

PUMP SPECIFICATIONS			
SIZE & TYPE: ZF150-3500			
SPEED: (see MOTOR SPECIFICATIONS)			
ROTATION: CW (AS VIEWED FROM DRIVER)			
DISCH FLG:	6"	CLASS: 300RF	Standard: ASME B16.5
SUCT FLG:	6"	CLASS: 300RF	Standard: ASME B16.5
MECH SEAL TYPE: CHETRA TYP151CA-048			
MECH SEAL DRG: 25515-16-10-P-1881 A/B API CODE: BSTHN			
API PIPING PLANS: 11 , 61			

COUPLING SPECIFICATIONS	
MFR: Metastream	
TYPE: TSKS	SIZE: 0135
COUPLING-GUARD MATERIAL: Brass	

DRIVER SPECIFICATIONS			
MOTOR: Schorch			
FRAME: 315	Enclosure:Zone 2, IIB, T3		
kW: 90	SPEED: 1488 rpm		
PHASE: 3	VOLTAGE: 400		
FURNISHED BY: SULZER	CYCLE: 50 Hz		

CONTRACT DATA	
PURCHASER:	AIOTEC GmbH
USER:	
JOB/PROJECT:	Kangan C2 Recovery and Fractionation Plant
CUST. P.O. NO.:	
SERVICE:	CONDENSATE RETURN WATER
INSTALLED AT:	
PUMP OEM:	Sulzer Pumpen (Deutschland) GmbH
SULZER ORDER NO.:	1002471880120


IDENTIFICATION NUMBERS		
SULZER SERIAL NO.	CUSTOMER TAG NO'S	
	PUMP	DRIVER
583648	10-P-1881 A	10-M-1881 A
583649	10-P-1881 B	10-M-1881 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

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

00001	<input type="checkbox"/> Approved	No comment and the document is released for Manufacturing.
00002	<input type="checkbox"/> Approved with comment	Vendor shall correct, review and resubmit the document, the document can be released for Manufacturing if changes incorporated.
00003	<input type="checkbox"/> Commented	Vendor shall correct, review and resubmit the document by the date specified, the document shall be released under the Status of "To Be Released Issue", if correct document will be available before starting the Manufacturing.
00004	<input type="checkbox"/> Not Accepted (Rejected)	Vendor shall re-work/re-design/re-specify the contents of the document according to the comments received by the customer. Approved documents shall be available before starting the Manufacturing. Review of any design changes and the responsibility of all the purchase order and the mutual agreement in writing.
DATE: DEPT: Signature: Only for Internal review CR PR CL IN ME MA ST AR PR SA HW TL		

