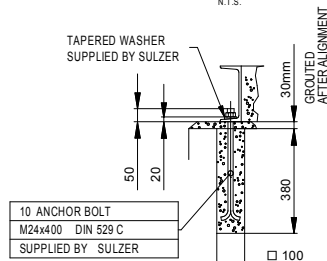


ANCHOR BOLT DETAIL

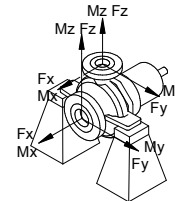
N.T.S.



MAXIMUM NOZZLE LOADINGS

Forces do comply with 2 times of the forces shown in API 610 11th

FORCE IN (N) MOMENTS IN (Nm)



| | SUCT | DISCH |
|---------|-------|-------|
| FORCE | | |
| Fx | 13340 | 10680 |
| Fy | 10680 | 8900 |
| Fz | 8900 | 13340 |
| Fr | 19260 | 19260 |
| MOMENTS | | |
| Mx | 10040 | 10040 |
| My | 4880 | 4880 |
| Mz | 7600 | 7600 |
| Mr | 13500 | 13500 |

CONTRACT DATA


| | |
|-------------------|--|
| PURCHASER: | AIOTEC GmbH |
| USER: | Kangan Petro-Refining Co. |
| JOB/PROJECT: | Kangan C2 Recovery and Fractionation Plant |
| CUST. P.O. NO.: | KP-10-00-PS-MA-PO-0003 |
| SERVICE: | DEETHANIZER REFLUX PUMP |
| INSTALLED AT: | KANGAN- ASSALUYEH - IRAN |
| PUMP OEM: | Sulzer Pumpen (Deutschland) GmbH |
| SULZER ORDER NO.: | 100247188-0010 |

IDENTIFICATION NUMBERS

| SULZER SERIAL NO. | CUSTOMER TAG NO'S | |
|----------------------|-------------------|-------------|
| | PUMP | DRIVER |
| 583626 | 10-P-1381 A | 10-M-1381 A |
| 583627 | 10-P-1381 B | 10-M-1381 B |

| | |
|---|---|
| <input checked="" type="checkbox"/> CERTIFIED FINAL | DO NOT SCALE. DIMENSIONS: mm |
| <input type="checkbox"/> CERTIFIED FOR NOZZLE & FOUNDATION ONLY | UNLESS OTHERWISE SPECIFIED TOLERANCES |
| <input type="checkbox"/> PRELIMINARY ONLY | ≤ 500 mm ± 3mm |
| | > 500 mm ± 12mm |
| | AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25 |

| | | | | | | | |
|------|----------|--------|------------------|-------|--------|--------|---------|
| 04 | 16.11.17 | "R" | For Approval | TR | RS | CH | PL |
| 03 | 09.08.17 | "R" | For Approval | TR | RS | CH | PL |
| 02 | 06.06.17 | "R" | For Approval | TR | RS | CH | PL |
| 01 | 02.03.17 | "R" | For Approval | TR | RS | CH | PL |
| 00 | 19.12.16 | "F" | For Approval | TR | RS | CH | PL |
| REV. | DATE | Status | Purpose of Issue | PREP. | CHK'D. | APP'D. | AUTH'D. |

