



PETROCHEMICAL INDUSTRIES  
DESIGN & ENGINEERING CO.

PROJ. NO. : 1205



DENA METHANOL PLANT

COVER SHEET

OWNER :

SABALAN PETROCHEMICAL INDUSTRIES CO.

PROJ. NO. : 89/S-G/102

## DATA SHEET

For

### CENTRIFUGAL EXHAUST FAN FOR MESS & TEA ROOM IN CONTROL BUILDING

DOCUMENT NO. : 1205-00-HV-DSH-051

TOTAL PAGES : 1 (Excluding Cover & Revision Index Sheets and attachments)

Note: For relevant records of the document, reference can be made to Sabalan Methanol Project documentation.

| ED         |            | EXT                           |  | IFE                    |            | A              |
|------------|------------|-------------------------------|--|------------------------|------------|----------------|
| Eng. Phase |            | Purpose Of Distribution (POD) |  | Purpose Of Issue (POI) |            | Owner's Action |
|            |            |                               |  |                        |            |                |
|            |            |                               |  |                        |            |                |
|            |            |                               |  |                        |            |                |
|            |            |                               |  |                        |            |                |
| 00         | 13.10.2016 | ISSUED FOR ENGINEERING        |  | M.Mashayekh            | M.Momenaie | A.Moadeli      |
| Rev.       | Date       | Description                   |  | Prepared by            | Checked by | Approved by    |
|            |            |                               |  |                        |            | Project        |

PROJ. NO. : 1205



## DENA METHANOL PLANT

**Data Sheet for Centrifugal Exhaust Fan for Mess & Tea Room in Control Building**

Doc. No.: 1205-00-HV-DSH-051

Rev. : 00

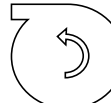
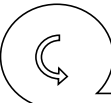
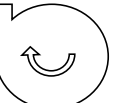
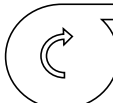
OWNER :

**SABALAN PETROCHEMICAL INDUSTRIES CO.**

PROJ. NO. : 89/S-G/102

[illegible]

|                                                                                   |                                                                                          |                                                                                  |                                                                                                                                                                                    |                                                                                          |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  | <b>PETROCHEMICAL INDUSTRIES<br/>DESIGN &amp; ENGINEERING CO.</b><br><br>PROJ. NO. : 1205 |  | <b>DENA METHANOL PLANT</b><br><br><b>Data Sheet for Centrifugal Exhaust Fan for Mess &amp; Tea<br/>Room in Control Building</b><br><br>Doc. No.: 1205-00-HV-DSH-051      Rev. : 00 | OWNER :<br><br><b>SABALAN PETROCHEMICAL INDUSTRIES CO.</b><br><br>PROJ. NO. : 89/S-G/102 |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|

