK ALARM							X	X	X			
N/A	HEATER	CONTROL	HEATER FAULT							X	X	X			



Legend:

ST = Start

SP = Stop

I = Interlock

X = Action

E = Energize

DE = De-energize

C = Control

NOTES:

1. MOTOR FEEDBACK TRIP, 2 SECOND AFTER START SIGNAL IS SEND AND MOTOR IS NOT SENDING FEEDBACK, THE PACKAGE IS TRIPPED

2. START AND STOP ON LOAD ON UNLOAD IS BASED ON THE TIMERS SPECIFIED IN THE CONTROL PHILOSOPHY

3. LOADING AFTER 30 SECONDS AFTER START AS PER CONTROL PHILOSOPHY

4. HEATER WILL BE STARTED WHEN COMPRESSOR IS STOPPED, TEMPERATURE WILL BE CONTROLLED AUTOMATICALLY FROM A SENSOR IN THE HEATER AND A CONTROLLER IN THE DISTRIBUTION PANEL

