







OWNER:  شرکت سست و پوی توپو ایرانیان (سهامی خاص)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	MC :  شرکت سست و پوی توپو ایرانیان (سهامی خاص)	<b>P&amp;ID FOR NITROGEN GAS BOOSTER</b>						 Netherlands	
Owner Document Number: 17811-03A		Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445
	BU	20	VD	303	PR	DWG	0013	Rev.: 10	Page 1 of 4

## P&ID FOR NITROGEN GAS BOOSTER

		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
<b>Document Review</b>		
Issue Purpose:	AB	
Result Code: AP,AN,CM,RE,NC	AP	
Next Status : IFC,IFA,IFI,AFC,AB	-	
Responsible Department	MECHANIC	
Commented Date	Jan.14.2023	
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.		

10	23/11/2022	As Built	KP	JR	PW	
09	21/09/2022	Approved for Construction	KP	JR	PW	
08	18/08/2022	Approved for Construction	KP	JR	PW	
07	14/07/2022	Approved for Construction	KP	JR	PW	
06	01/06/2022	Approved for Construction	KP	JR	PW	
05	05/05/2022	Approved for Construction	KP	JR	PW	
04	10/03/2022	Approved for Construction	KP	JR	PW	
03	23/02/2022	Approved for Construction	KP	JR	PW	
02	04/11/2021	For approval	KP	JR	PW	
01	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 Nm <sup>3</sup> /hr	Flow N2 side: 565 Nm <sup>3</sup> /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 m <sup>3</sup> /hr	Flow water side: 1.4 m <sup>3</sup> /hr
Discharge pr. 1st/2nd: 14.5 / 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, Exe'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:**

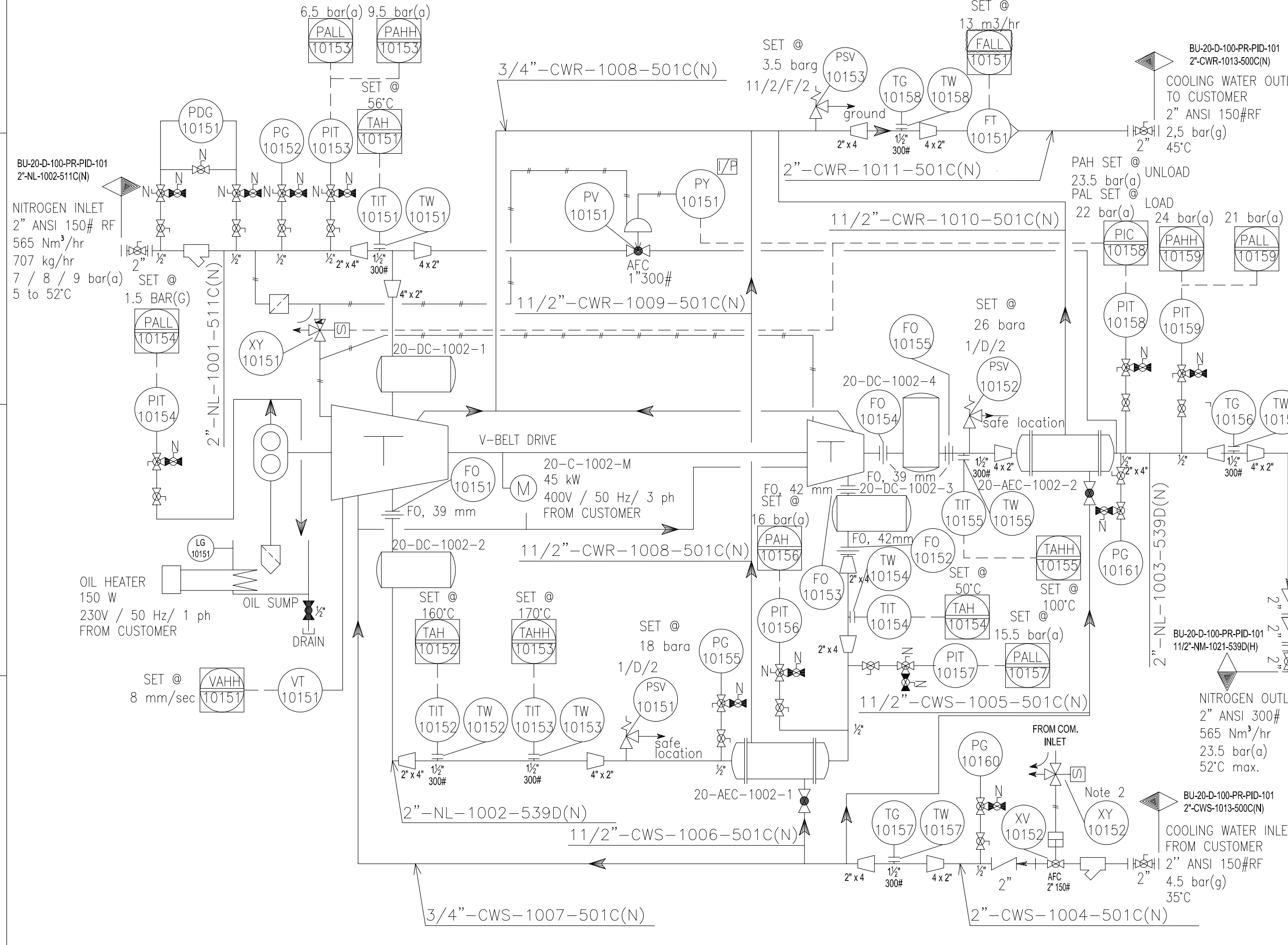
- All signals mentioned in P&ID will be transferred to FCS via Modbus TCP/IP communication link
- CW valve will open on compressor start and close on compressor stop

**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



REFERENCE DRAWINGS	DWG.No.
xxxxxxx	xxxxxxx

REV	DATE	PURPOSE OF ISSUE (P.O.I.)	PREP	CHKD	APPR	AC
10	02/01/23	As Built	SK	CS	KP	JL
09	23/11/22	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:

CONTRACTOR:

PROJECT: 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	10

