

PUMP SPECIFICATIONS	
SIZE & TYPE:	OHH 2x3x7.5A-1
SPEED:	(see MOTOR SPECIFICATIONS)
ROTATION:	CCW (AS VIEWED FROM DRIVER)
DISCH FLG:	2" CLASS: 300 RF Standard: ASME B16.5
SUCT FLG:	3" CLASS: 300 RF Standard: ASME B16.5
MECH SEAL TYPE:	EagleBurgmann
MECH SEAL DRG:	H75VA4-040-S400-DE001A1 API CODE: 21A-LFN-040
API PIPING PLANS:	11

COUPLING SPECIFICATIONS	
MFR:	Metastream
TYPE:	TSKS
SIZE:	0013
COUPLING-GUARD MATERIAL:	Brass

DRIVER SPECIFICATIONS	
MOTOR:	BROOK CROMPTON
FRAME:	132S
kW:	5.5
PHASE:	3
VOLTAGE:	400
FURNISHED BY:	SULZER
CYCLE:	50 Hz

CONTRACT DATA	
PURCHASER:	Sulzer Pumps Spain SA
USER:	Kangan Petro Refining Co
JOB/PROJECT:	Kangan Utility and Offsite Project
CUST. P.O. NO.:	KP-80-10-PS-MA-PO-0001-00
SERVICE:	Fuel Oil Unloading Pump
INSTALLED AT:	Iran
PUMP OEM:	Sulzer Pumps (Deutschland) GmbH
SULZER ORDER NO.:	100263244-0090

IDENTIFICATION NUMBERS		
SULZER SERIAL NO.	CUSTOMER TAG NO'S	
	PUMP	DRIVER
588350	88-P-3002 A	88-P-302 A

CERTIFIED FINAL CERTIFIED FOR NOZZLE & FOUNDATION ONLY PRELIMINARY ONLY	DO NOT SCALE. DIMENSIONS: mm	
	UNLESS OTHERWISE SPECIFIED TOLERANCES	
	$\leq 500 \text{ mm}$ $\pm 3 \text{ mm}$ $> 500 \text{ mm}$ $\pm 12 \text{ mm}$	

DRAWING CONTENT	
SHEET DESCRIPTION	SHEET NO.
GA ISOMETRIC DATA SHEET	1
FOUNDATION AND NOZZLE	2
CONNECTION LAYOUT	3

Code1	<input type="checkbox"/> Approved: No comment and the document is released for Manufacturing.
Code2	<input type="checkbox"/> Approved with comment: Vendor shall correct, revise and resubmit the document. The document will be released for Manufacturing if changes incorporated.
Code3	<input type="checkbox"/> Commented: Vendor shall correct, revise and resubmit the document by the date specified. The document will be released under the Status of "Revised Issue". All corrected documents shall be submitted before starting the Manufacturing.
Code4	<input type="checkbox"/> Not Accepted (Rejected): Vendor shall re-work/re-design/re-specify the contents contents of the document according to the comment/ reason for rejection. All corrected documents and be resubmitted before starting the Manufacturing. Acceptance of the document does not in any way relieve Vendor of any liability, obligation and responsibility out of the purchase order and the mutual agreement in writing.
DATE :	
DEPT. :	
Signature :	
Only for Internal review :	
CV PI EL IN ME MA	
ST AR PR SA HV TL	

Rev.	Date	Status	Purpose of Issue	PRE'D.	CHK'D.	APR'D.	AUZ'D.
02	24.10.18	R	For Approval	JL	VS	RS	CL
01	10.11.17	R	For Approval	JL	VS	RS	CL
00	02.06.17	F	For Approval	JL	VS	RS	CL

