

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

Document No.: VP-80-00-MA-0001-0238



Document Title: Equipment Outline (D) includig nozzle location for 88-P-3001 A/B

Kangan Utility & Offsite Project

Rev.: 02 Page 1 of 5

Equipment Outline (GAD) including nozzle location for 88-P-3001 A/B

Code1	□ App No Mar		d the docum	nent is relea	sed for					
Code2	Ven The		ct, revise and i							
Code3	Ven the	□ Commented Vendor shall correct, revise and resubmit the document by the date specified. The document shall be revised under the Status of "R: Revised Issue". All corrected documents shall be resubmitted before starting the Manufacturing.								
Code4 Not Accepted (Rejected) Vendor shall re-work/re-design/re-specify the contents of the documents according to the comments/ reasons for rejection. All corrected documents shall be resubmitted before starting the Manufacturing.										
	•		n no way relic		•					
	EIED	De	Date: Dept: Signature:							
Only for in	ternal rev	iew								
CV	PI	EL	IN	ME	MA					
ST	AR	PR	SA	HV	TL					

02	24-07-18	R	For Approval	F. Toneto	A. Madeira	F. Toneto	A. Madeira
01	18-04-18	R	For Approval	F. Toneto	A. Madeira	F. Toneto	A. Madeira
00	03-07-17	F	For Approval	F. Toneto	A. Madeira	F. Toneto	A. Madeira
Rev.	Date	Status	POI	PRE'D	СНК'D	APR'D	AUZ'D



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Kangan Utility & Offsite Project



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

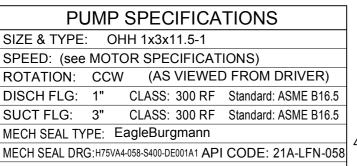
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Page 2 of 5

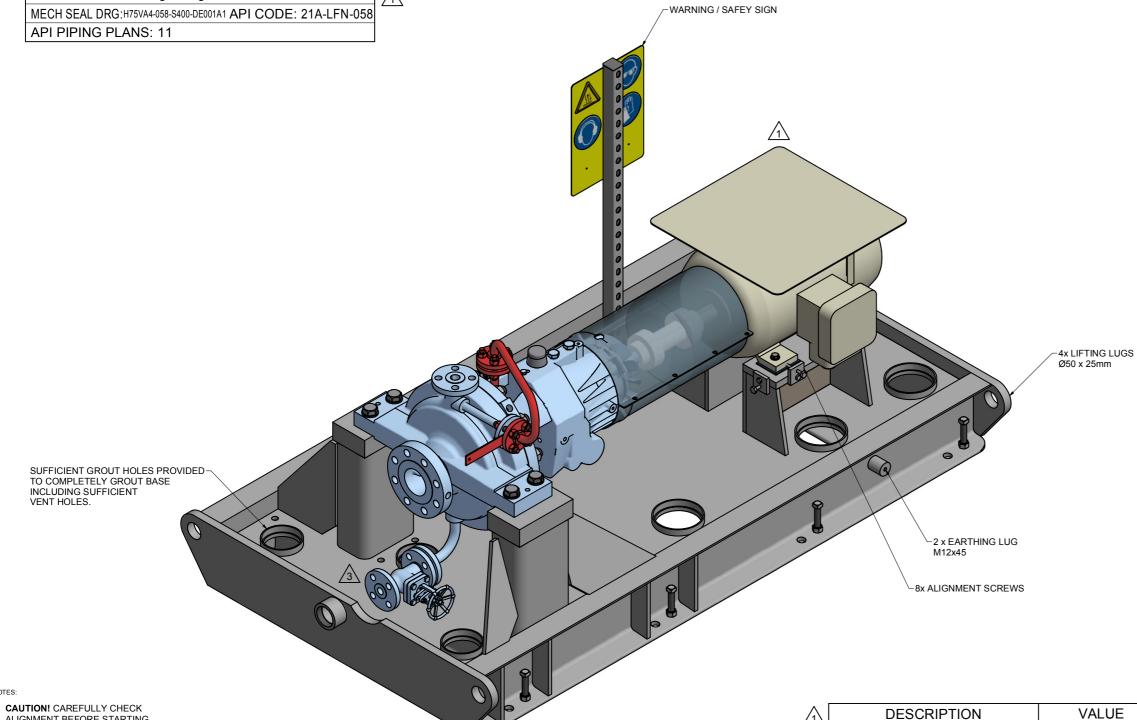
						Tab	oula	tion	of Re	evised	l Pag	es					
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4	X	X	X														
5	X	X	X														
							1	1	1		1			1			



