

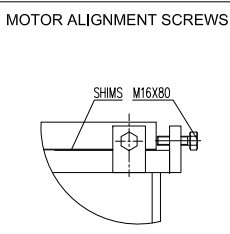
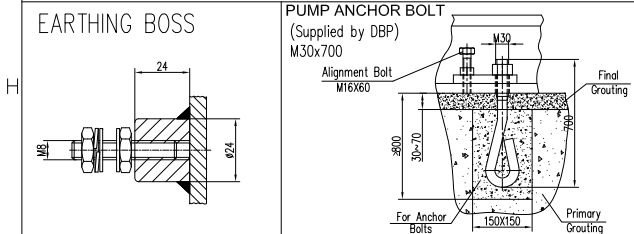
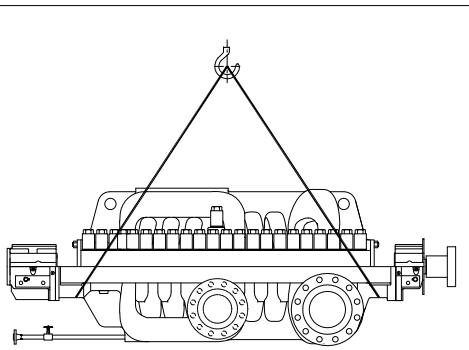
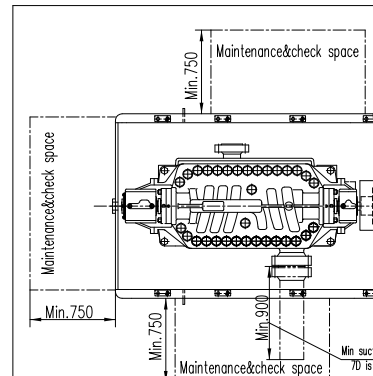
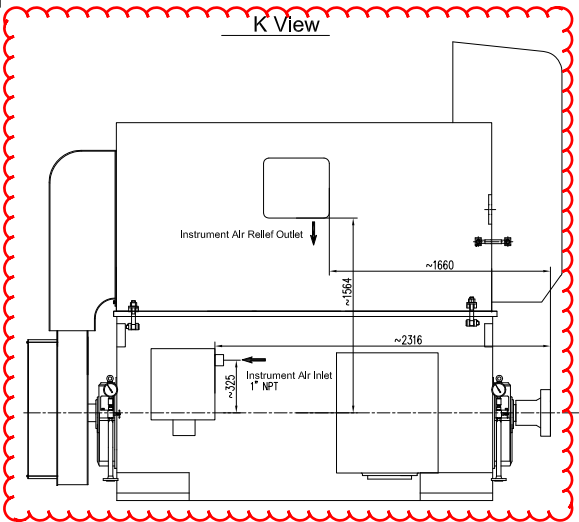
| PUMP INFORMATION | |
|------------------|------------------------|
| Item No.: | 01-120-P-5 A/B |
| Service: | AGRU LEAN AMINE PUMPS |
| Model: | APIFLO-MK 1200-200X3A |
| Seal Plan: | 11+53B |
| Motor: | 3150KW - 2950RPM |
| Capacity: | 1341 m ³ /h |
| Head: | 630 m |

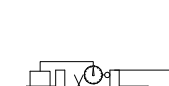
- NOTE:
1. In case of any discrepancies between documents General Arrangement Drawing is valid.
 2. Exact location of seal system and instrument junction box will be finalized after pipeline work finished in DBP factory.
 3. Lube oil pipelines between N6/7 and N6'/7' are out of DBP's scope of supply and shall be considered by customer according to the site situation.
 4. Single rundown tank is supplied for each pump, totally 2 for 01-120-P-5 A/B.

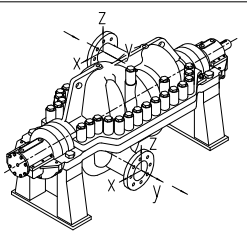
| REFERENCE DRAWINGS | DWG NO. |
|------------------------------|------------------------------|
| SEAL SYSTEM DRAWING | BU-01-VD-311-MA-DRW-1205-014 |
| MOTOR OUTLINE DRAWING | BU-01-VD-311-EL-DRW-1205-030 |
| COUPLING DRAWING | BU-01-VD-311-MA-DRW-1205-008 |
| RUNDOWN TANK OUTLINE DRAWING | BU-01-VD-311-MA-DRW-1205-034 |
| LUBE OIL SYSTEM DRAWING | BU-01-VD-311-MA-DRW-1205-022 |
| LUBE OIL SYSTEM PID | BU-01-VD-311-MA-PID-1205-004 |