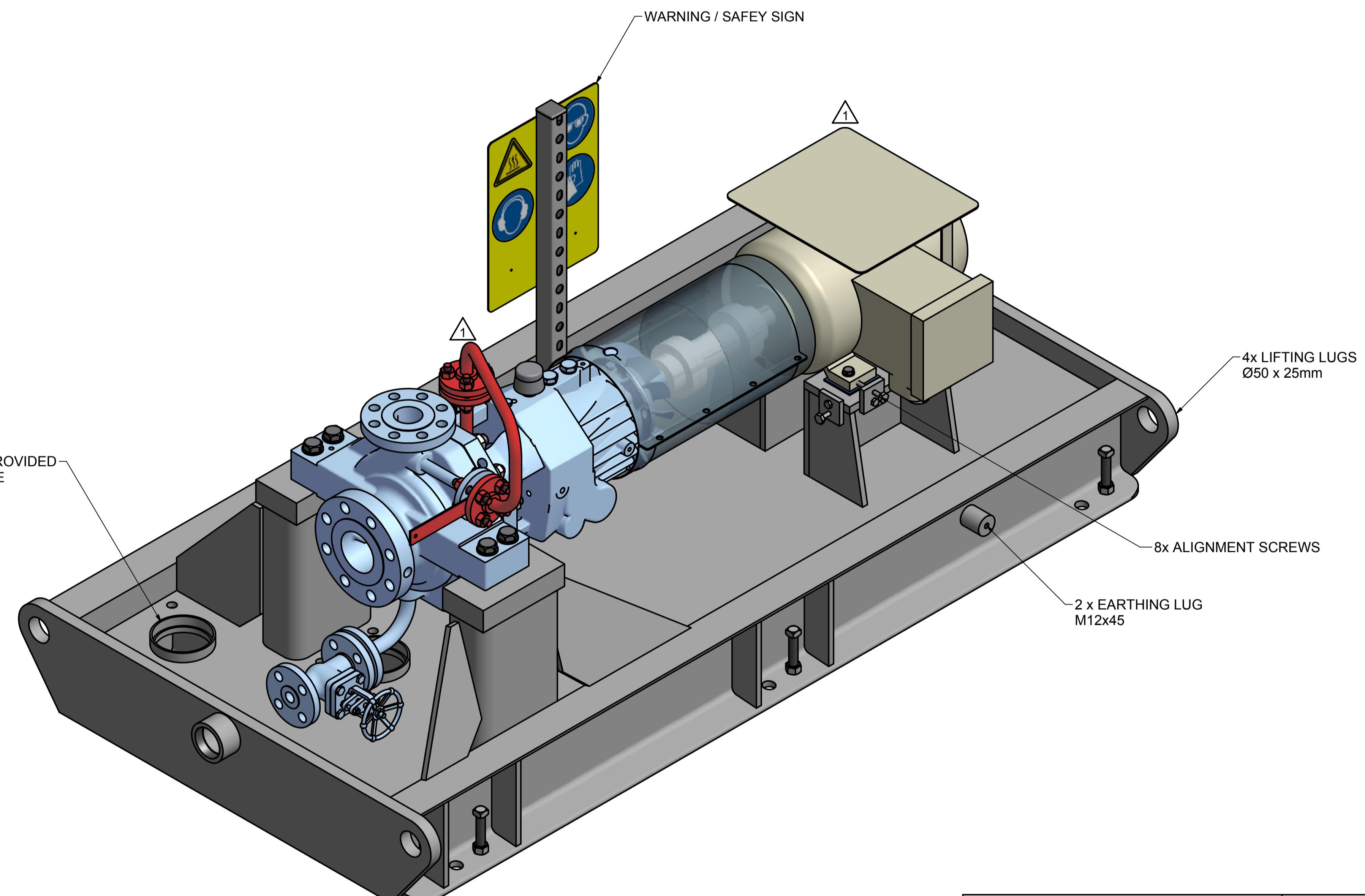
Kangan Utility & Offsite Project