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

 Λ

DRIVER SPECIFICATIONS MOTOR: BROOK CROMPTON FRAME: 160 3000 rpm SPEED: kW: 11.0 PHASE: 3 VOLTAGE: 400 FURNISHED BY: SULZER CYCLE: 50 Hz



				_	1	DESCRIPTION	VAL
						PUMP DYNAMIC LOADS [N] RADIAL	98
						PUMP DYNAMIC LOADS [N] AXIAL	22
	000		· ·	7	l	MOTOR DYNAMIC LOADS [N] RADIAL	N/A
COG COUPLING	COG	X	Y			MAINTENANCE WEIGHT PUMP [Kg]	163
COG MOTOR	PUMP	486	2	533			•

COG COUPLING	COG	X	Y	Z
COG MOTOR	PUMP	486	2	533
	COUPLING	1121	0	533
	BASEPLATE	912	90.5	154
	MOTOR	1518	-45	537
Y COG BASEPLATE	PACKAGE	895	45	315
ZERO/ COG PACKAGE POINT PUMP COG PUMP	COG=CEN	TER OF	GRAV	ITY

<i>F</i>	REPROXIMATE	V V □ I	GHIS
PUMP:		234	kg
MOTOR:		140	kg
BASEPLAT	ГЕ:	508	kg
AUXILIAR\	Υ :	15	kg
ΤΟΤΔΙ ·		207	ka

				/	\ B2001111 11011	
					PUMP DYNAMIC LOADS [N] RADIAL	98
					PUMP DYNAMIC LOADS [N] AXIAL	22
	1000				MOTOR DYNAMIC LOADS [N] RADIAL	N/A
COG COUPLING	COG	X	Y		MAINTENANCE WEIGHT PUMP [Kg]	163
COG MOTOR	PUMP	486	2	533	MAINTENANCE WEIGHT FOWI [Rg]	103
	COUPLING	1121	0	533	APPROXIMATE WE	ICHTS
	BASEPLATE	912	90.5	154	APPROXIIVIATE WE	IGHTS
	MOTOR	1518	-45	537	PUMP: 234	kg

PART NO. | EN | PGA1002632440080-01 | 1 / 3

Kangan Utility and Offsite Project

CUST. P.O. NO.: KP-80-10-PS-MA-PO-0001-00 SERVICE: INSTALLED AT: Fuel Oil Transfer Pump

88-P-3001 B

CONTRACT DATA

Sulzer Pumps Spain SA

Kangan Petro Refining Co

PUMP OEM: Sulzer Pumpen (Deutschland) GmbH SULZER ORDER NO.: 100263244-0080

	IDENTIFICATION NUMBERS									
SULZER	CUSTOMER	CUSTOMER TAG NO'S								
SERIAL NO.	PUMP	DRIVER								
588348	88-P-3001 A	88-M-3001 A								



88-M-3001 B

CERTIFIED FINAL

PURCHASER:

JOB/PROJECT:

SERIAL N

588349

USER:

CERTIFIED FOR NOZZLE & FOUNDATION ONLY

PRELIMINARY ONLY

≤ 500 mm ± 3mm $> 500 \text{ mm} \pm 12 \text{mm}$

AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25

DO NOT SCALE. DIMENSIONS: mm

UNLESS OTHERWISE SPECIFIED TOLERANCES

DRAWING CONTENT	
SHEET DESCRIPTION	SHEET NO.

GA ISOMETRIC DATA SHEET FOUNDATION AND NOZZLE CONNECTION LAYOUT 3



3	03.07.18	R	For Approval	JL	VS	RS	CL
2	11.01.18	R	For Approval	JL	vs	RS	CL
1	10.11.17	R	For Approval	JL	VS	RS	CL
0	02.06.17	F	For Approval	JL	vs	RS	CL
ev.	Date	Status	Purpose of Issue	PRE'D.	CHK'D.	APR'D.	AUZ'D.

Kangan Utility & Offsite Project



SCALE : 1:5

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



DRAWING TITLE:

Equipment Outline (GAD) including nozzle location

DRA	AWING No.	VP-	-80-10-M				No.	1	OF 3	R	EV.	03
(c)	Drain dime	nsion	updated	•	03/07	7/2018	03	07/201	8	03/	07/20	18
							V. SANCHEZ		EZ	R. SANCHE		HEZ
REV.	MODIFICATION				MOD	IFIED	CHECKED			APPROVED		
SEP.	PARTS LIST:	DESIGN GROUP	-			FIRST A	ANGLE I	PROJE	CTION	₽		
REPL	ACED BY:		-	SUBSTITUTE	SUBSTITUTE FOR:			ORIGINAL SCALE: 1:5			:5	
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-										V	SAN	CHEZ
								APPR	OVED	16	-MAY	-2017
10	0263244-00	080	GENERAL	ARRANGE	MENT	DRAWIN	٧G			R	CAN	CHEZ

