



DEHDASHT PETROCHEMICAL INDUSTRY COMPANY

DEHDASHT HIGH DENSITY POLYETHYLENE PROJECT



DOCUMENT TITLE: Utility Consumption List

POI: IFA

Contract No.: DPIC/98-12

DOCUMENT NUMBER: DPIC9812-000-VD-1002-ME-LST-0048

Rev. No.: D0

DOCUMENT TITLE:

## UTILITY CONSUMPTION LIST

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| PURCHASER'S COMMENT/APPROVAL STATUS |  |            |                 |             | Purchaser: NARGAN                                     |
|-------------------------------------|--|------------|-----------------|-------------|---|
| 1                                   | AP: Approved (Released for Manufacturing)                  |            |                 |             | Requisition No.: DPIC98-12-001-000-ME-MR-4150-0001-D1 |
| ✘                                   | AN: Approved With Minor Comments (Fabrication may Proceed) |            |                 |             |   |
| 3                                   | NF: Approved With Comments (Fabrication not Proceed)       |            |                 |             | Item No. (Tag No.): PK-6101                           |
| 4                                   | RJ: Rejected   |            |                 |             |   |
| 5                                   | NR: Not be Returned  |            |                 |             | Vendor Doc. No.: DPIC9812-000-VD-1002-ME-LST-0048-D0  |
| Date:                               |  | 18.01.2022 | Signature: A.AB |             |   |
|                                     |  |            |                 |             |   |
|                                     |  |            |                 |             |   |
|                                     |  |            |                 |             |   |
|                                     |  |            |                 |             |   |
| D0                                  | 03.Jan..22   | R.GOUDARZI | DR.A.NEJATI     | DR.A.NEJATI |   |
| REV                                 | DATE ISSUE   | PREPARED   | CHECKED         | APPROVED    |   |



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| Page | Rev-D0 | Rev-D1 | Rev-D2 | Rev-D3 | Rev-D4 |
|------|--------|--------|--------|--------|--------|
| 1    | x      |        |        |        |        |
| 2    | x      |        |        |        |        |
| 3    | x      |        |        |        |        |
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| 33   |        |        |        |        |        |
| 34   |        |        |        |        |        |
| 35   |        |        |        |        |        |

| Page | Rev-D0 | Rev-D1 | Rev-D2 | Rev-D3 | Rev-D4 |
|------|--------|--------|--------|--------|--------|
| 36   |        |        |        |        |        |
| 37   |        |        |        |        |        |
| 38   |        |        |        |        |        |
| 39   |        |        |        |        |        |
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| 69   |        |        |        |        |        |
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Sub distribution branch headers shall be sized as here below indicated:


- 1/2" up to 5 users
- 3/4" for 6 -10 users
- 1" for 11 -15 users
- 1 1/2" for 16 -20 users



size to be defined as per project spec

**DEHDASHT PETROCHEMICAL INDUSTRY COMPANY**

**DEHDASHT HIGH DENSITY POLYETHYLENE PROJECT**



شرکت صنایع پتروشیمی گachsaran  
Persian Gulf Petrochemical Industries Co  
PGPIC  
شرکت صنایع پتروشیمی دشت (سای مارم)

DOCUMENT TITLE: Utility Consum... POI: IFA

Contract No.: DPIC/98-12 DOCUMENT NUMBER: DPIC9812-4 Rev. No.: D0

**GENERAL MAJOR COMMENT:**  
All utilities consumption shall be revised based on correct Hexan flowrate and correct propylene cycle flowrate.  
Also utility consumption shall be finalized after approval of heat exchanger thermal design.

| ITEM          | SERVICE | FLUID (PHASE)           | PIPING SIZE | FLOW (kg/h)   | TEMPERATURE (°C) |       |      |        | PRESSURE (barg) |       |       |        | DURATION       |
|---------------|---------|-------------------------|-------------|---------------|------------------|-------|------|--------|-----------------|-------|-------|--------|----------------|
|               |         |                         |             |               | MIN.             | NORM. | MAX. | DESIGN | MIN.            | NORM. | MAX.  | DESIGN |                |
| E-PK6101-1A/B | COOLING | JACKETED WATER (LIQUID) | 3"          | 22548.6       | 37.0             | -     | 45.0 | 190.0  | 5.755           | -     | 5.901 | 10.0   | CONTINUOUS (1) |
| E-PK6101-2    | COOLING | JACKETED WATER (LIQUID) | 12"         | 289043        | 37.0             | -     | 45.0 | 190.0  | 5.634           | -     | 5.901 | 10.0   | CONTINUOUS     |
| PK-6101       | VALVES  | INSTRUMENT AIR (GAS)    | 3/4"        | 9.2 Nm3/h (2) | 40               |       |      | 80     | 6.5             | 7     | 7.5   | 10.5   | CONTINUOUS     |

NOTES:

- 1) 1 OF 2 COOLERS IS IN SERVICE. (IN CASE OF CHANGEVER OF COMPRESSOR OIL COOLERS CAN BE BOTH FOR A SHORT TIME IN OPERATION).
- 2) AIR CONSUMPTION FOR CONTROL VALVES= 0.9 Nm3/h PER VALVE  
AIR CONSUMPTION FOR ON-OFF VALVES= 3": 0.3 Nm3/h PER VALVE, 6": 0.45 Nm3/h PER VALVE

Qty of valves are not clear in this doc

It is not clear. There is only two Oil PUMP, But you have written 3 pump can be run

**POWER**

| ITEM                             | SERVICE                     | Q'TY | POWER     |          | VOLT | PHASE | Hz | DURATION      | REMARK  |
|----------------------------------|-----------------------------|------|-----------|----------|------|-------|----|---------------|---|
|                                  |                             |      | INSTALLED | ABSORBED |      |       |    |               |   |
|                                  |                             |      | kW        |          |      |       |    |               |   |
| C-PK6101-1A                      | SCREW COMPRESSOR            | 1    | 1240.0    | 1160.0   | 6000 | 3     | 50 | CONTINUOUS    | -   |
| P-PK6101-1A/2A<br>P-PK6101-1A/2A | OIL PUMP                    | 2    | 7.5       | 5.0      | 400  | 3     | 50 | CONTINUOUS    | (UP TO 3 PUMPS CAN RUN TOGETHER FOR APPROX. 30-60 SECONDS IN AN UPSET CONDITION. IN NORMAL OPERATION 1 TO 2 OIL PUMPS CAN BE IN OPERATION.) |
| E-PK6101-4A/B                    | OIL HEATER<br>OIL SEPARATOR | 1    | 1.5 (*)   | -        | 400  | 3     | 50 | DISCONTINUOUS | ONLY DURING START-UP  |
| -                                | ELECTRICAL HEAT TRACING     | -    | 3.0 (*)   | -        | 230  | 1     | 50 | CONTINUOUS    | ALL ELECTRICAL CONNECTIONS ARE TERMINATED AT LOCAL PANEL  |
| -                                | SPACE HEATER<br>MAIN MOTOR  | 2    | 0.3       | -        |      | 1     |    | DISCONTINUOUS | -   |
| -                                | SPACE HEATERS<br>OIL PUMP   | 4    | 0.05      | -        | 230  |       |    | DISCONTINUOUS | -   |

NOTES:

(\*) WILL BE FINILIZED LATER.

is Oil Heater off during system shut down?

UCP UPS and NON UPS demand to be mentioned too

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