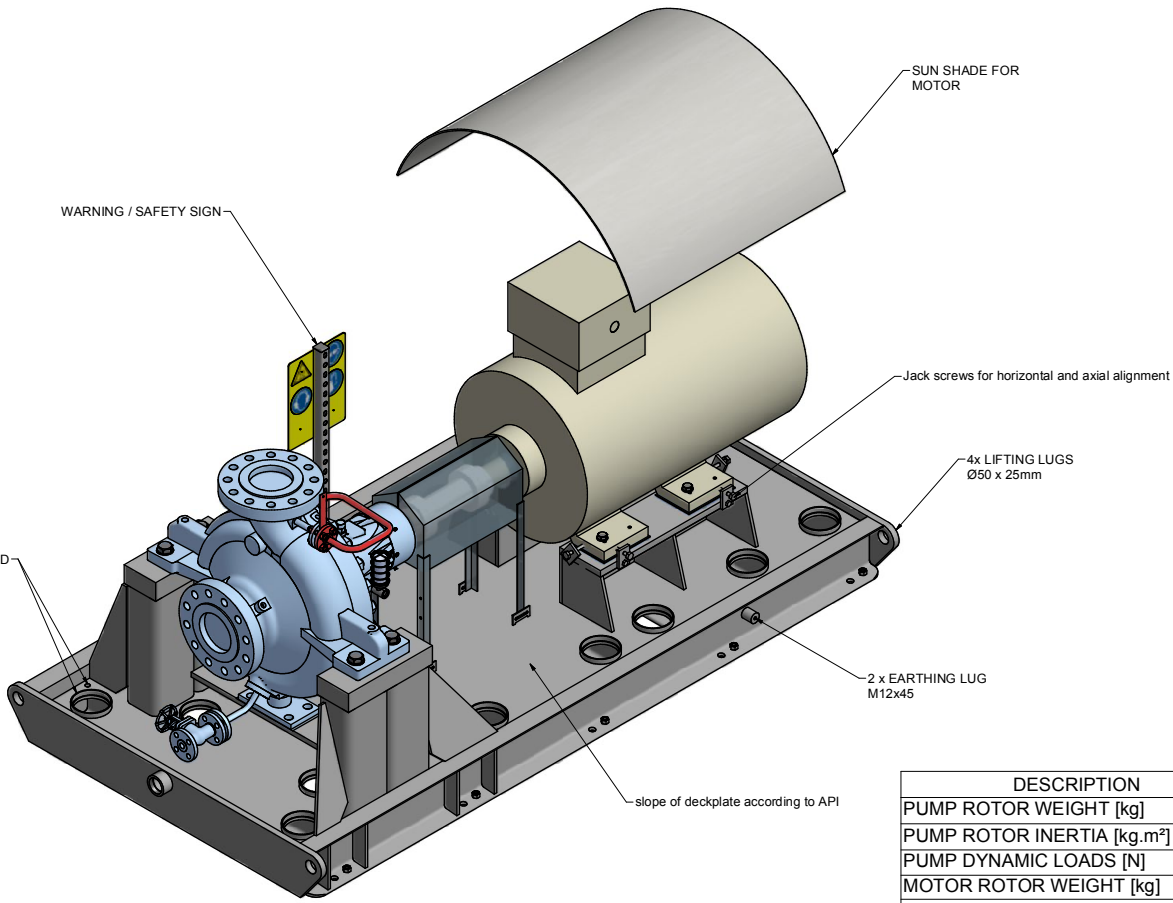
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01	12.05.17	"R"	For Approval	RS	AM	CH	SW
00	03.01.17	"F"	For Approval	RS	AM	CH	SW
REV.	DATE	Status	Purpose of issue	PREP.	CHK'D.	APP'D.	AUTH'D.

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

<b>SULZER</b>	
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DRAWING TITLE: Dimensional outline drawings for Item 10-P-1881 A/B			
DRAWING No.	VP-10-00-MA-0003-1214	SHEET No.	10F3 REV. 02

REV. MODIFICATION	NO	FORMAT: A1	DESIGN GROUP:	MODIFIED	CHECKED	APPROVED
SEP. PARTS LIST:	REPLACED BY:	ZF	150-3500	GENERAL ARRANGEMENT GA ISOMETRIC AND DATA SHEET	DRAWN: 3-Jan-2017 Scherban	CHECKED: 3-Jan-2017 Ratzel
1002471880120	GENERAL ARRANGEMENT DRAWING	APPROVED:				
<b>SULZER</b>	PART NO.	EN	PGA1002471880120-01	1	3	



DESCRIPTION	VALUE
PUMP ROTOR WEIGHT [kg]	68,5
PUMP ROTOR INERTIA [kg.m²]	1,42
PUMP DYNAMIC LOADS [N]	406/104
MOTOR ROTOR WEIGHT [kg]	Appr. 215
MOTOR ROTOR INERTIA [kg.m²]	2,2
MOTOR DYNAMIC LOADS [N]	84