| | |
|-----------------|--|
| Code1 | <input type="checkbox"/> (Approved) No comment and the document is released for Manufacturing |
| Code2 | <input type="checkbox"/> (Approved with comments) Vendor shall correct, revise and resubmit the document |
| Code3 | <div>No comment 2016.01.19</div> |
| Code4 | The at Vendor purch |
| BUSHEHR PROJECT | |
| Signature : | |

| No. | Description | Size & Rating | Remark |
|-----|-----------------------------|----------------------------|------------------------|
| N1 | Pump Suction | 12", ASME B16.5 900LB RTJ | |
| N2 | Pump Discharge | 10", ASME B16.5 900LB RTJ | |
| N3 | Pump Drain | 3/4", ASME B16.5 900LB RTJ | With ball valve |
| N4 | Cooling Water Inlet | 1", ASME B16.5 150LB RF | With gate valve |
| N5 | Cooling Water Outlet | 1", ASME B16.5 150LB RF | With gate valve |
| N6 | Pressure Lube Oil Inlet | 2", ASME B16.5 150LB RF | |
| N7 | Pressure Lube Oil Outlet | 3", ASME B16.5 150LB RF | |
| N8 | Pump Vent | 3/4", ASME B16.5 900LB RTJ | With ball valve |
| N9 | Baseplate Drain | NPT 1" | |
| N10 | Plan53B Change Connection | M14X1.5 | |
| N11 | Plan53B Drain | 1/2"-ASME 1500LB-RF | Flange With gate valve |
| N12 | Plan53B Fill | 1/2" NPT/T-Quick Fittings | |
| N13 | Plan53B Vent | 1/2"-ASME 1500LB-RF | Flange With gate valve |
| N14 | Plan53B cooling water drain | 1/2"-ASME 1500LB-RF | Flange With gate valve |
| N6' | Pressure Lube Oil Supply | 2", ASME B16.5 150LB RF | |
| N7' | Pressure Lube Oil Return | 3", ASME B16.5 150LB RF | |



| | | | |
|--|-----------|---|--------|
|  | D≤200 | X | ≤0.05 |
| | | Y | ≤0.05 |
| | | Z | Z±0.1 |
| | 200<D≤300 | X | ≤0.08 |
| | | Y | ≤0.08 |
| | | Z | Z±0.15 |
| | 300<D≤400 | X | ≤0.10 |
| | | Y | ≤0.10 |
| | | Z | Z±0.2 |
| MAX. ALLOWABLE MISALIGNMENT(mm) | | | |



| DISCHARGE | 10 | ±10680 | ±13340 | ±8900 | ±10040 | ±4880 | ±7600 |
|-----------|------|----------------|----------------|----------------|----------------|----------------|----------------|
| | inch | F _x | F _y | F _z | M _x | M _y | M _z |
| SUCTION | 12 | ±13340 | ±16000 | ±10680 | ±12200 | ±5960 | ±9220 |
| | inch | F _x | F _y | F _z | M _x | M _y | M _z |
| | DN | Force(N) | | | Moment(M) | | |

Table 1
Nozzle Allowable Force & Moment

| | | | | | | |
|------|----------|--------------------|----------|----------|----------|----------|
| 8 | 16/1/16 | ISSUE FOR APPROVAL | ANNE.T | TINO.L | RYAN.C | AAP |
| 7 | 16/12/15 | ISSUE FOR APPROVAL | ANNE.T | TINO.L | RYAN.C | AAP |
| 6 | 6/11/15 | ISSUE FOR APPROVAL | ANNE.T | TINO.L | RYAN.C | AAP |
| 5 | 10/10/15 | ISSUE FOR APPROVAL | ANNE.T | TINO.L | RYAN.C | AAP |
| REV. | DATE | PURPOSE OF ISSUE | PREP. BY | CHKD. BY | APPD. BY | AUTH. BY |

Gas Sweetening, Sulphur Recovery, C2 Recovery,
Fractionation and Inter Connection Pipeline
Between Plants Project

BUSHEHR PETROCHEMICAL COMPANY

P.O No.: 01-POR-RE-311-227

SCALE:

DEEP BLUE PUMP

EIED

Energy Industries
Engineering & Design Co.

DRAWING TITLE:
**PUMP OUTLINE DRAWING
for AGRU LEAN AMINE PUMPS
01-120-P-5 A/B**

DRAWING No.: BU-01-VD-311-MA-DRW-1205-002

SHEET No. 1 OF 1