







OWNER:  شرکت سست و سویی آسود ایرانین (سهامی خاص)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	P&ID FOR NITROGEN GAS BOOSTER								
MC :  شرکت سست و سویی آسود ایرانین (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
								09	1 of 4

## P&ID FOR GAS BOOSTER

 شرکت سست و سویی آسود ایرانین (سهامی خاص)	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
<b>Document Review</b>		
Issue Purpose:	AFC	
Result Code: AP,AN,CM,RE,NC	AN	
Next Status : IFC,IFA,IFI,AFC,AB	AFC	
Responsible Department	MECHANICAL	
Commented Date	Sep/29/2022	
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.		

Document revision shall be revised.



09	21/09/2022	Approved for Construction	KP	JR	PW	
07	18/08/2022	Approved for Construction	KP	JR	PW	
06	14/07/2022	Approved for Construction	KP	JR	PW	
05	01/06/2022	Approved for Construction	KP	JR	PW	
04	05/05/2022	Approved for Construction	KP	JR	PW	
03	10/03/2022	Approved for Construction	KP	JR	PW	
02	23/02/2022	Approved for Construction	KP	JR	PW	
01	04/11/2021	For approval	KP	JR	PW	
00	09/09/2021	For approval	KP	JR	PW	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
					Class: 1	Phase: P



A		B		C		D	
COMPRESSOR	MAIN MOTOR	PULS. DAMPER 1ST STAGE INLET	PULS. DAMPER 1ST STAGE OUTLET	PULS. DAMPER 2ND STAGE INLET	PULS. DAMPER 2ND STAGE OUTLET	INTER COOLER	AFTER COOLER
Tagnumber: 20-C-1002	Tagnumber: 20-C-1002-M	Tagnumber: 20-DC-1002-1	Tagnumber: 20-DC-1002-2	Tagnumber: 20-DC-1002-3	Tagnumber: 20-DC-1002-4	Tagnumber: 20-AEC-1002-1	Tagnumber: 20-AEC-1002-2
Type: 2-stage oilfree piston	Rated power: 45 kW	Volume: 90L	Volume: 80L	Volume: 34L	Volume: 45L	Flow N2 side: 565 Nm3/hr	Flow N2 side: 565 Nm3/hr
Compressor capacity: 565 Nm <sup>3</sup> /hr	Speed: 1485 rpm	OP / DP: 7 to 9 bar(a) / 13.5 bar(a)	OP / DP: 14.5 bar(a) / 25 bar(a)	OP / DP: 14.5 bar(a) / 25 bar(a)	OP / DP: 23.5 bar(a) / 26 bar(a)	Flow water side: 4.3 m3/hr	Flow water side: 1.4 m3/hr
Discharge pr. 1st/2nd: 13.5 / 23.5 bar(a)	Power supply: 400 V / 50 Hz / 3 ph	OT / DT: 5 to 55°C / 0 to 85°C	OT / DT: 134°C / 0 to 170°C	OT / DT: 50°C / 0 to 85°C	OT / DT: 83°C / 0 to 100°C	OP / DP(shell): 14.5 bar(a) / 26 bar(a)	OP / DP(shell): 23.5 bar(a) / 26 bar(a)
Design pr. 1st/2nd: 18 / 26 bar(a)	Nominal current: TBC	Design: AMSE VIII. Div. 1	Design: AMSE VIII. Div. 1	Design: AMSE VIII. Div. 1	Design: AMSE VIII. Div. 1	OP / DP(tubes): 4.5 bar(g) / 10 bar(g)	OP / DP(tubes): 4.5 bar(g) / 10 bar(g)
Speed: 400 rpm	Ingress protection: IP 55	Material: Carbon steel	Material: Carbon steel	Material: Carbon steel	Material: Carbon steel	OT / DT(shell): 134°C / 0 to 210°C	OT / DT(shell): 83°C / 0 to 210°C
Discharge temperature: 134°C (83°C)	Hazardous area class: Ex II 3G IIB T3, Eex'd					OT / DT(tubes): 35°C / 0 to 95°C	OT / DT(tubes): 35°C / 0 to 95°C
Desing temperature: 170° / 170°C						Design: TEMA C, AMSE VIII. Div. 1	Design: TEMA C, AMSE VIII. Div. 1
						Material: Carbon steel	Material: Carbon steel

**GENERAL NOTES**

**NOTES:**

- All signals mentioned in P&ID will be transferred to FCS via Modbus TCP/IP communication link
- CW valve will open on compressor start and close on compressor stop