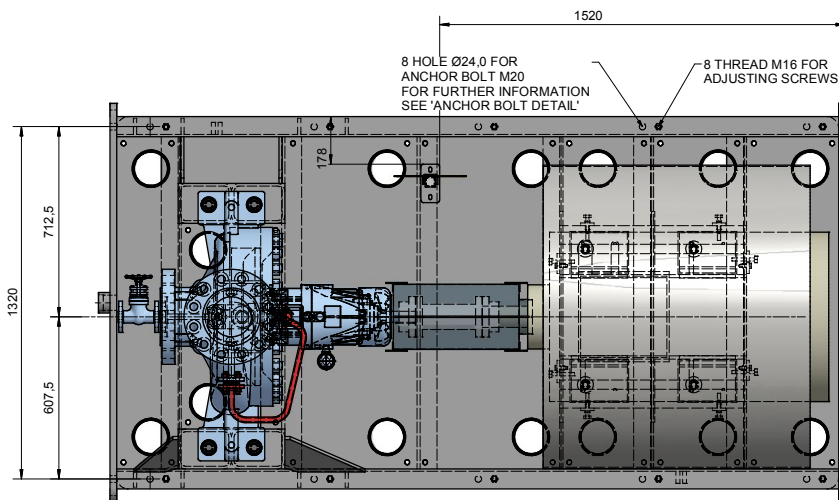
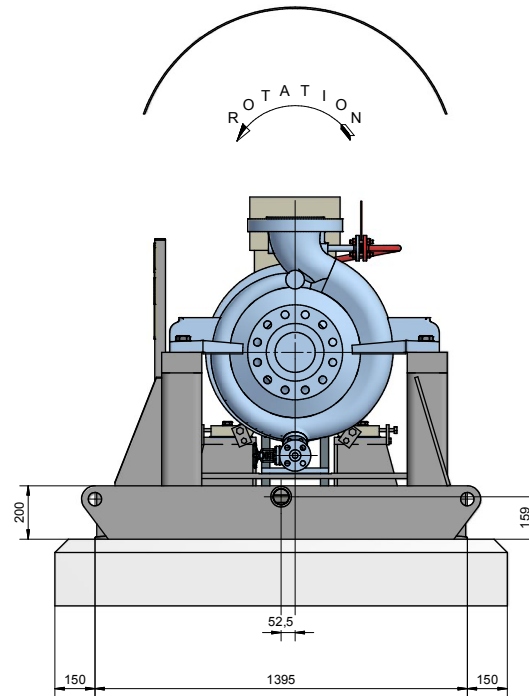
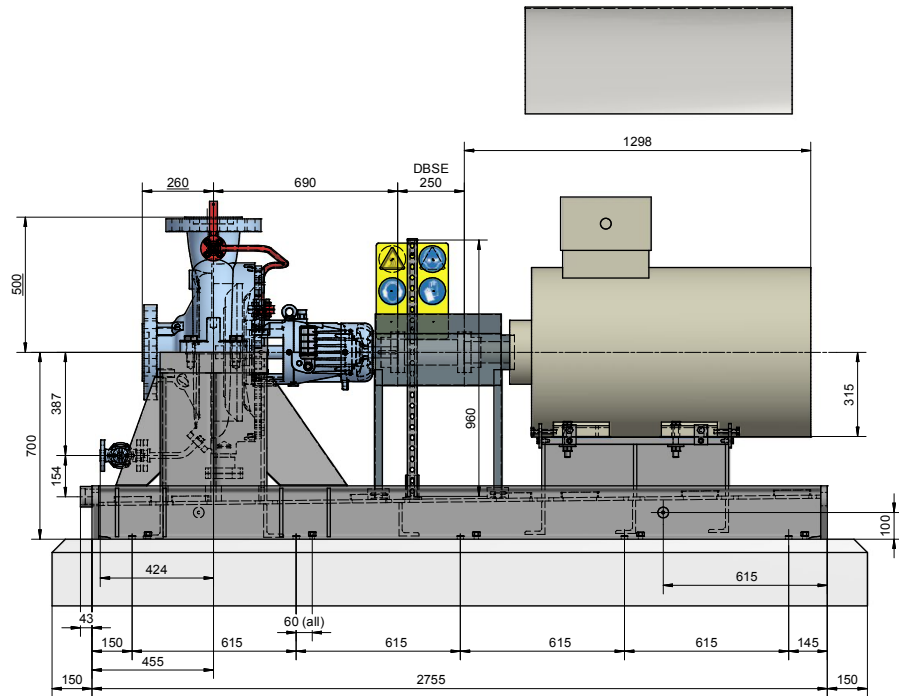
MAINTENANCE WEIGHT PUMP:	215 kg
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APPROXIMATE WEIGHTS	
PUMP:	613 kg
MOTOR:	1040 kg
BASEPLATE:	933 kg
AUXILIARY:	50 kg
TOTAL:	2636 kg

