

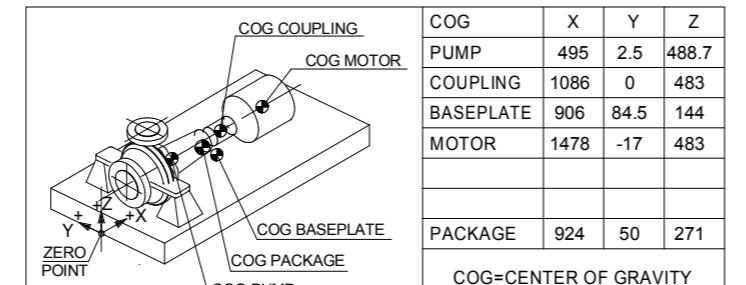
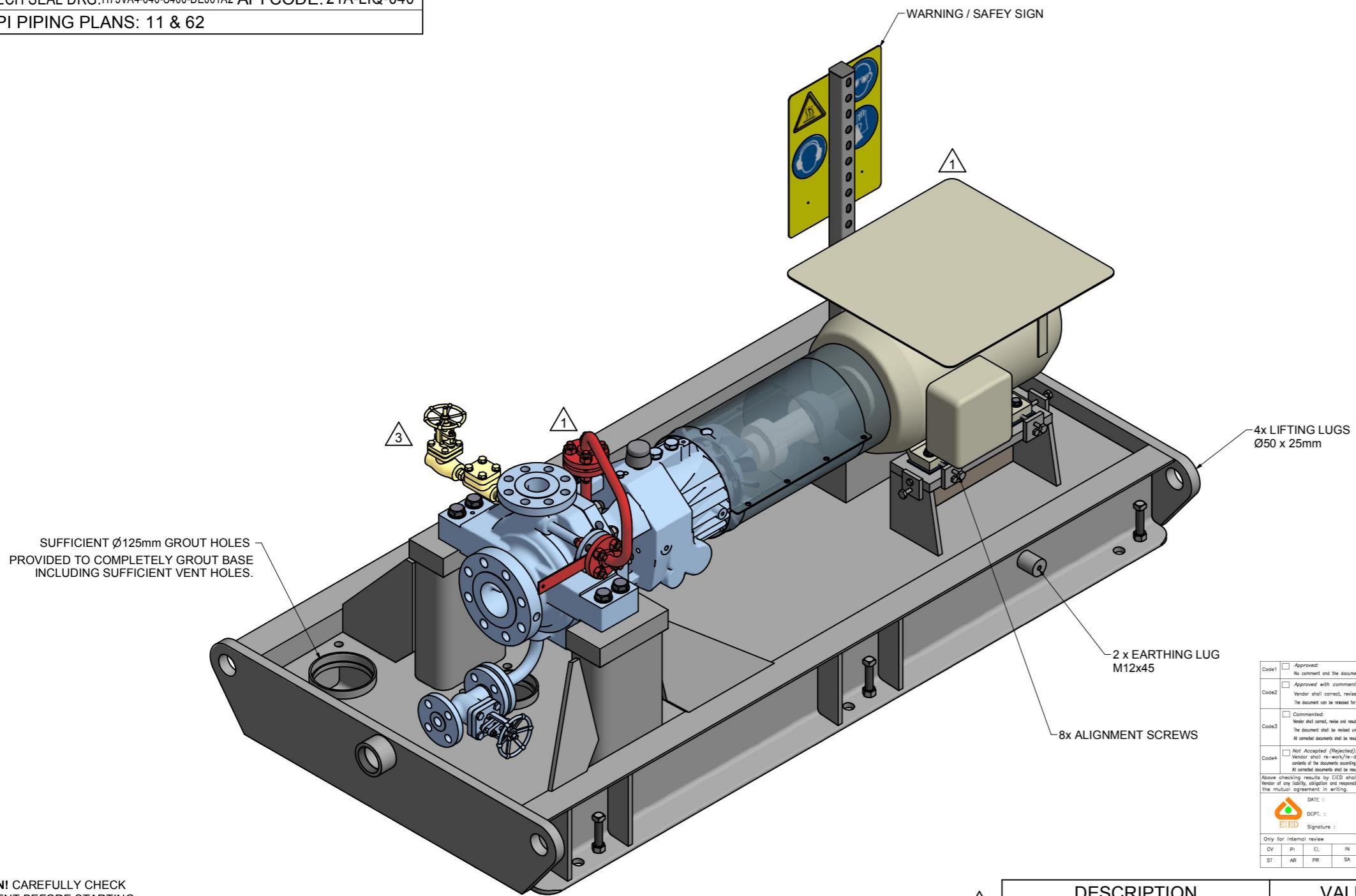
PUMP SPECIFICATIONS	
SIZE & TYPE:	OHH 2x3x7.5A-1
SPEED:	(see MOTOR SPECIFICATIONS)
ROTATION:	CCW (AS VIEWED FROM DRIVER)
DISCH FLG:	2" CLASS: 300 RF Standard: ASME B16.5
SUCT FLG:	3" CLASS: 300 RF Standard: ASME B16.5
MECH SEAL TYPE:	EagleBurgmann
MECH SEAL DRG:	H75VA4-040-S400-DE001A2 API CODE: 21A-LIQ-040
API PIPING PLANS:	11 & 62