| | |
|---|---|
| KANGAN C2 RECOVERY & FRACTIONATION PLANT |  |
| P.O. No.: KP-10-00-PS-MA-PO-0003 | SCALE : 1 : 15 |

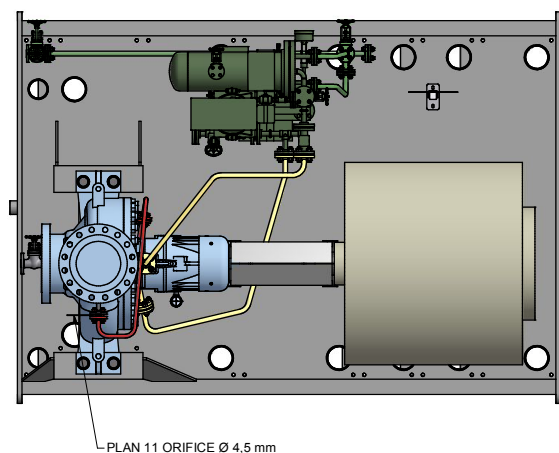
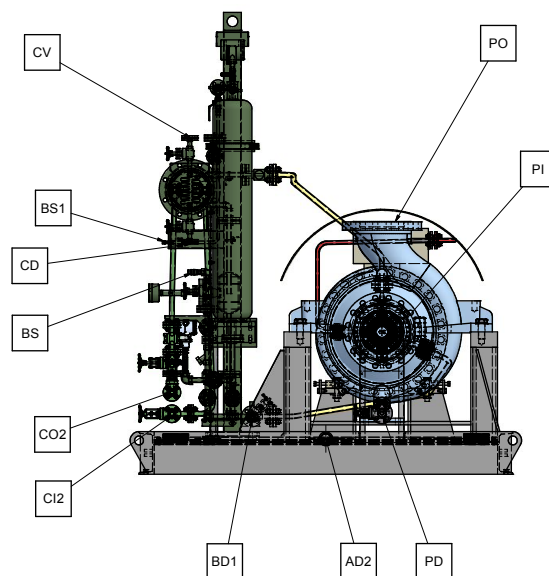
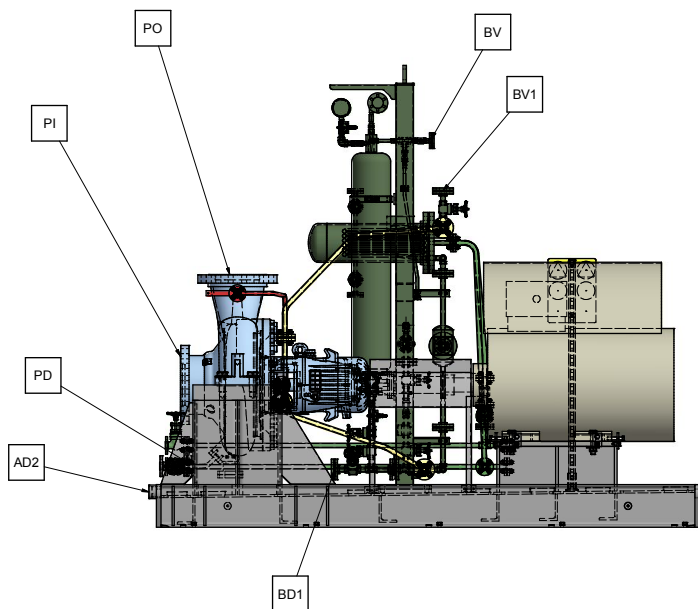
| | |
|---------------|---|
| SULZER |  |
|---------------|---|

DRAWING TITLE:
General Arrangement drawings for Item 10-P-1381 A/B

| | | | | |
|-------------|-----------------------|-----------|--------|---------|
| DRAWING No. | VP-10-00-MA-0003-0114 | SHEET No. | 2 of 3 | REV. 04 |
|-------------|-----------------------|-----------|--------|---------|

| | | | | | | |
|---|----------|-----------------|---------------------|----------|---------|----------|
| REV. MODIFICATION | NO | FORMAT: A1 | DESIGN GROUP: - | MODIFIED | CHECKED | APPROVED |
| SEP. PARTS LIST: | - | SUBSTITUTE FOR: | | | | |
| REPLACED BY: | ZF | 250-5560 | Kangan | | | |
| 100247188-0010 | | | | | | |
| GENERAL ARRANGEMENT FOUNDATION AND NOZZLE | | | | | | |
| GENERAL ARRANGEMENT DRAWING | | | | | | |
| SULZER | PART NO. | EN | PGA1002471880010-01 | 2 | 3 | |

Grout material:
Select a non-shrinking grout that is compatible with the highest and lowest temperatures to which it may be exposed.
Use concrete from a concrete company with a final strength of 25 N/mm² (B25) or better.



| CONNECTION LEGEND | | | |
|-------------------|----------------------------|------|---------------------------------------|
| ITEM | DESCRIPTION | SIZE | TYPE |
| PI | PUMP SUCTION NOZZLE | 10" | ASME B16.5 300 RF |
| PO | PUMP DISCHARGE NOZZLE | 10" | ASME B16.5 300 RF |
| PD | PUMP DRAIN WITH GATE VALVE | 3/4" | ASME B16.5 300 RF / GATE VALVE 300 RF |
| AD2 | BASE DRAIN | 2" | NPT FEMALE |
| CI2 | COOLING HEADER - INLET | 3/4" | ASME B16.5 150 RF |
| CO2 | COOLING HEADER - OUTLET | 3/4" | ASME B16.5 150 RF |
| BS | PLAN 53B RESERVOIR FILL | 1/2" | NPT-F QUICK COUPLING |
| BS1 | PLAN 53B NITROGEN CHARGE | 1/2" | NPT-F QUICK COUPLING |
| BD1 | PLAN 53B RESERVOIR DRAIN | 3/4" | ASME B16.5 300 RF BLIND FLANGE |
| BV | PLAN 53B HIGH POINT VENT | 3/4" | ASME B16.5 300 RF BLIND FLANGE |
| BV1 | PLAN 53B ACCUMULATOR VENT | 3/4" | ASME B16.5 300 RF BLIND FLANGE |
| CV | PLAN 53B COOLER VENT | 1/2" | ASME B16.5 150 RF BLIND FLANGE |
| CD | PLAN 53B COOLER DRAIN | 1/2" | ASME B16.5 150 RF BLIND FLANGE |

