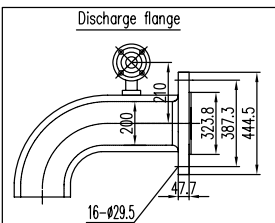


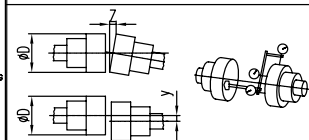
Code	Name	Size & Rating	Remark
N1	Pump Discharge	80/1", 300#, RF	
N2	Steam Inlet 1	3/4", 300#, RF	Flange with valve
N3	Steam Outlet	3/4", 300#, RF	Flange with valve
N4	Cooling Water Inlet	3/4", 150#, RF	Blind Flange
N5	Cooling Water Outlet	3/4", 150#, RF	Blind Flange
N6	N2 Connection	3/4", 300#, RF	
N7	Plan 53A Drain	3/4", 300#, RF	Flange with valve & blind flange
N8	Plan 53A Filling	1/2", 300#, RF	3" fittings
N9	Plan 53A Cooler Drain	3/4", 300#, RF	Flange with valve & blind flange
N10	Plan 53A Vent	3/4", 300#, RF	Flange with valve & blind flange
N11	Steam Inlet 2	3/4", 300#, RF	Flange with valve

Center of gravity List			
Item	X	Y	Z
Pump	197	0	-810
Motor	207	0	1307
Units	212	0	-80



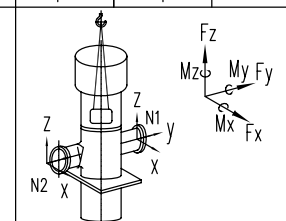
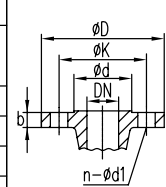
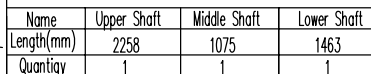
①	Steam Inlet Pipeline
②	Steam Outlet Pipeline
③	Plan53A Flushing Pipeline (to seal chamber)
④	Plan53A Flushing Pipeline (from seal chamber)
⑤	N2 Inlet Pipeline
⑥	Plan 53A Drain
⑦	Plan 53A Filling
⑧	Plan 53A Cooler Drain
⑨	Plan 53A Vent

PUMP	:	1300	KG
MOTOR	:	405	KG
SEAL SYSTEM	:	80	KG
MOUNTING PLATE	:	230	KG
OTHERS	:	40	KG
TOTAL WEIGHT	:	2055	KG
ROTOR OF PUMP	:	200	KG
ROTOR OF MOTOR	:	78	KG
MAX. MAINTANCE WEIGHT	:	320	KG

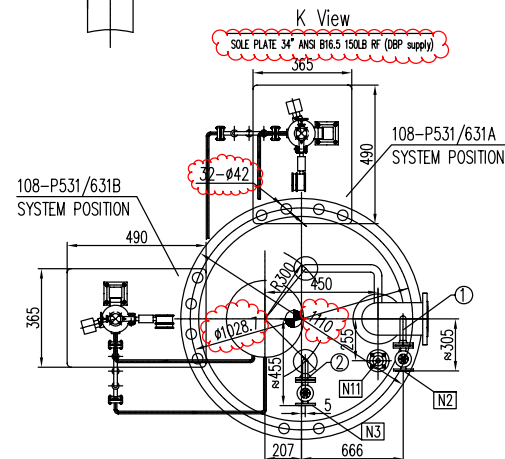
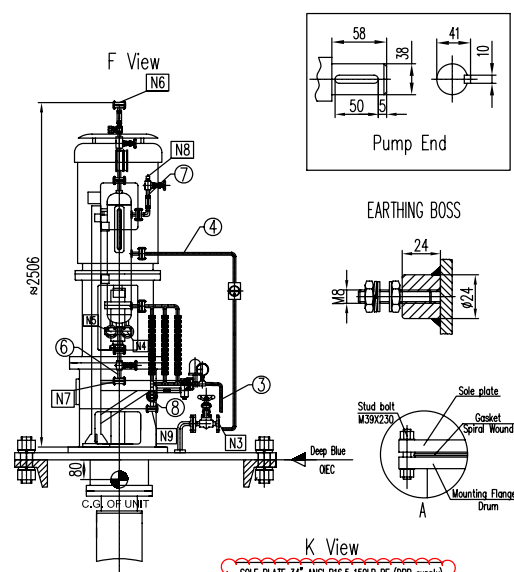
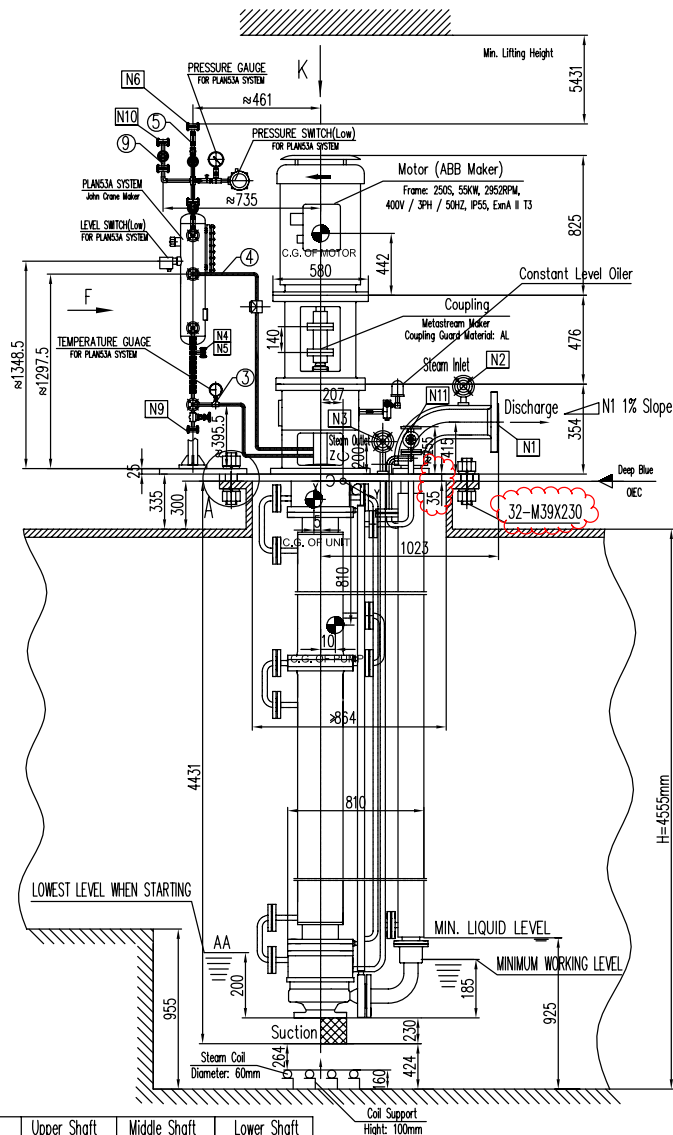