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

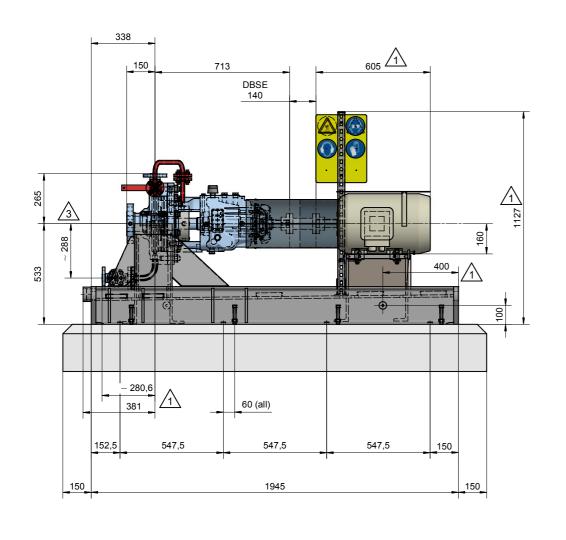
ARE FOR QUICK IDENTIFICATION OF PIPING AND EQUIPMENT.
PIPING AND EQUIPMENT ARE MODELED REPRESENTATIONS ONLY, ACTUAL LOCATION AND ORIENTATION MAY VARY PER SHOP STANDARDS, UNLESS OTHERWISE DIMENSIONED. THE SUCTION PIPING OR INTAKE DESIGN SHALL MEET THE HYDRAULIC INSTITUTE STANDARDS ANSI/H 19.8-1998 "PUMP INTAKE DESIGN" REQUIREMENTS.

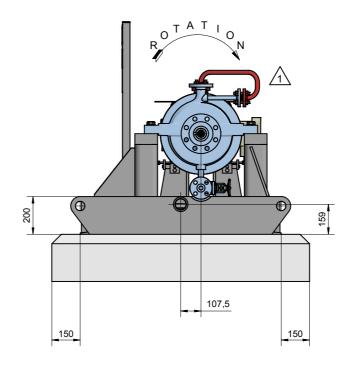
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ALIGNMENT BEFORE STARTING UNIT. ALL HOLES IN FLANGES

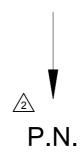
STRADDLE CENTERLINES. THE CONNECTION OF PIPES TO THE

UNIT HAS TO BE STRESS FREE. COLORS ARE NOT INTENDED TO REPRESENT "AS SHIPPED" PAINT REQUIREMENTS. THEY ARE FOR QUICK IDENTIFICATION OF PIPING





8 HOLE Ø24.0 FOR ANCHOR BOLT M20 8 THREAD M16 FOR ADJUSTING SCREWS FOR FURTHER INFORMATION



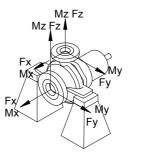
ANCHOR BOLT DETAIL

TAPERED WASHER SUPPLIED BY SULZER 8 ANCHOR BOLT M20x400 DIN 529 C SUPPLIED BY SULZER

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	Ľ
	Fx	2660	1420	F
FORCE	Fy	2140	1160	F
	Fz	1780	1780	
	Fr	3860	2560	
LS	Mx	1900	920	ŀ
MOMENTS	Му	940	460	
	Mz	1440	700	ŀ
ĭ	Mr	2560	1240	ľ

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 Transfer Pump
INSTALLED AT: Iran
PUMP OEM: Sulzer Pumpen (Deutschland) GmbH
SULZER ORDER NO.: 100263244-0080

IDENTIFICATION NUMBERS						
SULZER SERIAL NO.	CUSTOMER TAG NO'S					
	PUMP	DRIVER				
588348	88-P-3001 A	88-M-3001 A				
588349	88-P-3001 B	88-M-3001 B				



DO NOT SCALE. DIMENSIONS: mm CERTIFIED FINAL

UNLESS OTHERWISE SPECIFIED TOLERANCES CERTIFIED FOR NOZZLE & FOUNDATION ONLY ≤ 500 mm ± 3mm > 500 mm ± 12mm

PRELIMINARY ONLY AUXILIARY CUSTOMER CONNECTION DIMENSIONS ± 25

03	03.07.18	R	For Approval	JL	VS	RS	CL
02	11.01.18	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
≀ev.	Date	Status	Purpose of Issue	PRE'D.	CHK'D.	APR'D.	AUZ'D.

