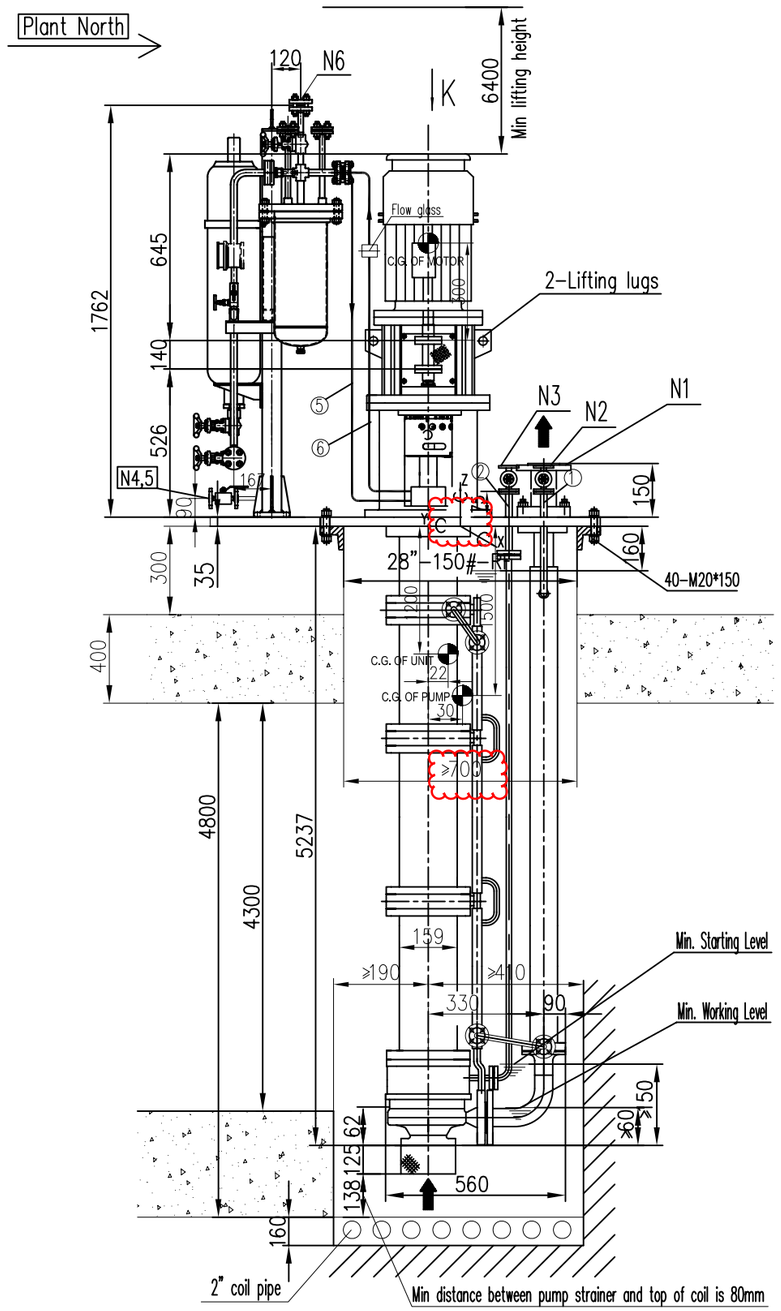
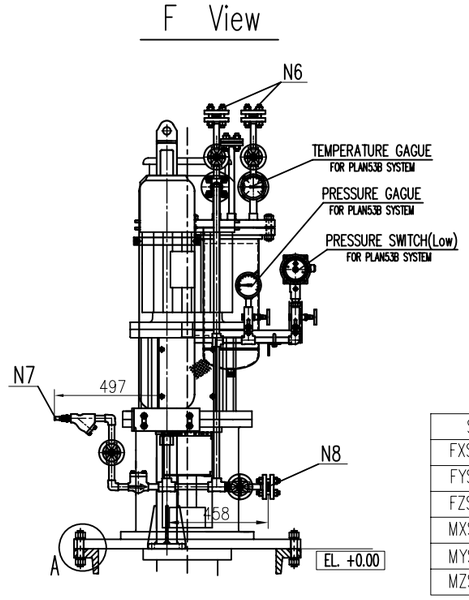
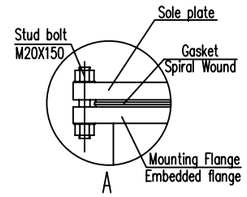




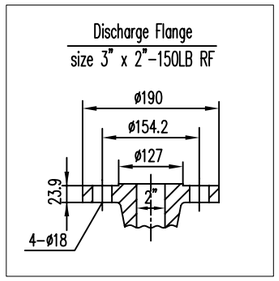


PROCESS CONNECTIONS			
Code	Description	Size & Rating	Remark
N1	Pump Discharge Flange	3"x2", ASME B16.5 150LB RF	
N2	Steam Inlet	1/2", ASME B16.5 150LB RF	Flange with ball valve
N3	Steam Outlet	1/2", ASME B16.5 150LB RF	Flange with ball valve
N4	Cooling Water Inlet Flange	1", ASME B16.5 150LB RF	Flange with ball valve
N5	Cooling Water Outlet Flange	1", ASME B16.5 150LB RF	Flange with ball valve
N6	Plan 53B vent	1/2", ASME B16.5 1500LB RF	Flange with gate valve
N7	Plan 53B filling	1/2" NPT, Quick Fittings	
N8	Plan 53B drain	1/2", ASME B16.5 1500LB RF	Flange with gate valve

