












OWNER:  شرکت سست و سویی تهر ایران (سهامی خاص)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	P&ID FOR NITROGEN GAS BOOSTER						 Netherlands		
MC :   شرکت سست و سویی تهر ایران (سهامی خاص)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-03A	BU	20	VD	303	PR	DWG	0013	Rev.:	Page
								01	1 of 4

- Reply sheet shall be submitted by vendor.
- Symbol, Legend and abbreviation shall be submitted by vendor.
- All instruments tag no. procedure in nitrogen compressor shall be same as follow:
PG-1015X → 5X your sequence number
- Please clarify whether C-1002 and C-7080 have one UCP for both or each of them have a separate UCP.

P&ID FOR GAS BOOSTER

 شرکت سست و سویی تهر ایران (سهامی خاص)		 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT	
Document Review					
Issue Purpose:			FA		
Result Code: AP,AN,CM,RE,NC			CM		
Next Status : IFC,IFA,IFI,AFC,AB			IFA		
Responsible Department			MECHANICAL		
Commented Date			Sep.22.2021		
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.					

01	09/09/2021	For approval	KP	JR	PW	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P

OWNER:  شرکت سست و هوئی آوند ایرانین (سهایی ناسی)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR: 		
	P&ID FOR NITROGEN GAS BOOSTER								
MC :  	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-03A	BU	20	VD	303	PR	DWG	0013	Rev.:	Page
								01	2 of 4