Kangan Utility & Offsite Project



SCALE : 1:10

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

DRAWING TITLE:

Equipment Outline (GAD) including nozzle location

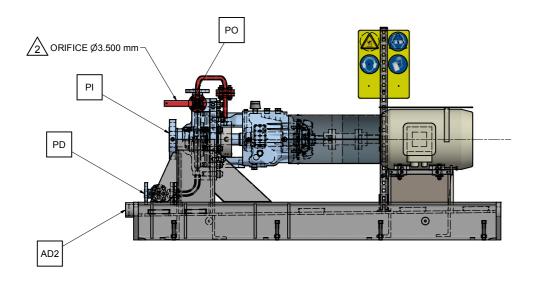
DRAWING No. VP-			-80-10-MA-0001-0238			SHEET	No.	2 OF .	3 RE	V. 03	
Drain dimension			on updated		03/07/2018		03	03/07/2018		03/07/2018	
0					J. LC	OPEZ	V. S	ANCHEZ	R. SAI	NCHEZ	
REV.	. MODIFICATION				MOD	IFIED	CHECKED			ROVED	
SEP. PARTS LIST: NO FORMAT: A1 DESIGN GROUP					-			FIRST ANGLE	PROJECT	ION 🗆 🌘	
REPLACED BY: - SUBSTITUTE					FOR: ORIGINAL SCALE:		1:10				
OHH GENERALA					ANG	FMFI	NΤ	DRAWN:	16-M	AY-2017	

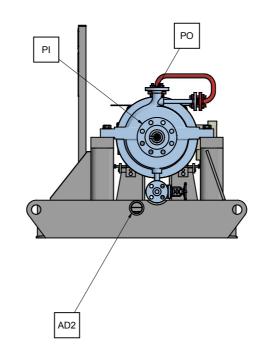
1x3x11.5-1 FOUNDATION AND NOZZLE

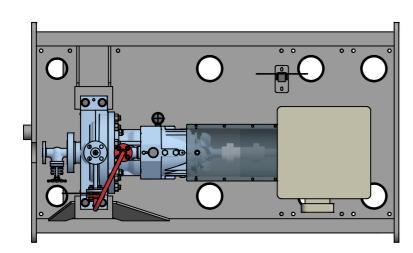
CHECKED: V.SANCHEZ 16-MAY-2017 GENERAL ARRANGEMENT DRAWING

100263244-0080 PART NO. | EN | PGA1002632440080-01 | 2 / 3

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ELYPRESS PRIOR WRITTEN CONSENT OF SULZER
PUMPS







	CONNECTION LEGEND							
	ITEM	DESCRIPTION	SIZE	TYPE				
	PI	PUMP SUCTION NOZZLE	3"	300 RF				
\wedge	PO	PUMP DISCHARGE NOZZLE	1"	300 RF				
/2\	PD	PUMP DRAIN WITH VALVE	3/4"	300 RF				
	AD2	DASE DDAIN	2"	NDT EEMALE				

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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 Transfer Pump
INSTALLED AT: Iran
PUMP OEM: Sulzer Pumpen (Deutschland) GmbH
SULZER ORDER NO.: 100263244-0080

CERTIFIED FINAL

CERTIFIED FOR NOZZLE & FOUNDATION ONLY

IDENTIFICATION NUMBERS						
SULZER	CUSTOMER TAG NO'S					
SERIAL NO.	PUMP	DRIVER				
588348	88-P-3001 A	88-M-3001 A				
588349	88-P-3001 B	88-M-3001 B				



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≤ 500 mm ± 3mm > 500 mm ± 12mm

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02	11.01.18	R	For Approval	JL	vs	RS	CL
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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 : 1:10





DRAWING TITLE:

Equipment Outline (GAD) including nozzle location

DR	AWING No.	VP-	-80-10-M	A-0001-0	238	SHEET	No.	2 OF 3	V. 03	
(c)	Drain dimension updated				03/07/2018 03/		07/2018	03/07/2018		
U					J. LC	OPEZ	V. S	ANCHEZ	R. SANCHEZ	
REV.	MODIFICATION				MOD	IFIED	CI	HECKED	APPI	ROVED
SEP. PARTS LIST: NO FORMAT: A1 DESIGN GROU				DESIGN GROUP	:-			FIRST ANGLE	PROJECT	LION 🗇
REPLACED BY: - SUBS			SUBSTITUTE	FOR:			ORIGINAL S	SCALE:	1:10	
OHH GENERAL AR					RANG	EME	NT	DRAWN:	16-N	MAY-2017 C.ORTIZ
1x3x11.5-1 CONNECTION LAY				OUT			CHECKED:	16-1	/AY-2017	

100263244-0080 GENERAL ARRANGEMENT DRAWING

16-MAY-2017 V.SANCHEZ 16-MAY-2017

SULZER PART NO. EN PGA1002632440080-01 3 / 3