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

DRIVER SPECIFICATIONS	
MOTOR:	BROOK / ATB
FRAME:	160
kW:	11
SPEED:	2910 rpm
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:	Bulk Acid Sulphuric Transfer Pump
INSTALLED AT:	Iran
PUMP OEM:	Sulzer Pumps (Deutschland) GmbH
SULZER ORDER NO.:	100263244-0070

IDENTIFICATION NUMBERS		
SULZER SERIAL NO.	CUSTOMER TAG NO'S	
	PUMP	DRIVER
588346	87-P-7004A	87-M-7004A
588347	87-P-7004B	87-M-7004B



DESCRIPTION	VALUE
PUMP DYNAMIC LOADS [N] RADIAL	68
PUMP DYNAMIC LOADS [N] AXIAL	22
MOTOR DYNAMIC LOADS [N] RADIAL	N/A
MAINTENANCE WEIGHT PUMP [Kg]	97.1

APPROXIMATE WEIGHTS

PUMP:	151 kg
MOTOR:	133 kg
BASEPLATE:	478 kg
AUXILIARY:	15 kg
TOTAL:	777 kg

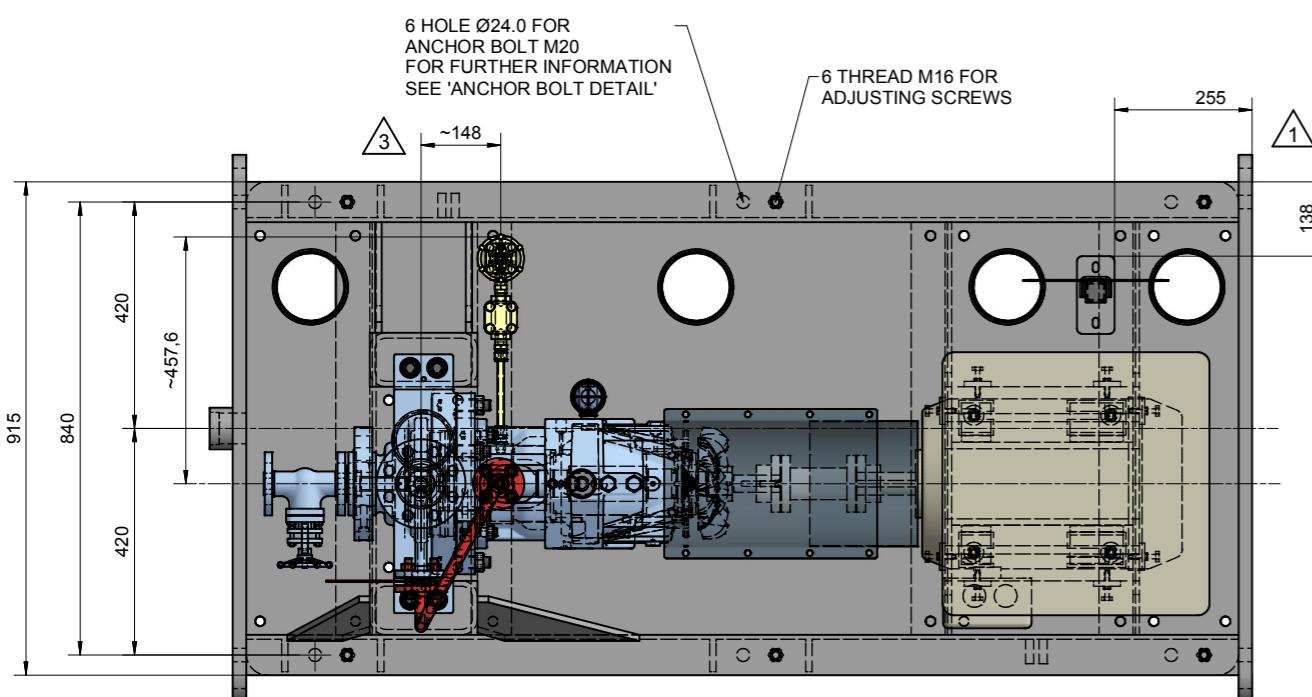
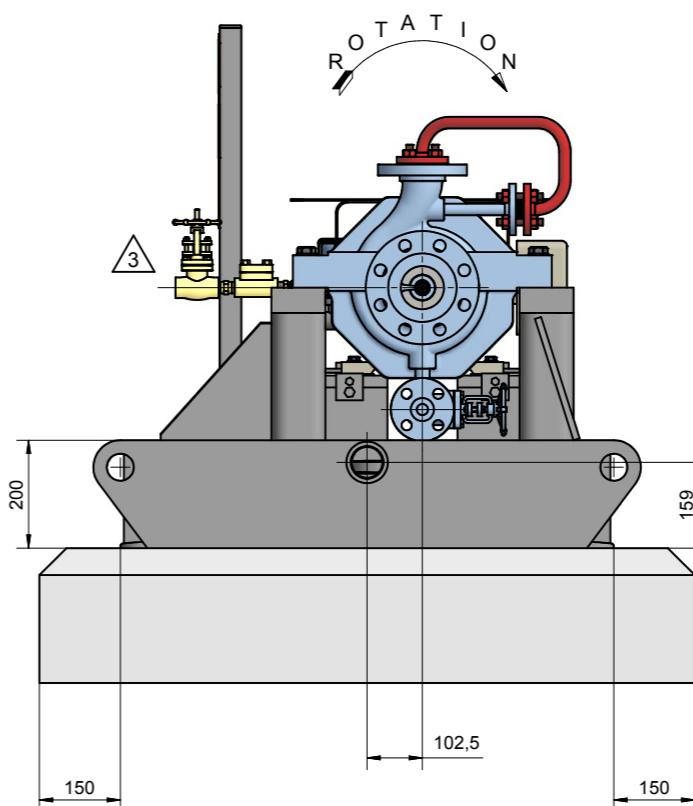
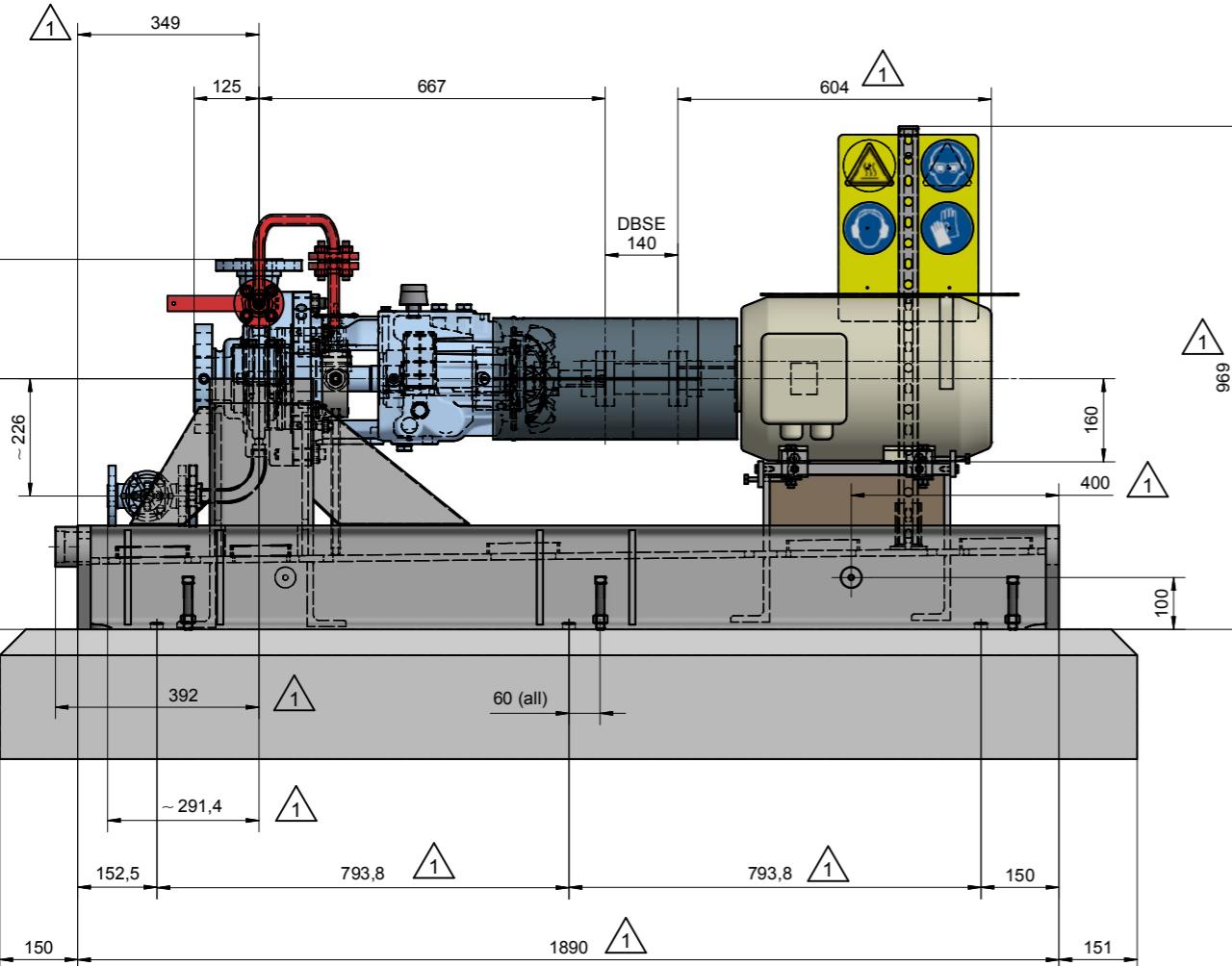
<input checked="" type="checkbox"/> CERTIFIED FINAL	DO NOT SCALE. DIMENSIONS: mm	
	UNLESS OTHERWISE SPECIFIED TOLERANCES	
	≤ 500 mm ± 3mm ≥ 500 mm ± 12mm	
AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25		