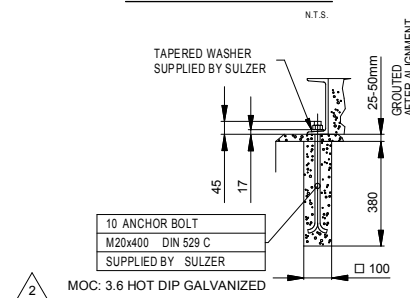
COG	X	Y	Z
PUMP	550	0	700
COUPLING	1270	0	700
BASEPLATE	1254	30	205
MOTOR	2045	0	700
PACKAGE	1404	11	523
COG=CENTER OF GRAVITY			

- NOTES:
- 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.**
  - COLORS ARE NOT INTENDED TO REPRESENT "AS SHIPPED" PAINT REQUIREMENTS. THEY ARE FOR QUICK IDENTIFICATION OF PIPING AND EQUIPMENT.
  - PIPING AND EQUIPMENT ARE MODELED REPRESENTATIONS ONLY. ACTUAL LOCATION AND ORIENTATION MAY VARY PER SHOP STANDARDS, UNLESS OTHERWISE DIMENSIONED.
  - THE SUCTION PIPING OR INTAKE DESIGN SHALL MEET THE HYDRAULIC INSTITUTE STANDARDS ANSI/HI 9.8-1998 "PUMP INTAKE DESIGN" REQUIREMENTS.

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#### ANCHOR BOLT DETAIL



#### 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/mm<sup>2</sup> (B25) or better.

#### CONTRACT DATA

PURCHASER: AIOTEC GmbH  
USER:  
JOB/PROJECT: Kangan C2 Recovery and Fractionation Plant  
CUST. P.O. NO.:  
SERVICE: CONDENSATE RETURN WATER  
INSTALLED AT:  
PUMP OEM: Sulzer Pumpen (Deutschland) GmbH  
SULZER ORDER NO.: 1002471880120

#### IDENTIFICATION NUMBERS

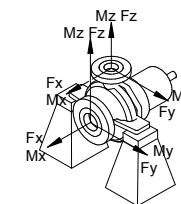
SULZER SERIAL NO.	CUSTOMER TAG NO'S	
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	AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25