P.O. No.: KP-80-10-PS-MA-PO-0001-00

SCALE : 1: 5

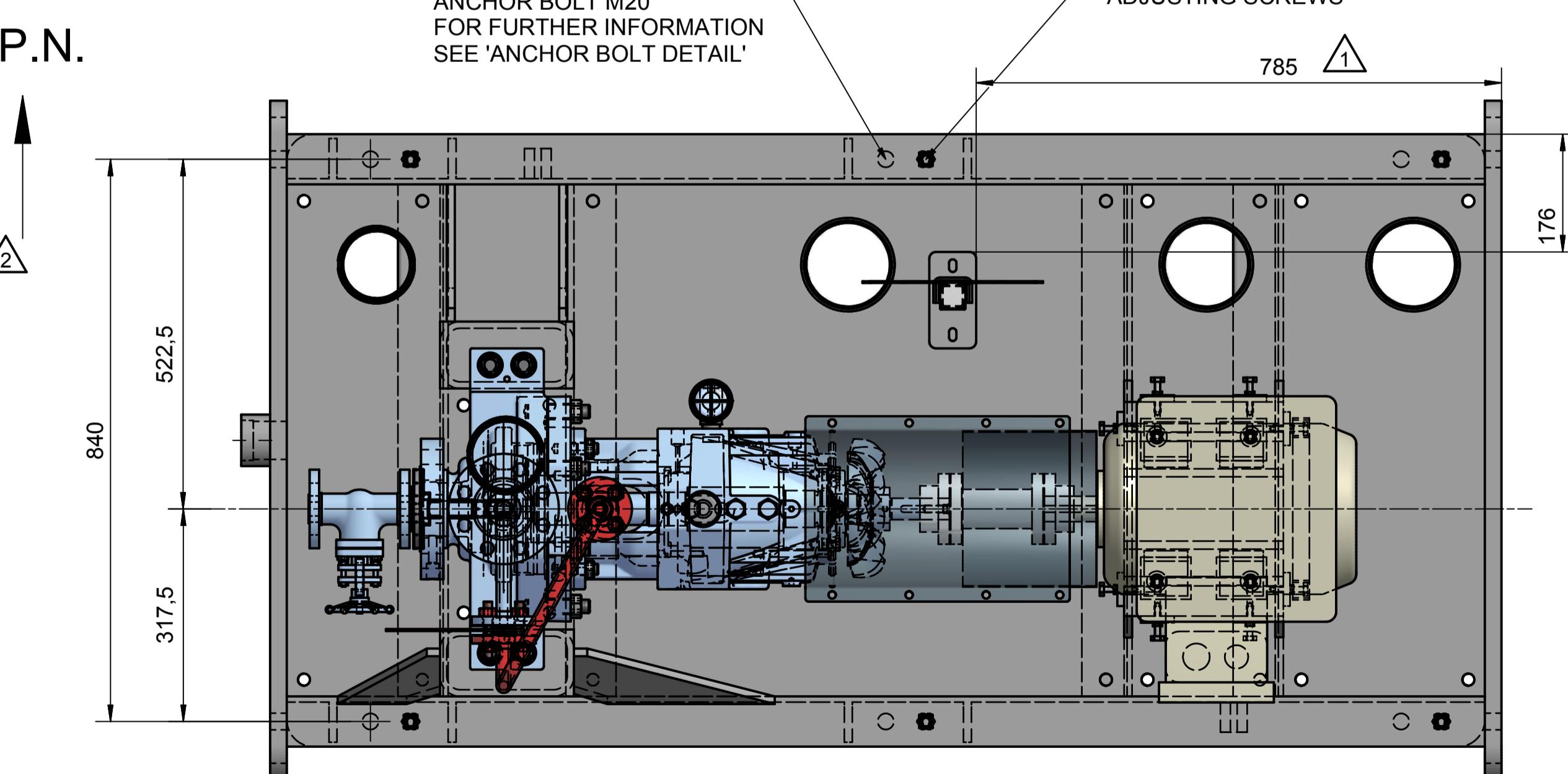