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

0	8	R	For Approval	JL	VS	RS	CL
01	17.11.17	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: 5

SULZER		
DRAWING TITLE:		
Equipment Outline (GAD) including nozzle location		
DRAWING No.	VP-80-00-MA-0001-0196	SHEET No. 1 OF 3 REV. 03
(C)	Quench connection updated	09-AUG-2018 09-AUG-2018 09-AUG-2018
REV. MODIFICATION	SEP. PARTS LIST: NO FORMAT: A1	DESIGN GROUP: - FIRST ANGLE PROJECTION <input checked="" type="checkbox"/>
REPLACED BY:	-	SUBSTITUTE FOR: ORIGINAL SCALE: 1:5
OHH	2x3x7.5A-1	DRAWN: 16-MAY-2017 C.ORTIZ
100263244-0070	-	CHECKED: 16-MAY-2017 V.SANCHEZ
		APPROVED: 16-MAY-2017 R.SANCHEZ
GENERAL ARRANGEMENT		GENERAL ARRANGEMENT DRAWING
GA ISOMETRIC AND DATA SHEET		PART NO. -
-		EN PGA1002632440070-01 1 / 3

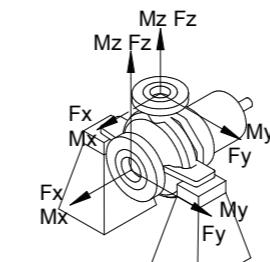


P. N.

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	2660	1420
	Fy	2140	1160
MOMENTS	Fz	1780	1780
	Fr	3860	2560
FORCE	Mx	1900	920
	My	940	460
MOMENTS	Mz	1440	700
	Mr	2560	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:	Bulk Acid Sulphuric Transfer Pump
INSTALLED AT:	Iran
PUMP OEM:	Sulzer Pumpen (Deutschland) GmbH
SULZER ORDER NO.:	100263244-0070

IDENTIFICATION NUMBERS	
SULZER SERIAL NO.	CUSTOMER TAG NO'S
588346	PUMP DRIVER
588347	87-P-7004A 87-M-7004A
	87-P-7004B 87-M-7004B

CERTIFIED FINAL	DO NOT SCALE. DIMENSIONS: mm	
	UNLESS OTHERWISE SPECIFIED TOLERANCES	
	≤ 500 mm	± 3mm
> 500 mm		± 12mm
AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25		