Outer Diameter Coupling (D)	Radial Displacement	Axial Tilt
$D \leq 200$	$< 0.05$	$< 0.2 / 1000$
$200 < D \leq 300$	$< 0.08$	$< 0.3 / 1000$
$300 < D \leq 400$	$< 0.1$	$< 0.4 / 1000$

MAX. ALLOWABLE MISALIGNMENT(mm)



Force (N)	N1	F <sub>x</sub>	F <sub>y</sub>	F <sub>z</sub>
		±10680	±13340	±8900
		M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>
Moment (N.m)	2XAPI	±10040	±4880	±7600




MINIMUM CLEARANCE		(mm)
Wear Ring	Second Stage(front)	0.35~0.40
	Second Stage(behind)	0.35~0.39
Balance Disc / Balance Sleeve	Axial	0.1~0.15
	Radial	0.35~0.4
Shaft Bushing / Shaft Sleeve		0.2~0.26
Bearing / Cover		0.1~0.2

PUMP INFORMATION	
Item No.:	108-P-531/631 A/B
Unit:	108
Service:	SULPHUR DEGASSING PUMP
Model:	LGJ 80-200-A-14
Seal Plan:	53A
Motor:	55KW - 2P
Capacity:	130 m <sup>3</sup> /h
Head:	38.65+4.651 m

- Note: 1. Max. allowable working pressure: 20 barg
2. For lifting position, Deep Blue suggest:  
Through the motor frame.
3. For Suction Strainer:
  1. mesh size: 8 mm;
  2. pressure drop: 0.0046 m;
  3. open ratio (open area/suction area): more than 390%.
4. Mounting flange of pump side and spiral wound gasket, stud bolt between mounting flanges are in DBP's scope of supply.  
Mounting flange on sulphur pit will be supplied by customer.

REFERENCE DRAWINGS	DWG. NO.
SEAL SYSTEM DRAWING	VP-SP2021-ON-MA-108-P531-0013
MOTOR OUTLINE DRAWING	VP-SP2021-ON-MA-108-P531-0016
COUPLING DRAWING AND BOM	VP-SP2021-ON-MA-108-P531-0008
ELECTRICAL MOTOR DATASHEET	VP-SP2021-ON-MA-108-P531-0009
PUMP DATASHEET	VP-SP2021-ON-MA-108-P531-0003

Code1	<input checked="" type="checkbox"/> (Approved) Vendor to submit "For Final (No comment & release for manufacturing);				
Code2	<input type="checkbox"/> (Approved with comments) Vendor shall correct / revise & submit it as "For Final" (Released for manufacturing if change incorporated as indicated)				
Code3	<input type="checkbox"/> (Commented) : Vendor shall correct / revise & resubmit . it as " For Approval" of the date specified : Corrected documents to be				
Code4	<input type="checkbox"/> Not Acceptable quality (Reject)				
<p>The above checking result by OIEC shall in no way relieve Vendor of any liability, obligation and responsibility out of the purchase order and the mutual agreement in writing</p> <div style="display: flex; justify-content: space-between; align-items: center;"><div style="text-align: center;"><p><b>OIEC-SP 20&amp;21</b></p></div><div style="text-align: right;"><p>DATE : 09-09-2014</p><p>DEPT: Machinery</p><p>Signature : S.Shahriari</p></div></div>					
Only for internal review					
CV	PI	EL	IN	ME	MA
ST	BU	PR	SA	HV	TL

4	6. Aug. 2014	FOR APPROVAL	DBP	Eric	Tino	Ryan	
5	18. Mar. 2014	FOR APPROVAL	DBP	Eric	Tino	Ryan	
3	25. Feb. 2014	FOR APPROVAL	DBP	Eric	Tino	Ryan	
2	26. Dec. 2013	FOR APPROVAL	DBP	Eric	Tino	Ryan	
REV.	DATE	DESCRIPTION	ORIG.	PREP.	CH'D.	APP'D.	Contract



**NIOC**  
NATIONAL OIL AND GAS COMPANY

**SCALE :**



DRAWING No.	VP-SP2021-ON-MA-106-P531-0001	SHEET No.	1 OF 1	REV. 5
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