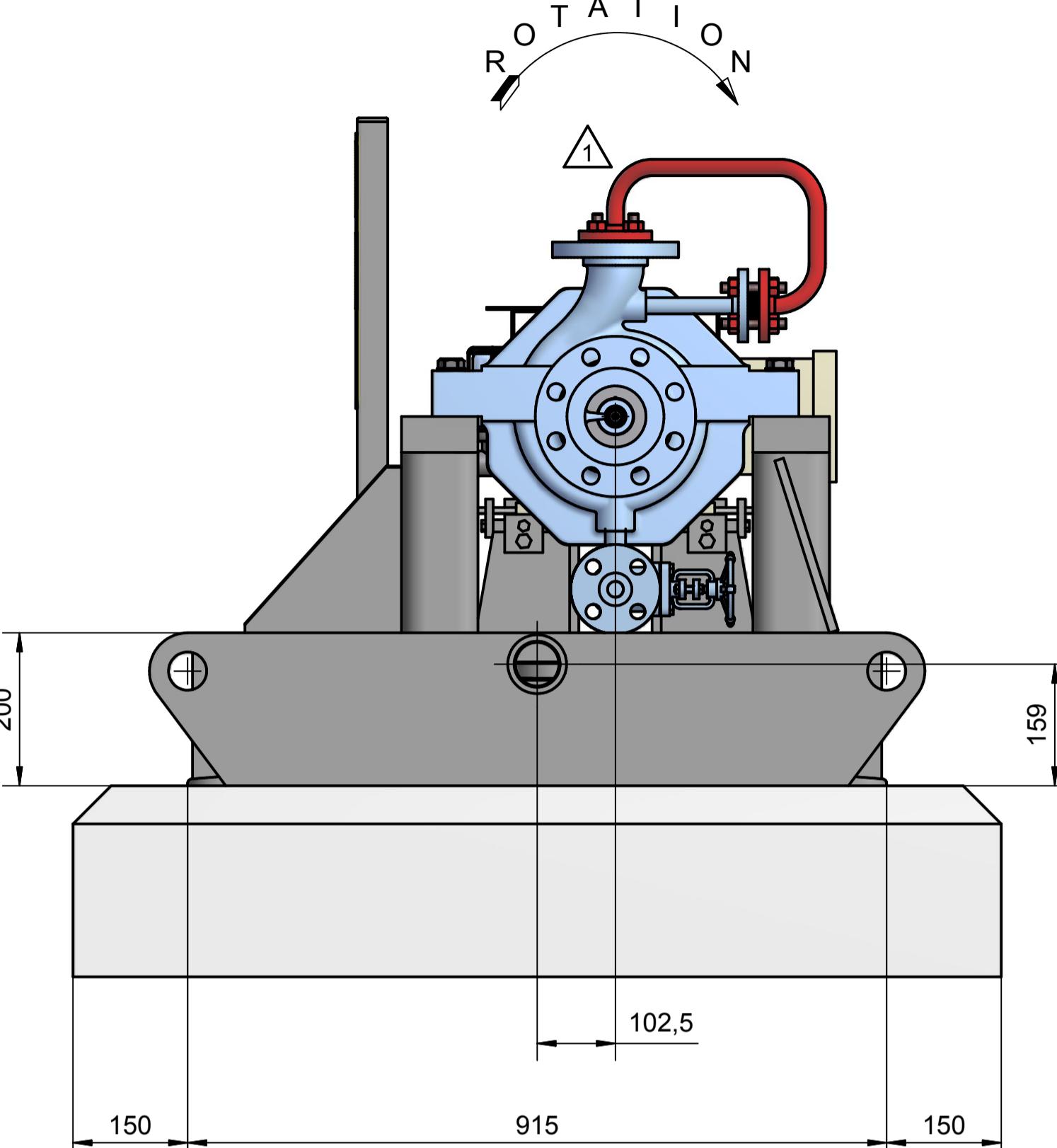
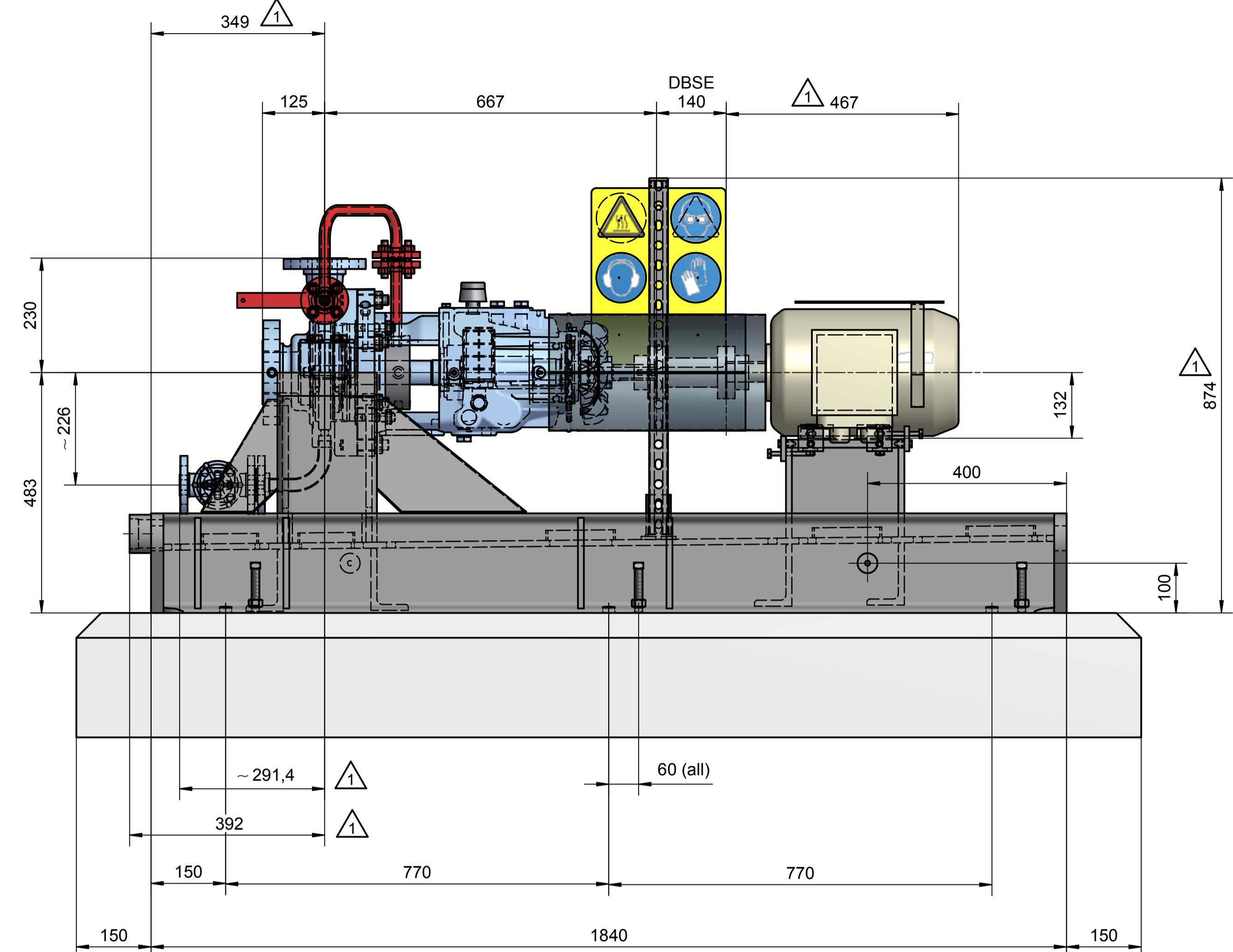
**SULZER**