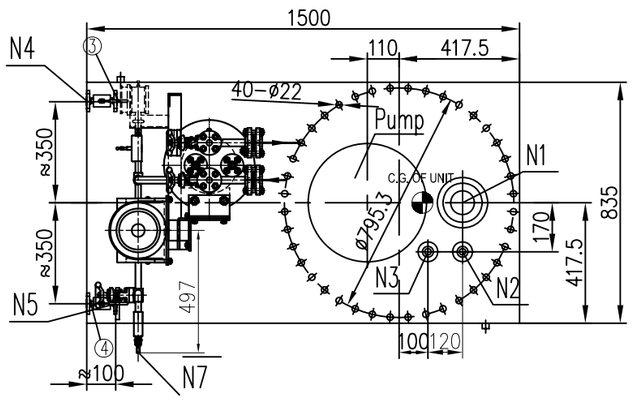
Pipeline Description	
①	Steam flushing inlet
②	Steam flushing outlet
③	Main cooling water inlet
④	Main cooling water outlet
⑤	Plan53B Flushing pipeline (to seal chamber)
⑥	Plan53B Flushing pipeline (from seal chamber)

Static loading calculation results		
FXStatic=±	710	N
FYStatic=±	890	N
FZStatic=±	-13085/14245	N
MXStatic=±	861	N*m
MYStatic=±	361	N*m
MZStatic=±	584	N*m

Dynamic loading calculation results		
FXdynamic=±	124	N
FYdynamic=±	124	N
FZdynamic=±	0	N
MXdynamic=±	288	N*m
MYdynamic=±	288	N*m
MZdynamic=±	24/-24	N*m



WEIGHT TABLE		
PUMP	850	KG
MOTOR	135	KG
SEAL SYSTEM	336	KG
BASEPLATE	328	KG
OTHERS	50	KG
TOTAL WEIGHT	1699	KG
ROTOR WEIGHT	80	KG
MAX. MAINTENANCE WEIGHT	328	KG



Remark:
1. Moment of inertia: 0.042 kg.m2

PUMP INFORMATION	
Item No:	01-140A/B-P-1 A/B
Service:	SULPHUR TRANSFER PUMPS
Model:	LGJ 25-200-A-14
Seal Plan:	61+53B
Motor:	7.5KW-2955RPM
Motor Critical Speed:	6700RPM

REFERENCE DRAWING	DWG NO.
Seal System Drawing	BU-01-VD-307-MA-DRW-1401-074
Motor outline Drawing	BU-01-VD-307-MA-DRW-1401-106
Coupling Drawing	BU-01-VD-307-MA-OMN-1401-042
Pump Data Sheet	BU-01-VD-307-MA-DSH-1401-010

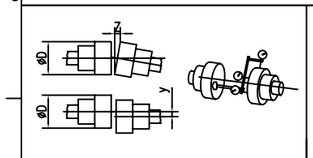
Note: 1. Pump rotation direction: CW viewed from the drive-end.
2. Pit item number is 01-140-TK-1 A/B.
3. Vibration Level complies to API610 requirement, table 8 and table 9.
4. Bolt&nut and related gasket for mounting plate will be provided by DBP.

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 agreement in writing

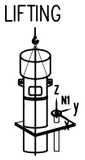
EIED BUSHEHR PROJECT

DATE 28 November 2015
DEPT MA
Signe M.F.
CODE 1

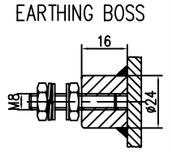


Outer Diameter Coupling (D)	Radial Displacement	Axial Tilt
D ≤ 200	< 0.05	< 0.2 / 1000
200 < D ≤ 300	< 0.08	< 0.3 / 1000
300 < D ≤ 400	< 0.1	< 0.4 / 1000
MAX. ALLOWABLE MISALIGNMENT(mm)		

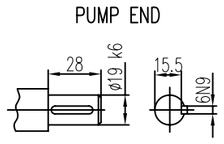
LIFTING



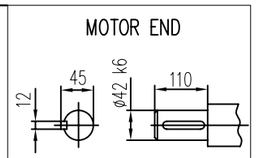
EARTHING BOSS

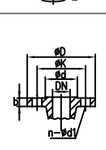


PUMP END



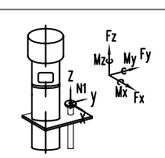
MOTOR END





DISCHARGE	2"	±1420	±1780	±1160
	inch	Fx	Fy	Fz
	DN	Force (N)		
		±920	±460	±700
		Mx	My	Mz
		Moment(Nm)		

Nozzle Allowable Force & Moment



Minimum Clearance for impeller & casingwear ring	0.3~0.45 mm

Pump shaft information

Name	Upper Shaft	Middle Shaft	Lower Shaft
Length(mm)	2100	2200	1424
Quantity	1	1	1

REV.	DATE	PURPOSE OF ISSUE	PREP. BY	CHKD. BY	APPD. BY	AUTH. BY
04	7/11/15	FOR APPROVAL	Eric	Andy	Tino	AAP
03	13/10/15	FOR APPROVAL	Eric	Andy	Tino	AAP
02	29/08/15	FOR APPROVAL	Eric	Andy	Tino	AAP
01	09/07/15	FOR APPROVAL	Eric	Andy	Tino	AAP
00	26/03/15	FOR APPROVAL	Eric	Andy	Tino	AAP

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

EIED Energy Industries Engineering & Design Co.

DRAWING TITLE:
Pump Outline Drawing for SULPHUR TRANSFER PUMPS
01-140A/B-P-1 A/B

DRAWING No.: BU-01-VD-307-MA-DRW-1401-010 | SHEET No. 1 OF 1