#### MAXIMUM NOZZLE LOADINGS

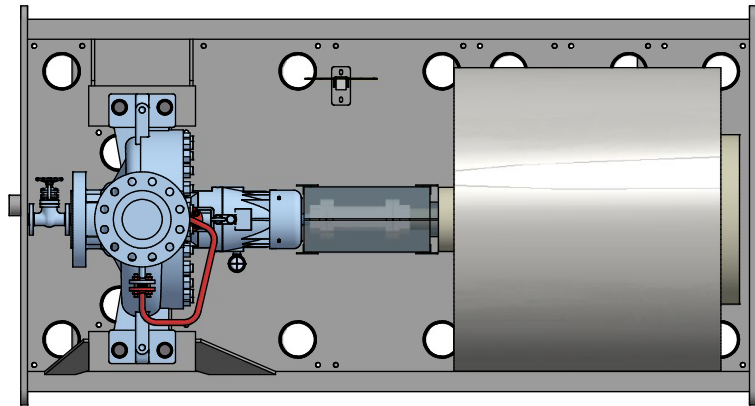
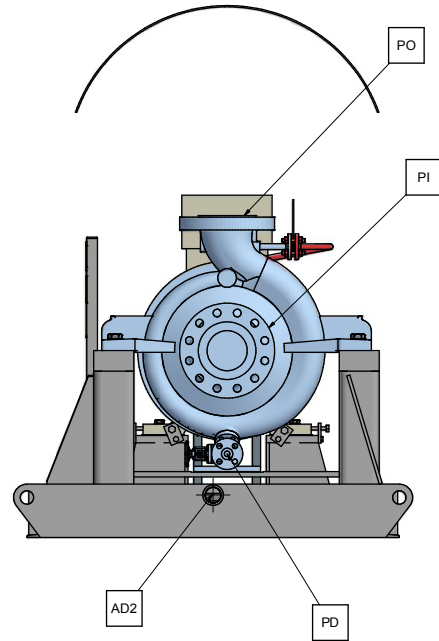
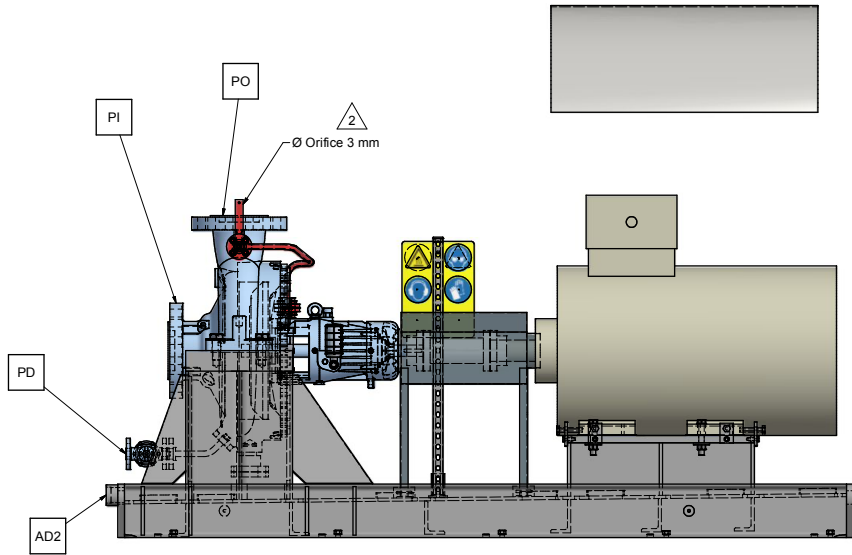
Forces do comply with 2 times of the forces shown in API 610<sup>11th</sup>

FORCE IN (N) MOMENTS IN (Nm)



		SUCT	DISCH
FORCE	Fx	6220	4980
	Fy	4980	4100
	Fz	4100	6220
	Fr	8960	8960
MOMENTS	Mx	4600	4600
	My	2360	2360
	Mz	3520	3520
	Mr	6260	6260

REV. MODIFICATION	NO	FORMAT: A1	DESIGN GROUP: -	MODIFIED	CHECKED	APPROVED
SEP. PARTS LIST:	NO	FORMAT: A1	DESIGN GROUP: -	MODIFIED	CHECKED	APPROVED
REPLACED BY:	-	SUBSTITUTE FOR:	ORIGINAL SCALE:	MODIFIED	CHECKED	APPROVED
ZF	150-3500	GENERAL ARRANGEMENT	FOUNDATION AND NOZZLE	DRAWN:	3-Jan-2017	Scherban
1002471880120	GENERAL ARRANGEMENT DRAWING	CHECKED:	3-Jan-2017	Ratzel		
				APPROVED:		
<b>SULZER</b>	PART NO.	EN	PGA1002471880120-01	2	3	



CONNECTION LEGEND			
ITEM	DESCRIPTION	SIZE	TYPE
PI	PUMP SUCTION NOZZLE	6"	ANSI B16.5 300 RF
PO	PUMP DISCHARGE NOZZLE	6"	ANSI B16.5 300 RF
PD	PUMP DRAIN	3/4"	ANSI B16.5 300 RF WITH GATE VALVE
AD2	BASE DRAIN	2"	NPT FEMALE

2

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PUMPS

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REV.	MODIFICATION	NO	FORMAT: A1	DESIGN GROUP: -	MODIFIED	CHECKED	APPROVED
SEP. PARTS LIST:	REPLACED BY:	150-3500	GENERAL ARRANGEMENT CONNECTION LAYOUT	ORIGINAL SCALE: -	FIRST ANGLE PROJECTION	3-Jan-2017 Scherban	3-Jan-2017 Ratzel
1002471880120	GENERAL ARRANGEMENT DRAWING	PART NO.	EN	PGA1002471880120-01	3 / 3		