

C-PK6101-1A/B Screw Compressor
 D-PK6101-1A/B Oil Separator
 D-PK6101-2 Liquid Receiver
 D-PK6101-3 K.O. Drum
 E-6101 Evaporator
 E-PK6101-2 Condenser
 E-PK6101-3 Economizer
 E-PK6101-1A/B Oil Cooler
 E-PK6101-4A/B Oil Heater Oil separator
 F-PK6101-1A/2A Oil Filter
 F-PK6101-1B/2B Oil Filter
 F-PK6101-2 Propylene Filter/Dryer
 P-PK6101-1A/2A Oil Pump
 P-PK6101-1B/2B Oil Pump

REFERENCES DOCUMENT

NOTES

- 1) One compressor unit is for standby.
- 2) Compressor model : PPN320LUD-ME

SPECIFICATION

Compressor Duty:
 BHP = 912 kW **1750 kW**

Heat Exchanger Duty:
 E-6101 = 1688 kW
 E-PK6101-1A/B = 208 kW
 E-PK6101-2 = 2627 kW
 E-PK6101-3 = 506 kW

LEGEND

CLIENT: MC CONTRACTOR:

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PROJECT TITLE:
 DEHDASHT PETROCHEMICAL INDUSTRY COMPANY
 DEHDASHT HIGH DENSITY POLYETHYLENE PROJECT

DRAWING TITLE:
 PROCESS FLOW DIAGRAM (PFD)

DOCUMENT No.: DPIC9812-000-VD-1002-ME-PFD-0011 SC. SIZE: A1

Proj. Code	Area No.	VD	Material Code	PD No.	Disc. Code	Doc. Type	Serial No.	Rev.	Sheet No.
DPIC9812	000	VD	1002	4150	ME	PFD	0011	D2	1 OF 1

PURCHASER'S COMMENT/APPROVAL STATUS
 1. AP: Approved (Released for Manufacturing)
 2. AN: Approved With Minor Comments (Fabrication may Proceed)
 3. NF: Approved With Comments (Fabrication not Proceed)
 4. R: Rejected
 5. NR: Not to be Returned

REQUISITION NO.: DPIC98-12-001-000-ME-MR-4150-0001-01
 ITEM NO. (TAG NO.): PK-6101
 Date: 06.03.2022 Signature: A.AB VENDOR DOC. NO.: DPIC98-000-VD-1002-ME-PFD-0011-02

REV.	DATE	DESCRIPTION	PREP'D	CHK'D	APP'D

STREAM NO.	UNIT	3	4	5	6	7	8	9	10	11	12	13		
DESC.		PRY GAS TO COMP.	PRY GAS FROM COMP.	CONDENSATE PROPYLENE	REFRIGERATE PROPYLENE	RECYCLE PROPYLENE	HOT HEXANE	COOLED HEXANE	PROPYLENE TO ECO.	ECO. FLOW TO COMP.	SEPARATED OIL	COOLED OIL	OIL TO FILTER	COMPRESSOR DISCHARGE
TEMP.	°C	-25.0	80.3	48.4	-24.0	-25.0	-16.0	-20.0	12.4	15.0	80.3	50.0	50.0	80.3
PRESS.	bara	256	19.9	19.8	2.62	2.61	6.91	6.41	8.3	8.2	19.9	19.8	22.3	20.0
C3= FLOW	kg/h	19500	26500	26500	19500	19500	748000	748000	7000	7000	-	-	-	26500
OIL FLOW	LPM	-	-	-	-	-	-	-	-	-	240	240	240	240
DENSITY	kg/m³	5.58	35.7	467	24.0	5.8	703	707	56.2	17.1	870	880	880	-
V.F.		1.0	1.0	0.0	0.24	1.0	0.0	0.0	0.28	1.0	0.0	0.0	0.0	0.0/1.0

All control system shall be shown on PFD.

Please recheck PFD with last revision of PID. PFD shall include all equipment and control system in accordance with PID.

Filter to be added. Any equipment which is tagged shall be shown on PFD.

Ejector and drain system to be added.

Discrepancy with evaporator data sheet. Operating temp is -24°C.

Discrepancy with evaporator data sheet.

To be revised based on pump discharge pressure.

This is normal flowrate design shall be done based on 748000 x 1.1.

Color	Width
RED	0.10
YEL	0.20
GRN	0.30
CYA	0.40
BLU	0.50
MAG	0.60
WHF	0.20
B	0.10
9	0.10
11	0.10
30	0.10
40	0.10
54	0.10
60	0.10
100	0.10
112	0.10
140	0.10
200	0.10