Rev.	Date	Status	Purpose of Issue	PRE'D. CHK'D. APR'D. AUZ'D.
02	10.10.18	R	For Approval	JL VS RS CL
01	17.11.17	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: 7

SULZER



DRAWING TITLE:
Equipment Outline (GAD) including nozzle location

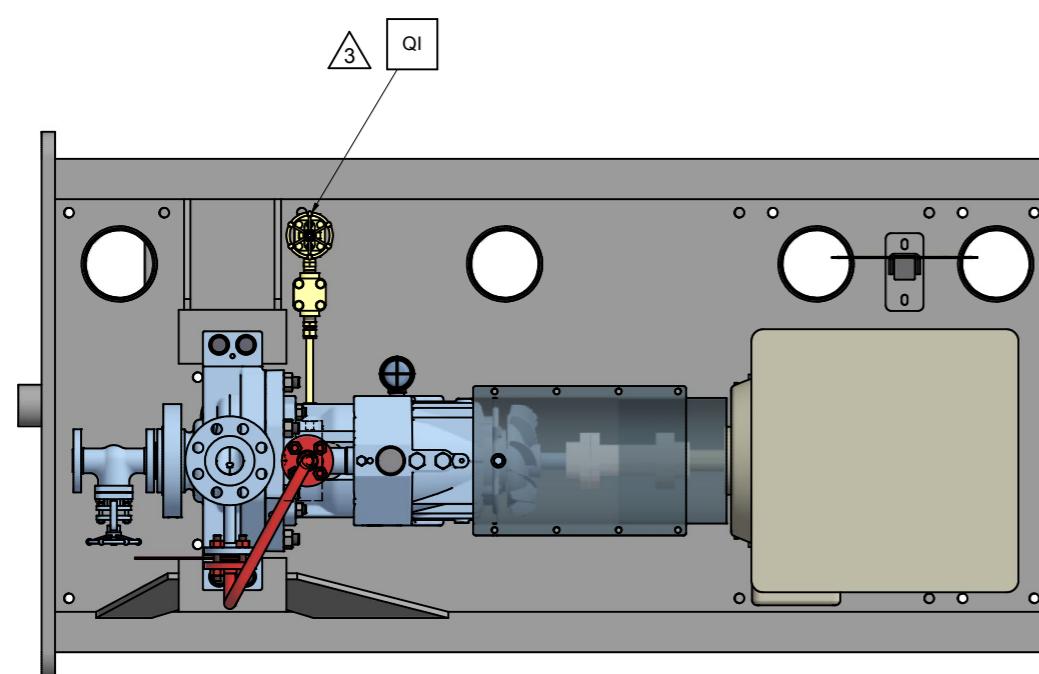
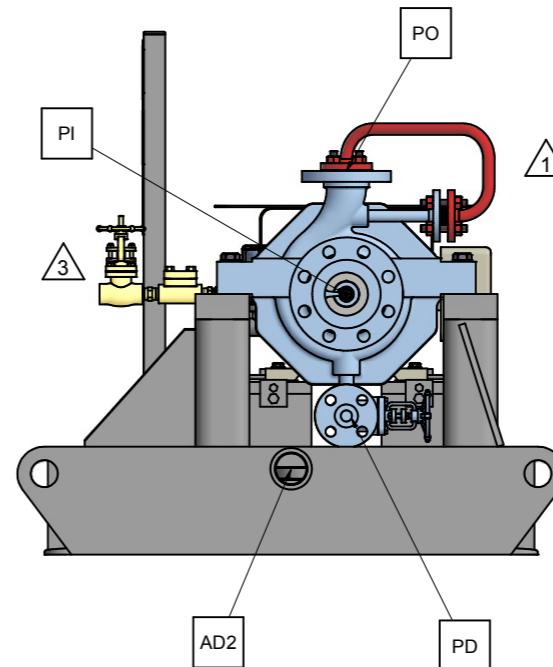
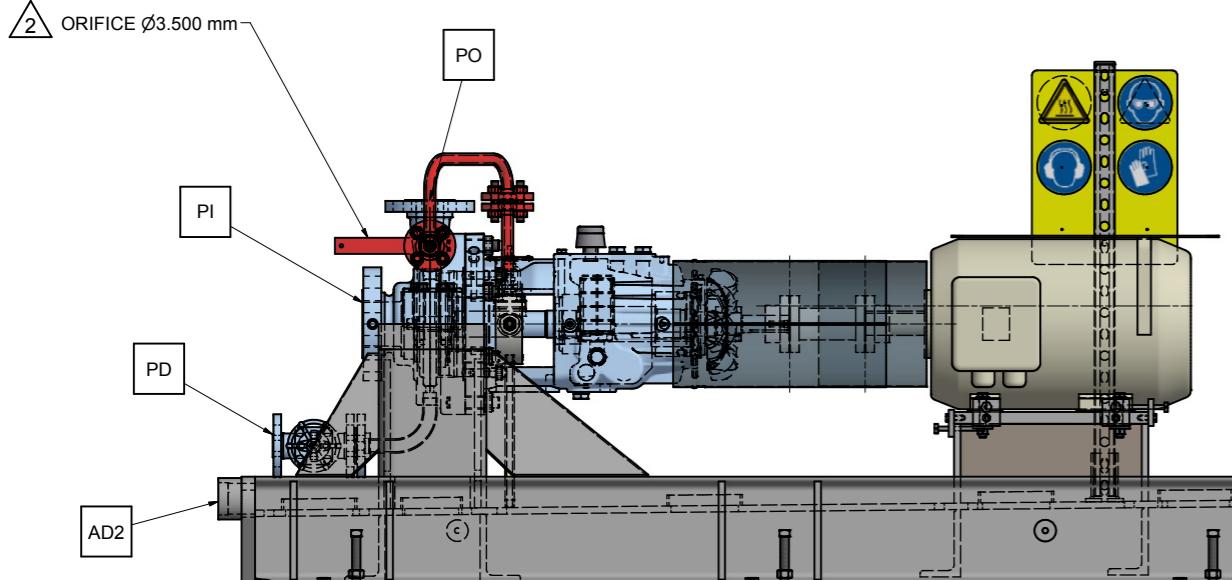
DRAWING No.	VP-80-00-MA-0001-0196	HEET No.	2 OF 3	REV. 03
(C)	Quench connection updated	09-AUG-2018	09-AUG-2018	09-AUG-2018
	J. LOPEZ	C. LOPEZ	R. SANCHEZ	
REV. MODIFICATION	MODIFIED	CHECKED	APPROVED	
SEP. PARTS LIST: NO	FORMAT: A1	DESIGN GROUP: -	FIRST ANGLE PROJECTION	
REPLACED BY: -	SUBSTITUTE FOR: -	ORIGINAL SCALE: 1:7		
OHH	2x3x7.5A-1		DRAWN: 16-MAY-2017	C.ORTIZ
-	-		CHECKED: 16-MAY-2017	V.SANCHEZ
100263244-0070			APPROVED: 16-MAY-2017	R.SANCHEZ
SULZER	PART NO. -	EN PGA1002632440070-01	2 / 3	