© SULZER Ltd 2015 (Date of Drawing).
ALL RIGHTS RESERVED. NO PART OF THIS
DRAWING MAY BE REPRODUCED, DISTRIBUTED OR
TRANSMITTED IN ANY FORM OR BY ANY MEANS,
ELECTRONIC OR MECHANICAL, INCLUDING
PHOTOCOPYING AND RECORDING, WITHOUT THE
EXPRESS PRIOR WRITTEN CONSENT OF SULZER
PUMPS

CONTRACT DATA

PURCHASER: AIOTEC GmbH
USER: Kangan Petro-Refining Co.
JOB/PROJECT: Kangan C2 Recovery and Fractionation Plant
CUST. P.O. NO.: KP-10-00-PS-MA-PO-0003
SERVICE: DEETHANIZER REFLUX PUMP
INSTALLED AT: KANGAN- ASSALUYEH - IRAN
PUMP OEM: Sulzer Pumpen (Deutschland) GmbH
SULZER ORDER NO.: 100247188-0010

IDENTIFICATION NUMBERS

| SULZER SERIAL NO. | CUSTOMER TAG NO'S | |
|----------------------|-------------------|-------------|
| | PUMP | DRIVER |
| 583626 | 10-P-1381 A | 10-M-1381 A |
| 583627 | 10-P-1381 B | 10-M-1381 B |

| | |
|---|---|
| <input checked="" type="checkbox"/> CERTIFIED FINAL | DO NOT SCALE. DIMENSIONS: mm |
| <input type="checkbox"/> CERTIFIED FOR NOZZLE & FOUNDATION ONLY | UNLESS OTHERWISE SPECIFIED TOLERANCES |
| <input type="checkbox"/> PRELIMINARY ONLY | ≤ 500 mm ± 3mm > 500 mm ± 12mm |
| | AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25 |

| | | | | | | | |
|------|----------|--------|------------------|-------|--------|--------|---------|
| 04 | 16.11.17 | "R" | For Approval | TR | RS | CH | PL |
| 03 | 09.08.17 | "R" | For Approval | TR | RS | CH | PL |
| 02 | 06.06.17 | "R" | For Approval | TR | RS | CH | PL |
| 01 | 02.03.17 | "R" | For Approval | TR | RS | CH | PL |
| 00 | 19.12.16 | "F" | For Approval | TR | RS | CH | PL |
| REV. | DATE | Status | Purpose of Issue | PREP. | CHK'D. | APP'D. | AUTH'D. |

| | | | | | | | |
|---|------------------------|--|--|--|--|--|--|
| KANGAN C2 RECOVERY & FRACTIONATION PLANT | | | |  KANGAN PETRO REFINING CO. | | | |
| P.O. No.: | KP-10-00-PS-MA-PO-0003 | | | SCALE : 1 : 15 | | | |

| | |
|---------------|---|
| SULZER |  |
|---------------|---|

DRAWING TITLE:
General Arrangement drawings for Item 10-P-1381 A/B

DRAWING No. VP-10-00-MA-0003-0114 SHEET No. 3 OF 3 REV. 04

| | | | | | | |
|-------------------|-----------------------------|-----------------|---------------------|----------------------|------------------------|----------|
| REV. MODIFICATION | NO | FORMAT: A1 | DESIGN GROUP: - | MODIFIED | CHECKED | APPROVED |
| SEP. PARTS LIST: | NO | SUBSTITUTE FOR: | | | FIRST ANGLE PROJECTION | |
| REPLACED BY: | - | | | ORIGINAL SCALE: 1:15 | | |
| ZF | GENERAL ARRANGEMENT | | | DRAWN: 12-Dec-2016 | | |
| 250-5560 | CONNECTION LAYOUT | | | T. Ratzel | | |
| Kangan | - | | | CHECKED: 12-Dec-2016 | | |
| 100247188-0010 | GENERAL ARRANGEMENT DRAWING | | | R. Scherban | | |
| SULZER | PART NO. | EN | PGA1002471880010-01 | APPROVED: | | |
| | | | | 3 / 3 | | |