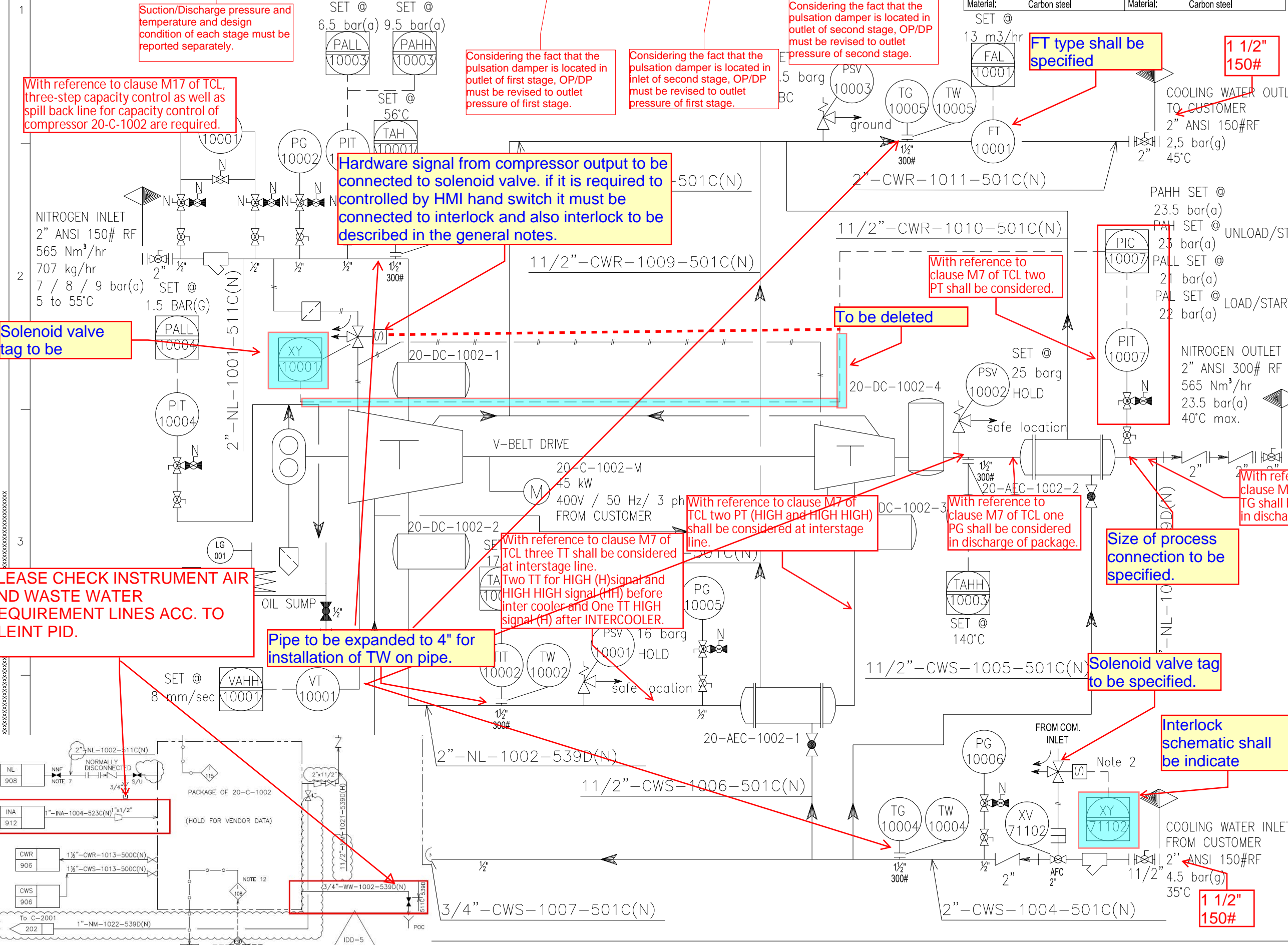
TABULATION OF REVISED PAGES

Page	D00	D01	D02	D03	D04
1.	X	X			
2.	X	X			
3.	X	X			
4.	X	X			
5.					
6.					
7.					
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31.					
32.					
33.					
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Page	D00	D01	D02	D03	D04
35.					
36.					
37.					
38.					
39.					
40.					
41.					
42.					
43.					
44.					
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COMPRESSOR	MAIN MOTOR	PULS. DAMPER 1ST STAGE INLET	PULS. DAMPER 1ST STAGE OUTLET	PULS. DAMPER 1ST STAGE INLET	PULS. DAMPER 1ST STAGE OUTLET	INTER COOLER	AFTER COOLER
Tagnumber: 20-C-1002 Type: 2-stage oilfree piston Compressor capacity: 565 Nm ³ /hr Discharge pressure: 23.5 bar(a) Speed: 400 rpm Discharge temperature: 134°C / 64°C	Tagnumber: 20-C-1002-M Rated power: 45 kW Speed: 1485 rpm Power supply: 400 V / 50 Hz / 3 ph Nominal current: TBC Ingress protection: IP 55 Hazardous area class: Ex II 3G IIB T3, Eex'd	Tagnumber: 20-DC-1002-1 Volume: TBC OP / DP: 7 to 9 bar(a) / 13.5 bar(a) OT / DT: 134°C / 0 to 170°C Design: AMSE VIII. Div. 1 Material: Carbon steel	Tagnumber: 20-DC-1002-2 Volume: TBC OP / DP: 7 to 9 bar(a) / 13.5 bar(a) OT / DT: 134°C / 0 to 170°C Design: AMSE VIII. Div. 1 Material: Carbon steel	Tagnumber: 20-DC-1002-3 Volume: TBC OP / DP: 7 to 9 bar(a) / 13.5 bar(a) OT / DT: 50°C / 0 to 80°C Design: AMSE VIII. Div. 1 Material: Carbon steel	Tagnumber: 20-DC-1002-4 Volume: TBC OP / DP: 7 to 9 bar(a) / 13.5 bar(a) OT / DT: 64°C / 0 to 80°C Design: AMSE VIII. Div. 1 Material: Carbon steel	Tagnumber: 20-AEC-1002-1 Flow air side: 565 Nm ³ /hr Flow water side: 4.3 m ³ /hr OP / DP(shell): 14.5 bar(a) / 25 bar(g) OP / DP(tubes): 4.5 bar(g) / 10 bar(g) OT / DT(shell): 180°C / 0 to 210°C OT / DT(tubes): 35°C / 0 to 95°C Design: TEMA C, AMSE VIII. Div. 1 Material: Carbon steel	Tagnumber: 20-AEC-1002-2 Flow air side: 565 Nm ³ /hr Flow water side: 1.4 m ³ /hr OP / DP(shell): 14.5 bar(a) / 25 bar(g) OP / DP(tubes): 4.5 bar(g) / 10 bar(g) OT / DT(shell): 180°C / 0 to 210°C OT / DT(tubes): 35°C / 0 to 95°C Design: TEMA C, AMSE VIII. Div. 1 Material: Carbon steel

GENERAL NOTES	
NOTES:	
1.	All signals mentioned in P&ID will be transferred to FCS via Modbus TCP/IP communication link
2.	CW valve will open on compressor start and close on compressor stop
Following items must be report:	
1.	Inlet T/Outlet T (oC) (Tube)
2.	Inlet T/Outlet T (oC) (Shell)
3.	Inlet T/Outlet P (barg) (Tube)
4.	Inlet T/Outlet P (barg) (Shell)
placement.	
after completion	
motor order	
Considering the fact that "Inter Cooler" is located in outlet of first stage and "After Cooler" is located in outlet of second stage, The condition of them are different.	
DWG. No.	xxxxxxx



With reference to clause M17 of TCL, three-step capacity control as well as spill back line for capacity control of compressor 20-C-1002 are required.

Suction/Discharge pressure and temperature and design condition of each stage must be reported separately.

Hardware signal from compressor output to be connected to solenoid valve. if it is required to be controlled by HMI hand switch it must be connected to interlock and also interlock to be described in the general notes.

Considering the fact that the pulsation damper is located in outlet of first stage, OP/DP must be revised to outlet pressure of first stage.

Considering the fact that the pulsation damper is located in inlet of second stage, OP/DP must be revised to outlet pressure of second stage.

Considering the fact that the pulsation damper is located in outlet of second stage, OP/DP must be revised to outlet pressure of second stage.

FT type shall be specified

1 1/2" 150#

Solenoid valve tag to be

To be deleted

With reference to clause M7 of TCL two PT shall be considered.

Size of process connection to be specified.

With reference to clause M7 of TCL one TG shall be considered in discharge of package.

With reference to clause M7 of TCL two PT (HIGH and HIGH HIGH) shall be considered at interstage line.

With reference to clause M7 of TCL one PG shall be considered in discharge of package.

With reference to clause M7 of TCL three TT shall be considered at interstage line. Two TT for HIGH (H) signal and HIGH HIGH signal (HH) before inter cooler and One TT HIGH signal (H) after INTERCOOLER.

Pipe to be expanded to 4" for installation of TW on pipe.

Solenoid valve tag to be specified.

Interlock schematic shall indicate

PLEASE CHECK INSTRUMENT AIR AND WASTE WATER REQUIREMENT LINES ACC. TO CLIENT PID.

REV. DATE	09/09/20	PURPOSE OF ISSUE (P.O.I)	For approval	KP	CS	KP	JL
OWNER:	MC:		CONTRACTOR:				
PROJECT:			BUSHEHR PETROCHEMICAL COMPANY MEG PLANT				
DRAWING TITLE: P&ID FOR NITROGEN GAS BOOSTER							
CONTRACT NO.	SCALE	SIZE	CLASS	1	PHASE	D	
52-98/445	XX	A0					
DOCUMENT NO.	PROJECT	AREA	PHASE	MRQ No.	DIS.	DOC.	SEQ.
OWNER DOC. NO.	BU-20-VD-303-PR-DWG-0013						
							1 OF 2