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: Bulk Acid Sulphuric Transfer Pump
 INSTALLED AT: Iran
 PUMP OEM: Sulzer Pumps (Deutschland) GmbH
 SULZER ORDER NO.: 100263244-0070

IDENTIFICATION NUMBERS

SULZER SERIAL NO.	CUSTOMER TAG NO'S	
	PUMP	DRIVER
588346	87-P-7004A	87-M-7004A
588347	87-P-7004B	87-M-7004B



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
QI	QUENCH INLET	0.5	NPT FEMALE

02	10.10.18	R	For Approval	JL	VS	RS	CL
01	17.11.17	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



DRAWING TITLE:
 Equipment Outline (GAD) including nozzle location

DRAWING No.	VP-80-00-MA-0001-0196	SHEET No.	3 OF 3	REV. 03
(C)	Quench connection updated	09-AUG-2018	09-AUG-2018	09-AUG-2018
REV.	MODIFICATION	J. LOPEZ	C. LOPEZ	R. SANCHEZ
SEP. PARTS LIST:	NO	FORMAT: A1	DESIGN GROUP: -	FIRST ANGLE PROJECTION <input checked="" type="checkbox"/>
REPLACED BY:	-	SUBSTITUTE FOR:	ORIGINAL SCALE: 1:7	DRAWN: 16-MAY-2017 C.ORTIZ
OHH	2x3x7.5A-1	GENERAL ARRANGEMENT CONNECTION LAYOUT	-	CHECKED: 16-MAY-2017 V.SANCHEZ
100263244-0070	GENERAL ARRANGEMENT DRAWING	PART NO.	EN	APPROVED: 16-MAY-2017 R.SANCHEZ
SULZER	PGA1002632440070-01	3 / 3		