DRAWING TITLE:							
Equipment Outline (GAD) including nozzle location							
DRAWING No.	VP-80-00-MA-0001-0261	Sheet No.	1 OF 3	REV. 02			
(B) Changes according customer comments and revision added		11/01/2018	11/01/2018	11/01/2018			
REV.	MODIFICATION	MODIFIED	CHECKED	APPROVED			
SEP. PARTS LIST:	NO	FORMAT: A1	DESIGN GROUP: -	FIRST ANGLE PROJECTION			
REPLACED BY:	-	SUBSTITUTE FOR:	ORIGINAL SCALE:	1:5			
OHH	2x3x7.5A-1	-	DRAWN:	16-MAY-2017			
GENERAL ARRANGEMENT		GA ISOMETRIC AND DATA SHEET	CORTIZ'	CHECKED:	16-MAY-2017		
100263244-0090		GENERAL ARRANGEMENT DRAWING	APPROVED:	16-MAY-2017			
SULZER		PART NO.	EN	PGA1002632440090-01			
				1 / 3			

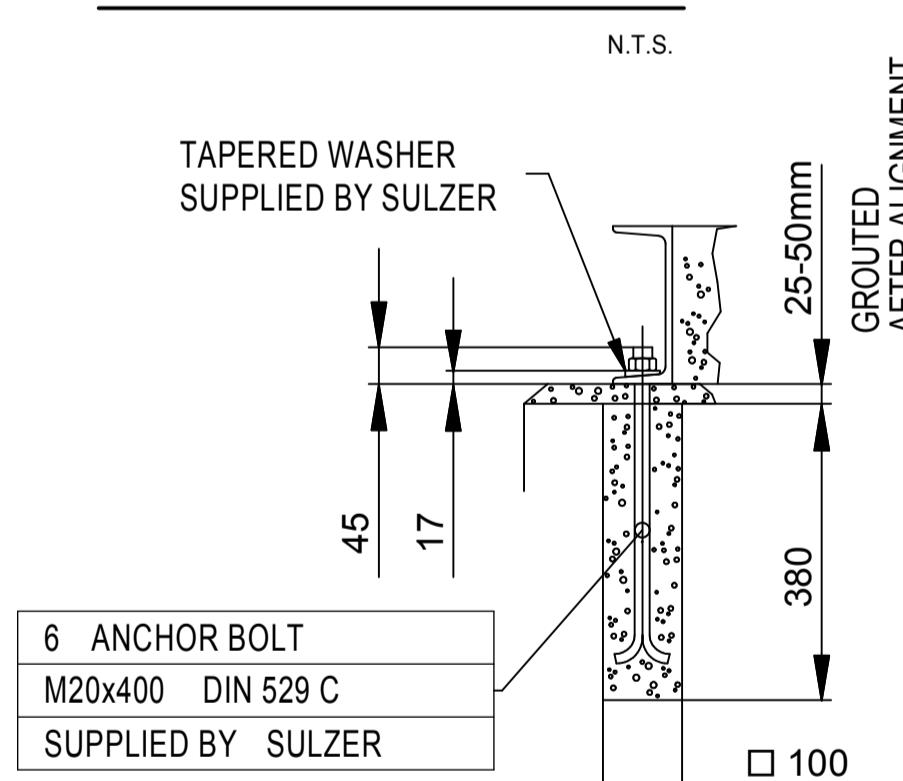


NOTES:

1. CAUTION! CAREFULLY CHECK ALIGNMENT BEFORE STARTING UNIT. ALL HOLES IN FLANGES STRADDLE CENTERLINES. THE CONNECTION OF PIPES TO THE UNIT HAS TO BE STRESS FREE.
2. COLORS ARE NOT INTENDED TO REPRESENT "AS SHIPPED" PAINT REQUIREMENTS. THEY ARE FOR QUICK IDENTIFICATION OF PIPING AND EQUIPMENT.
3. PIPING AND EQUIPMENT ARE MODELED REPRESENTATIONS ONLY. ACTUAL LOCATION AND ORIENTATION MAY VARY PER SHOP STANDARDS, UNLESS OTHERWISE DIMENSIONED.
4. THE SUCTION PIPING OR INTAKE DESIGN SHALL MEET THE HYDRAULIC INSTITUTE STANDARDS ANSI/HI 9.8-1998 „PUMP INTAKE DESIGN“ REQUIREMENTS.



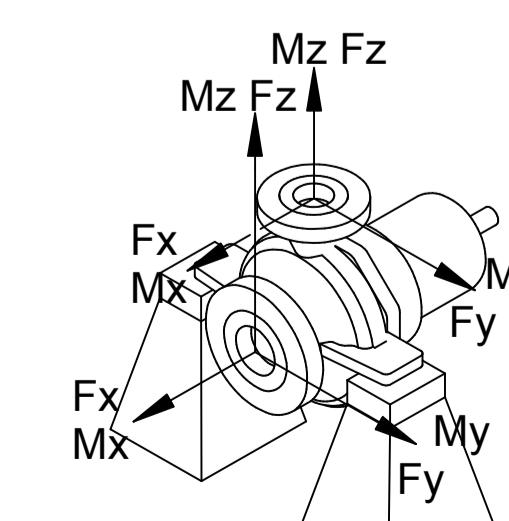
### ANCHOR BOLT DETAIL



### 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	1420
	Fy	1160
	Fz	1780
	Fr	2560
MOMENTS	Mx	920
	My	460
	Mz	700
	Mr	1240

CONTRACT DATA	
PURCHASER:	Sulzer Pumps Spain SA
USER:	Kangan Petro Refining Co
JOB/PROJECT:	Kangan Utility and Offsite Project
CUST. P.O. NO.:	KP-80-10-PS-MA-PO-0001-00
SERVICE:	Fuel Oil Unloading Pump
INSTALLED AT:	Iran
PUMP OEM:	Sulzer Pumps (Deutschland) GmbH
SULZER ORDER NO.:	100263244-0090

IDENTIFICATION NUMBERS	
SULZER SERIAL NO.	CUSTOMER TAG NO'S
588350	PUMP            DRIVER 88-P-3002 A    88-P-302 A

DO NOT SCALE. DIMENSIONS: mm	CERTIFIED FINAL
	UNLESS OTHERWISE SPECIFIED TOLERANCES ≤ 500 mm ± 3mm > 500 mm ± 12mm
	PRELIMINARY ONLY

AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25

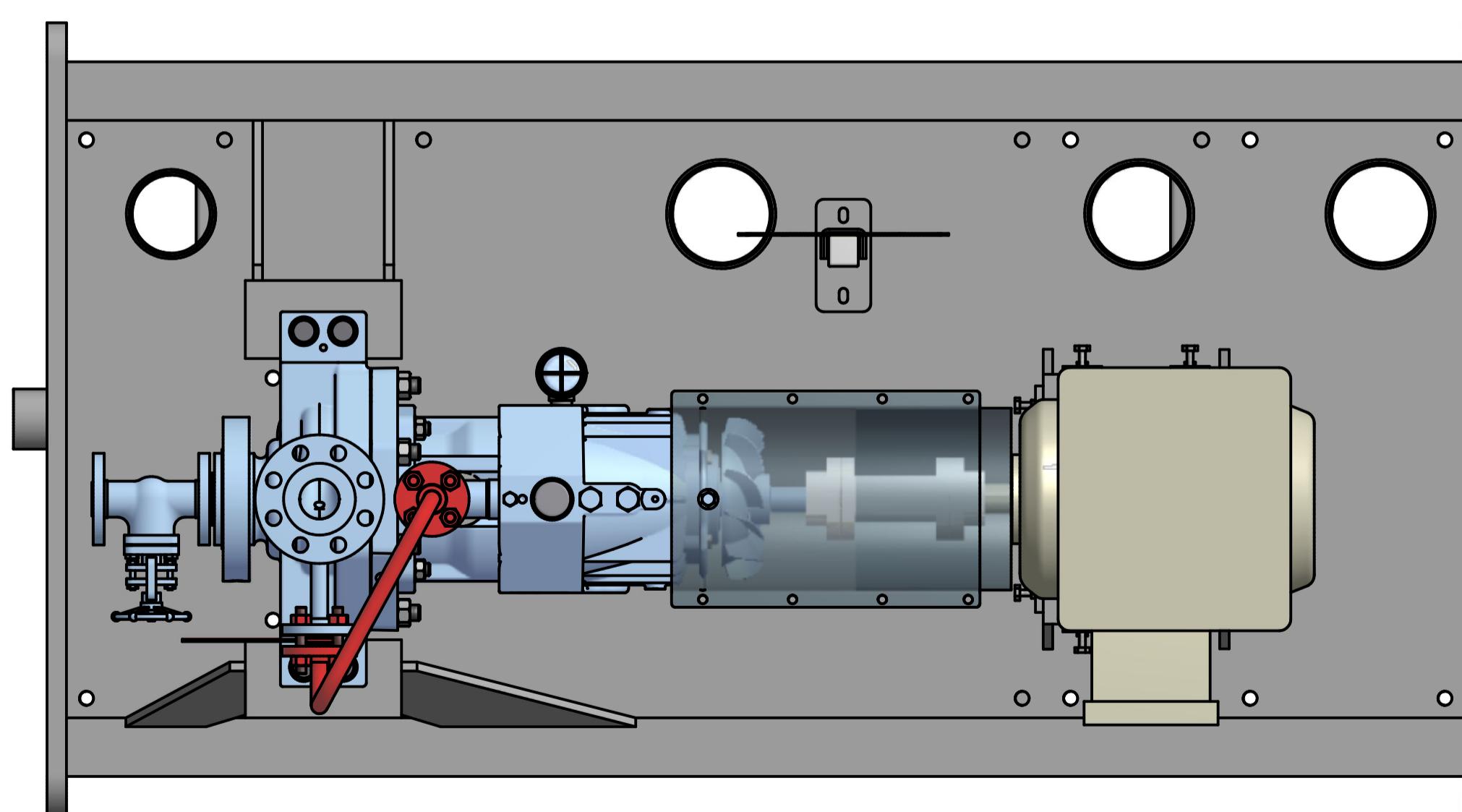
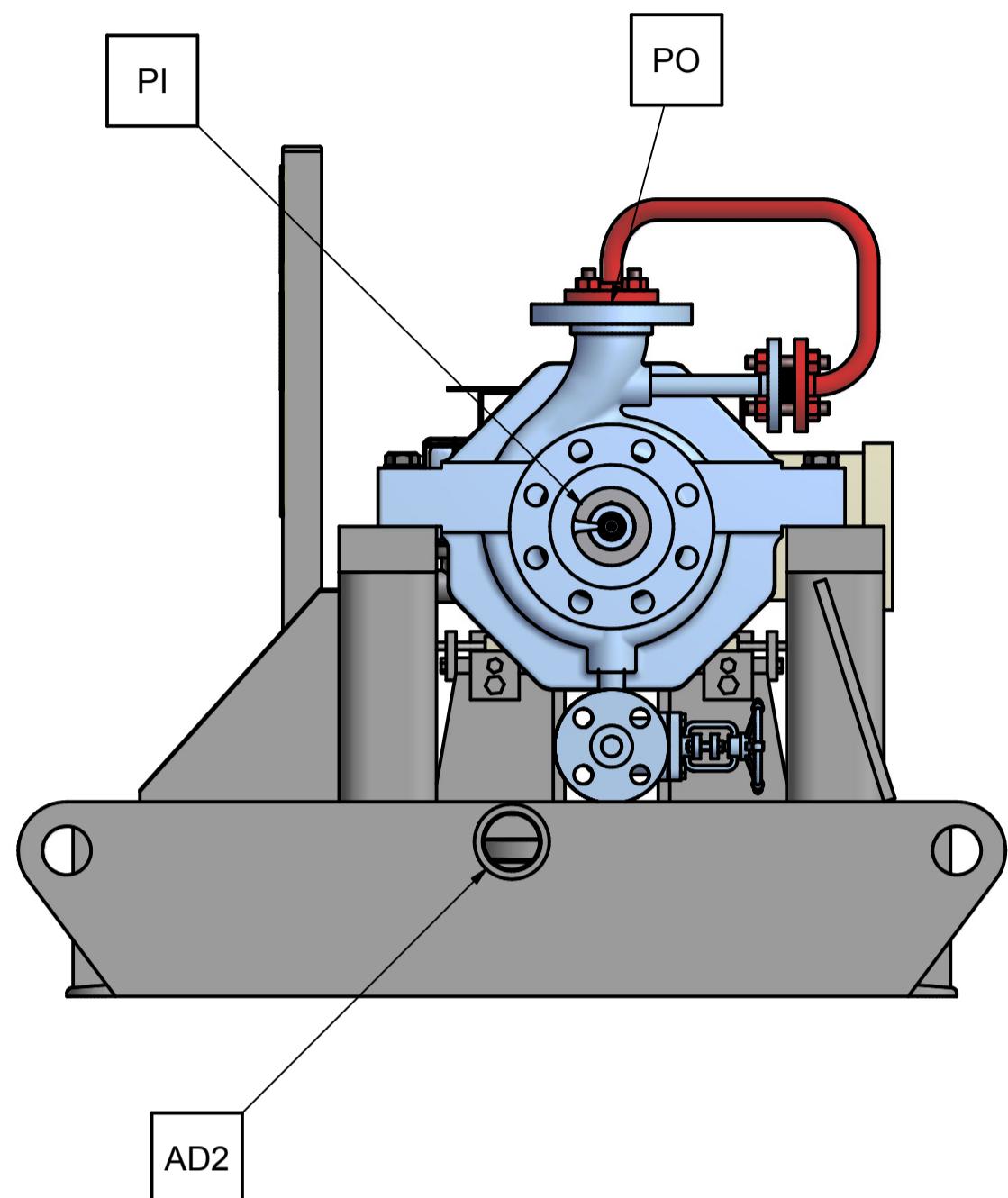
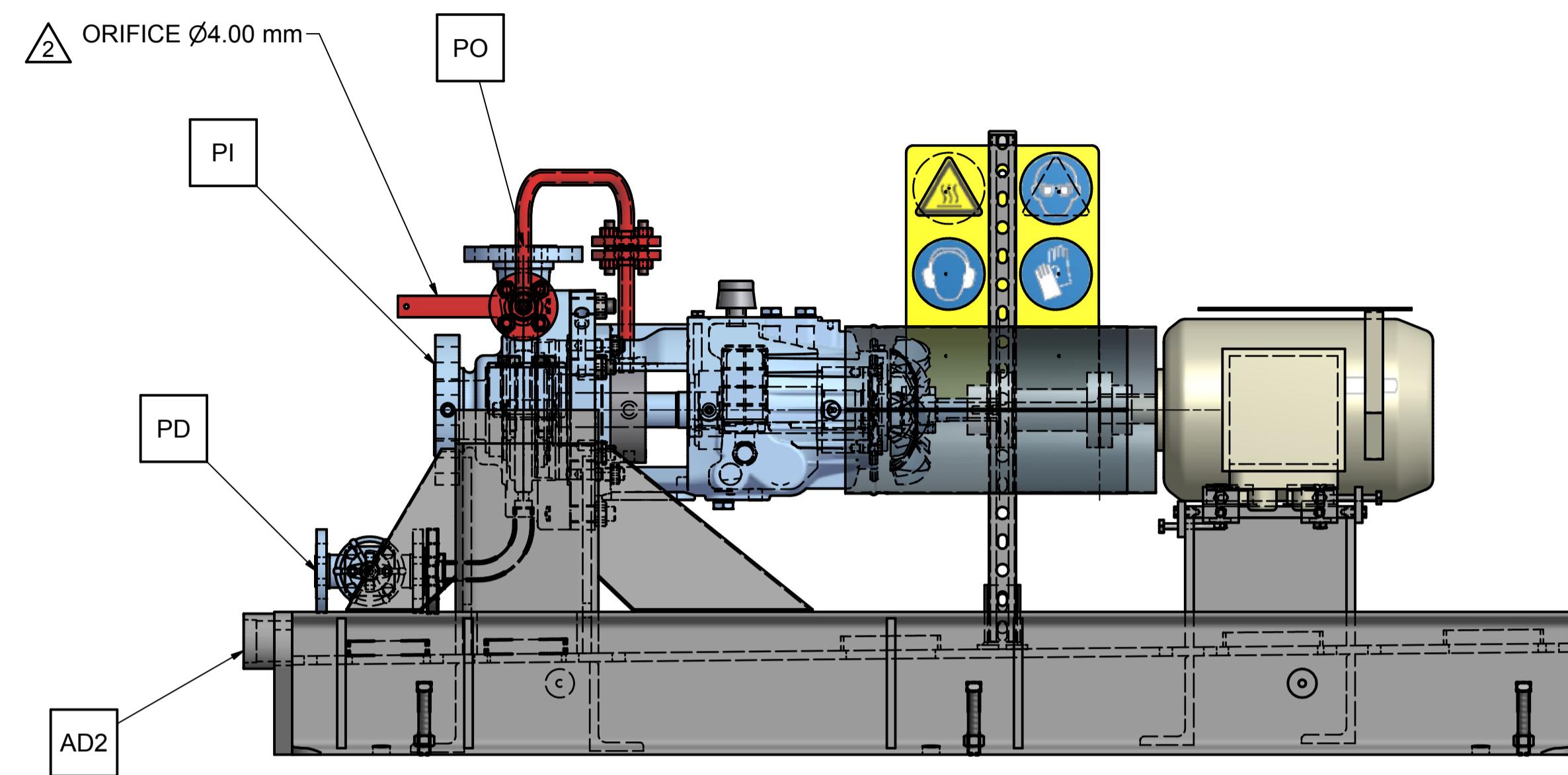
02	24.10.18	R	For Approval	JL	VS	RS	CL
01	10.11.17	R	For Approval	JL	VS	RS	CL
00	02.06.17	F	For Approval	JL	VS	RS	CL
Rev.	Date	Status	Purpose of Issue	PRE'D.	CHK'D.	APR'D.	AUZ'D.