| NO. | GENERAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------|------------|---------------------------|--|----------------------------------------------|--|
| 1   | Tag No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | EX-0023                                                                                                                                                                                                 |  |                          |            |                           |  |                                              |  |
| 2   | Duty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Permanent                                                                                                                                                                                               |  |                          |            |                           |  |                                              |  |
| 3   | Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | <input type="checkbox"/> Wall Mounted <input type="checkbox"/> Duct Mounted <input checked="" type="checkbox"/> Utility (Centrifugal) <input type="checkbox"/> Roof Type <input type="checkbox"/> Other |  |                          |            |                           |  |                                              |  |
| 4   | Quantity (Working + Standby)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 1                                                                                                                                                                                                       |  | Operating Weight         |            | Kg                        |  | *                                            |  |
| 5   | Service                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Mess & Tea Room                                                                                                                                                                                         |  | Type of Driver           |            | El. Motor                 |  |                                              |  |
| 6   | Overall Size                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | lwwh    mmxm                                                                                                                                                                                            |  | Installation             |            | Outdoor                   |  |                                              |  |
| 7   | Inlet : (Single / Double)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Single                                                                                                                                                                                                  |  | Impeller Type            |            | lwwh    mmxm              |  | *                                            |  |
| 8   | SITE CONDITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 9   | Location / Latitude                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | Assaluyeh / 28.5° N                                                                                                                                                                                     |  |                          |            |                           |  |                                              |  |
| 10  | Altitude                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | m                                                                                                                                                                                                       |  | 34                       |            |                           |  |                                              |  |
| 11  | Ambient Air Temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Max / Min                                                                                                                                                                                               |  | °F                       |            | 118.4 / 41                |  |                                              |  |
| 12  | Wet Bulb Temp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                         |  | °F                       |            | 91.4                      |  |                                              |  |
| 13  | OPERATING CONDITIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 14  | Gas Composition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Air                                                                                                                                                                                                     |  | Suction Press.           |            | in.w.g                    |  | -0.64                                        |  |
| 15  | Molecular Weight                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | 29                                                                                                                                                                                                      |  | Discharge Pressure       |            | in.w.g                    |  | Atm.                                         |  |
| 16  | Air Flow Rate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Rated    cfm                                                                                                                                                                                            |  | 485                      |            | Differential Pressure     |  | in.w.g    0.64                               |  |
| 17  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Normal    cfm                                                                                                                                                                                           |  | 440                      |            | Suc. Temp.                |  | Min    °F    73.4                            |  |
| 18  | Relative Humidity at Suction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Max    %                                                                                                                                                                                                |  | 65                       |            | Max    °F                 |  | 77                                           |  |
| 19  | FAN DATA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                         |  |                          | MOTOR DATA |                           |  |                                              |  |
| 20  | Make/Origin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | * / *                                                                                                                                                                                                   |  | Make/Origin              |            | * / *                     |  |                                              |  |
| 21  | Model No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | *                                                                                                                                                                                                       |  | Model No.                |            | *                         |  |                                              |  |
| 22  | Fan Diameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | m                                                                                                                                                                                                       |  | *                        |            | Input Power               |  | Kw    *                                      |  |
| 23  | Fan Speed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | rpm                                                                                                                                                                                                     |  | *                        |            | Speed                     |  | rpm    *                                     |  |
| 24  | Material / Thickness                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Casing                                                                                                                                                                                                  |  | mm                       |            | *                         |  | Insulation Class / Temperature Rise    * / * |  |
| 25  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Impeller                                                                                                                                                                                                |  | mm                       |            | *                         |  | Power Supply    V/Ph/Hz    400 / 3 / 50      |  |
| 26  | Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Shaft                                                                                                                                                                                                   |  | *                        |            | Degree of Protection      |  | IP 55                                        |  |
| 27  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Pulley                                                                                                                                                                                                  |  | *                        |            | System Full Load Current  |  | A    *                                       |  |
| 28  | Material / Make / Origin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Belt                                                                                                                                                                                                    |  | * / * / *                |            | System Power Factor       |  | %    *                                       |  |
| 29  | Finish                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Casing                                                                                                                                                                                                  |  | *                        |            | Hazardous Classification  |  | Unclassified                                 |  |
| 30  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Impeller                                                                                                                                                                                                |  | *                        |            | Motor Efficiency          |  | %    *                                       |  |
| 31  | ACCESSORIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 32  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | Required                                                                                                                                                                                                |  | More Specification       |            |                           |  | Required    More Specification               |  |
| 33  | Pulley Guard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | *                                                                                                                                                                                                       |  | *                        |            | Base                      |  | Yes    * steel channel profile               |  |
| 34  | Belt Guard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | *                                                                                                                                                                                                       |  | *                        |            | Safety Screen             |  | Outlet    *                                  |  |
| 35  | Bearing Guard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | *                                                                                                                                                                                                       |  | *                        |            | Vibration Isolator        |  | Yes    *                                     |  |
| 36  | Air Flow Switch / Model No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Yes                                                                                                                                                                                                     |  | *                        |            | Gravity Damper            |  | Yes    *                                     |  |
| 37  | Drain Hole                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Yes                                                                                                                                                                                                     |  | *                        |            | Inlet Connection          |  | Yes    Flanged                               |  |
| 38  | Elec. Terminal Junction Box                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Yes                                                                                                                                                                                                     |  | IPW 55, With Cable Gland |            | Outlet Connection         |  | No    -                                      |  |
| 39  | LOCAL CONTROL STATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 40  | Required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | N.A.                                                                                                                                                                                                    |  | Installation Location    |            | -                         |  |                                              |  |
| 41  | On / Off / Trip Indicating Lights                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | -                                                                                                                                                                                                       |  | Degree of Protection     |            | -                         |  |                                              |  |
| 42  | Start / Stop Push Buttons                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | -                                                                                                                                                                                                       |  | Hazardous Classification |            | -                         |  |                                              |  |
| 43  | Miscellaneous Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | -                                                                                                                                                                                                       |  |                          |            |                           |  |                                              |  |
| 44  | NOISE SPECIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 45  | Noise level @ 1 meter from ex. Fan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | db                                                                                                                                                                                                      |  | *                        |            | Noise level @ exhaust air |  | db    *                                      |  |
| 46  | DIRECTION OF DISCHARGE (Note 2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 47  | <div style="display: flex; justify-content: space-around; align-items: center;"> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> </div>                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 48  |         |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 49  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 50  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |
| 51  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                                         |  |                          |            |                           |  |                                              |  |

- REMARKS:
- 1      \*    To be filled by vendor.
  - 2      Direction of rotation is determined from drive side of fan.
  - 3      N.A. Not Applicable.
  - 4      IPW 55 protection for junction boxes, motor terminal boxes, control stations, panel boards, and auxiliary equipment should be considered.