

PROCESS CONNECTIONS			
Code	Description	Size & Rating	Remark
N1	Pump Suction Flange	3", ASME B16.5 300LB RF	
N2	Pump Discharge Flange	1 1/2", ASME B16.5 300LB RF	
N3	Pump Drain Flange	3/4", ASME B16.5 300LB RF	Flange with ball valve
N4	Baseplate Drain	NPT 2"	
N5	Cooling Water Inlet Flange	1", ASME B16.5 150LB RF	Flange with ball valve
N6	Cooling Water Outlet Flange	1", ASME B16.5 150LB RF	Flange with ball valve
N7	Plan53B Vent	1/2", ASME B16.5 1500LB RF	Flange with gate valve
N8	Plan53B Filling	1/2" NPT, Block Fittings	
N9	Plan53B Drain	1/2", ASME B16.5 1500LB RF	Flange with gate valve

Pipeline Description	
①	Pump Drain
②	Main cooling water inlet
③	Main cooling water outlet
④	Plan11 Flushing pipeline
⑤	Plan53B Flushing pipeline (to seal chamber)
⑥	Plan53B Flushing pipeline (from seal chamber)

PUMP INFORMATION	
Item No:	01-150-P-1 A/B
Service:	SWS BOTTOM PUMPS
Model:	EAP 40K2-315-9
Seal Plan:	11+53B
Motor:	22KW-2960RPM
Motor Critical Speed:	5300RPM

REFERENCE DRAWING	DWG NO.
Seal System Drawing	BU-01-VD-307-MA-DRW-1501-075
Motor outline Drawing	BU-01-VD-307-MA-DRW-1501-107
Coupling Drawing	BU-01-VD-307-MA-DRW-1501-043
Pump data sheet	BU-01-VD-307-MA-DSH-1501-011

- Note:
- 1. The pump is self vent.
 - 2. Rotation: Clockwise viewed from drive-end.
 - 3. Vibration Level complies to API610 requirement, table 8 and table 9.


Code1 ☒ (Approved) No comment and the document is released for Manufacturing

Code2 ☐ (Approved with comments) Vendor shall correct, revise and resubmit the document
The document is released for manufacturing

Code3 ☐ (Commented) : Vendor shall correct / revise & resubmit document

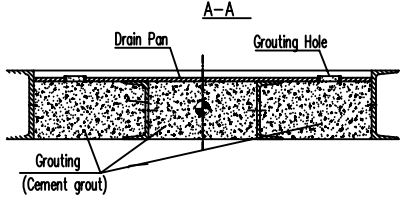
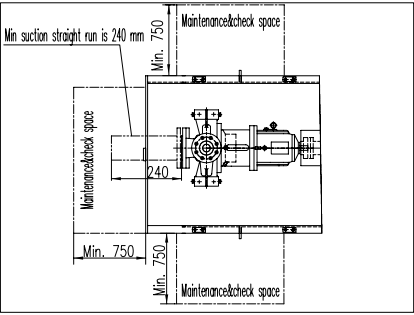
Code4 ☐ Not Acceptable quality (Reject)

The above checking result by EIED shall in no way relieve Vendor of any liability, obligation and responsibility out of the purchase order and the mutual


EIED
BUSHEHR PROJECT

DATE: 4 November 2015
DEPT: MA
M.F.
CODE 1
Signature: _____

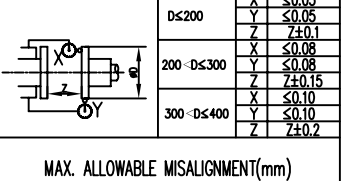
WEIGHT TABLE		
PUMP	183	KG
MOTOR	294	KG
SEAL SYSTEM	336	KG
BASEPLATE	237	KG
OTHERS	50	KG
TOTAL WEIGHT	1100	KG
ROTOR WEIGHT	28.5	KG
MAX. MAINTENANCE WEIGHT	126	KG



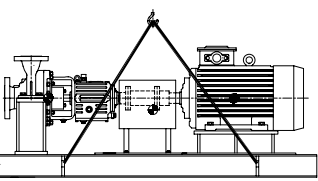
Remark:
1. Moment of inertia: 0.28 kg.m2

Static loading calculation results		
FXStatic=±	4080	N
FYStatic=±	3300	N
FZStatic=±	-5514/12634	N
MXStatic=±	4762	N*m
MYStatic=±	7250/5185	N*m
MZStatic=±	4462	N*m

Dynamic loading calculation results		
FXdynamic=±	0	N
FYdynamic=±	54	N
FZdynamic=±	54	N
MXdynamic=±	98/-45	N*m
MYdynamic=±	32	N*m
MZdynamic=±	32	N*m

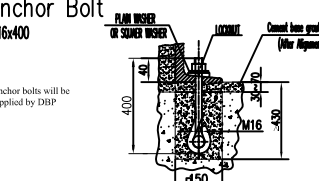


D≤200	X ≤0.05	Y ≤0.05	Z ≤0.1
200 < D ≤300	X ≤0.08	Y ≤0.08	Z ≤0.15
300 < D ≤400	X ≤0.10	Y ≤0.10	Z ≤0.2

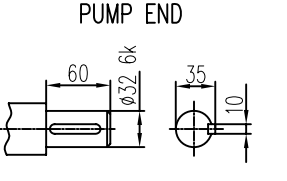


Anchor Bolt
M16x400


Anchor bolts will be supplied by DBP



PUMP END



EARTHING BOSS




MOTOR END

DISCHARGE	1 1/2"	±1420	±1160	±1780	±920	±460	±700
	inch	Fx	Fy	Fz	Mx	My	Mz
	DN	Force (N)					
SUCTION	3"	±2660	±2140	±1780	±1900	±940	±1440
	inch	Fx	Fy	Fz	Mx	My	Mz
	DN	Force (N)					
		Moment(Nm)					

Nozzle Allowable Force & Moment

03	13/10/15	FOR APPROVAL	Eric	Andy	Tino	AAP
02	29/08/15	FOR APPROVAL	Eric	Andy	Tino	AAP
01	08/07/15	FOR APPROVAL	Eric	Andy	Tino	AAP
00	25/03/15	FOR APPROVAL	Eric	Andy	Tino	AAP
REV.	DATE	PURPOSE OF ISSUE	PREP. BY	CHKD. BY	APPD. BY	AUTH. BY


Gas Sweetening, Sulphur Recovery, C2 Recovery, Fractionation and Inter Connection Pipeline Between Plants Project


BUSHEHR PETROCHEMICAL COMPANY

P.O No.: A315.760AME

SCALE:

DEEP BLUE PUMP


Energy Industries Engineering & Design Co.

DRAWING TITLE:
Pump Outline Drawing for SWS BOTTOM PUMPS
01-150-P-1 A/B

DRAWING No.: BU-01-VD-307-MA-DRW-1501-011

SHEET No. 1 OF 1