Kangan Utility & Offsite Project  
P.O. No.: KP-80-10-PS-MA-PO-0001-00      SCALE : 1: 7

**SULZER**      EIED

DRAWING TITLE:  
Equipment Outline (GAD) including nozzle location

DRAWING No.	VP-80-00-MA-0001-0261	SHEET No.	2 OF 3	REV. 02
(B) Changes according customer comments		11/01/2018	11/01/2018	11/01/2018
		J. LOPEZ	V. SANCHEZ	R. SANCHEZ
REV. MODIFICATION		MODIFIED	CHECKED	APPROVED
SEP. PARTS LIST:	NO	FORMAT: A1	DESIGN GROUP: -	FIRST ANGLE PROJECTION
REPLACED BY:	-	SUBSTITUTE FOR:		ORIGINAL SCALE: 1:7
OHH	2x3x7.5A-1			DRAWN: 16-MAY-2017 C.ORTIZ
	-			CHECKED: 16-MAY-2017 V.SANCHEZ
100263244-0090		GENERAL ARRANGEMENT DRAWING		APPROVED: 16-MAY-2017 R.SANCHEZ
		PART NO.	EN	PGA1002632440090-01
				2 / 3



CONNECTION LEGEND			
ITEM	DESCRIPTION	SIZE	TYPE
PI	PUMP SUCTION NOZZLE	3"	300 RF
PO	PUMP DISCHARGE NOZZLE	2"	300 RF
PD	PUMP DRAIN WITH VALVE	3/4"	300 RF
AD2	BASE DRAIN	2"	NPT FEMALE

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PHOTOCOPYING AND RECORDING, WITHOUT THE  
EXPRESS PRIOR WRITTEN CONSENT OF SULZER  
PUMPS

## CONTRACT DATA

PURCHASER: Sulzer Pumps Spain SA  
USER: Kangan Petro Refining Co  
JOB/PROJECT: Kangan Utility and Offsite Project  
CUST. P.O. NO.: KP-80-10-PS-MA-PO-0001-00  
SERVICE: Fuel Oil Unloading Pump  
INSTALLED AT: Iran  
PUMP OEM: Sulzer Pumpe (Deutschland) GmbH  
SULZER ORDER NO.: 100263244-0090

## IDENTIFICATION NUMBERS

SULZER SERIAL NO.	CUSTOMER TAG NO'S	
	PUMP	DRIVER
588350	88-P-3002 A	88-P-302 A

DO NOT SCALE. DIMENSIONS: mm	CERTIFIED FINAL
	UNLESS OTHERWISE SPECIFIED TOLERANCES
	≤ 500 mm ± 3mm > 500 mm ± 12mm

AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25

02	24.10.18	R	For Approval	JL	VS	RS	CL
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Kangan Utility & Offsite Project  
KANGAN PETRO REFINING CO.

P.O. No.: KP-80-10-PS-MA-PO-0001-00      SCALE : 1: 7

**SULZER**



DRAWING TITLE:  
Equipment Outline (GAD) including nozzle location

DRAWING No.	VP-80-00-MA-0001-0261	SHEET No.	3 OF 3	REV. 02
(b)	Changes according customer comments	11/01/2018	11/01/2018	11/01/2018
REV.	MODIFICATION	J. LOPEZ	V. SANCHEZ	R. SANCHEZ
SEP. PARTS LIST:	NO	FORMAT: A1	DESIGN GROUP: -	FIRST ANGLE PROJECTION <input checked="" type="checkbox"/>
REPLACED BY:	-	SUBSTITUTE FOR:	MODIFIED	CHECKED APPROVED
OHH	2x3x7.5A-1	-	-	ORIGINAL SCALE: 1:7
GENERAL ARRANGEMENT	GENERAL ARRANGEMENT	DRAWN: 16-MAY-2017	C.ORTIZ	
CONNECTION LAYOUT	CONNECTION LAYOUT	CHECKED: 16-MAY-2017	V.SANCHEZ	
100263244-0090	GENERAL ARRANGEMENT DRAWING	APPROVED: 16-MAY-2017	R.SANCHEZ	
<b>SULZER</b>	PART NO. EN PGA1002632440090-01	3 / 3		