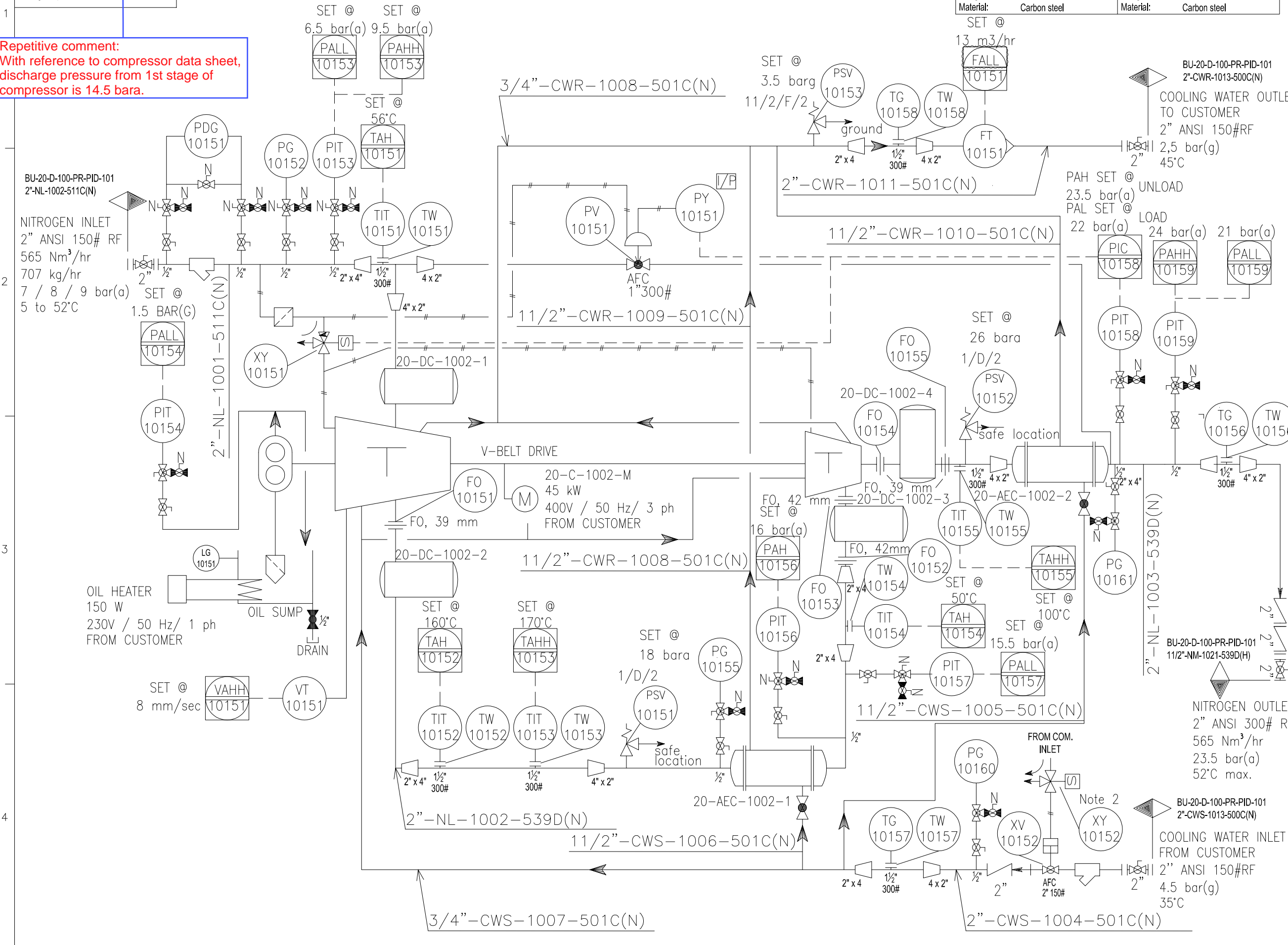
**HOLDS:**

- Deleted
- Deleted

**Tie-In-Point:**

TP-1: Nitrogen Compressor inlet  
 TP-2: Nitrogen Compressor outlet  
 TP-3: Main cooling water supply  
 TP-4: Main cooling water return

**Repetitive comment:**  
 With reference to compressor data sheet, discharge pressure from 1st stage of compressor is 14.5 bara.



REFERENCE DRAWINGS	DWG.No.
xxxxxxx	xxxxxxx

REV	DATE	PURPOSE OF ISSUE (P.O.I.)	PREP	CHKD	APPR	AC
09	20/09/22	For construction	KP	CS	KP	JL
07	17/08/22	For construction	KP	CS	KP	JL
06	14/07/22	For construction	KP	CS	KP	JL
05	01/06/22	For construction	KP	CS	KP	JL
04	05/05/22	For construction	KP	CS	KP	JL
03	09/03/22	For construction	KP	CS	KP	JL
02	03/11/21	For approval	KP	CS	KP	JL
01	09/09/21	For approval	KP	CS	KP	JL

**OWNER:** BUSHEHR PETROCHEMICAL COMPANY  
**MEG PLANT**

**DRAWING TITLE:** 17811-03 P&ID FOR NITROGEN GAS BOOSTER

CONTRACT NO.	SCALE	SIZE	CLASS	PHASE
52-98/445	XX	A0	1	P

DOCUMENT NO.	PROJECT	AREA	PHASE	MRO No.	DIS.	DOC.	SEQ.	SHEET	REV. NO.
	BU	20	VD	303	PR	DWG	0013	1 OF 2	09

**OWNER DDC. NO.:** BU 20 VD 303 PR DWG 0013 1 OF 2

