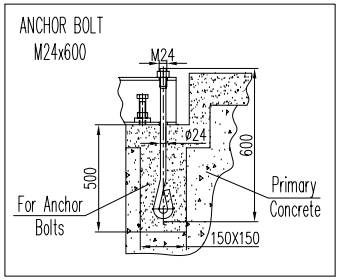
PROCESS CONNECTIONS

Code	Name	Size & Rating	Remark
N1	Pump Suction	2", 300lb, RF	
N2	Pump Discharge	1", 300lb, RF	
N3	External casing drain	3/4", 300lb, RF	Flange with valve
N4	Pump Vent	3/4", 300lb, RF	Flange with valve
N5	Pump Barrel Drain	3/4", 300lb, RF	Flange with valve
N6	Mechanical seal vent	3/4", 300lb, RF	Flange with valve
N7	Seal system vent	3/4", 300lb, RF	Flange with valve
N8	Seal system drain	3/4", 600lb, RF	Flange with valve
N9	N_2 connection	3/4", 300lb, RF	Flange
N10	Quick connection	1/2" Quick Fittings	Quick Connection

ANCHOR BOLT M24x600

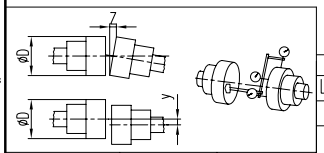


Pipeline Description

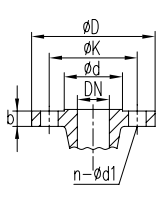
Code	Description
①	Mechanical Seal Vent
②	External Casing Drain
③	Pump Barrel Drain
④	Pump Vent
⑤	Barrier Fluid Pipeline (from seal chamber)
⑥	Barrier Fluid Pipeline (to seal chamber)
⑦	Plan53B Drain
⑧	Plan53B Filling
⑨	Plan53B Vent
⑩	N_2 Pipeline

WEIGHT TABLE

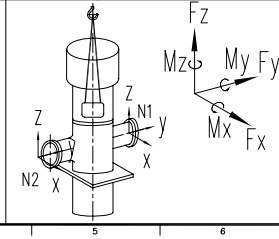
PUMP	:	1058	KG
MOTOR	:	100	KG
SEAL SYSTEM	:	272	KG
MOUNTING PLATE	:	80	KG
COUPLING	:	4	KG
OTHERS	:	40	KG
TOTAL WEIGHT	:	1554	KG
ROTOR OF PUMP	:	90	KG
ROTOR OF MOTOR	:	8	KG
MAX. MAINTANCE WEIGHT	:	478	KG



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)		



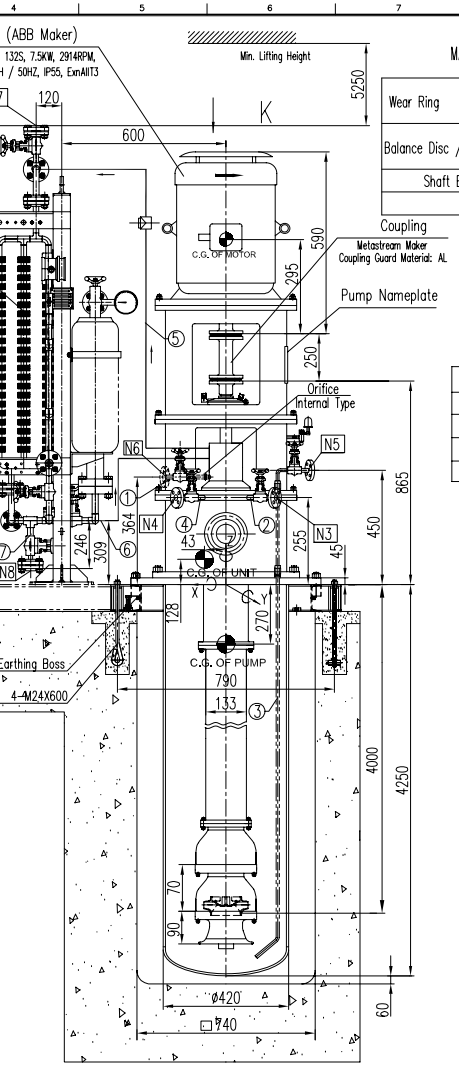
Name	Upper Shaft	Middle Shaft	Middle Shaft	Lower Shaft
Length(mm)	1805	1540	770	838
Quantigy	1	1	1	1



Nozzle Allowable Force & Moment				
Force (N)	N1	Fx	Fy	Fz
		±1420	±1780	±1160
		Mx	My	Mz
		±920	±460	±700
Moment (N.m)	N2	Fx	Fy	Fz
		±1420	±1780	±1160
		Mx	My	Mz
		±920	±460	±700

N6	ANSI B16.5 300lb RF	3/4"	117.3	15.7	82.5	42.9	4-ø18
N5	ANSI B16.5 300lb RF	3/4"	117.3	15.7	82.5	42.9	4-ø18
N4	ANSI B16.5 300lb RF	3/4"	117.3	15.7	82.5	42.9	4-ø18
N3	ANSI B16.5 300lb RF	3/4"	117.3	15.7	82.5	42.9	4-ø18
N2	ANSI B16.5 300lb RF	1"	124	17.5	89	50.8	4-ø18
N1	ANSI B16.5 300lb RF	2"	165	22.3	127	92	8-ø18
Name	Standard	DN	øD	b	øK	ød	n-ød1

Flange Size(mm)

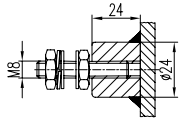


MINIMUM CLEARANCE FOR MAINTENACE AND DISMANTLING (mm)

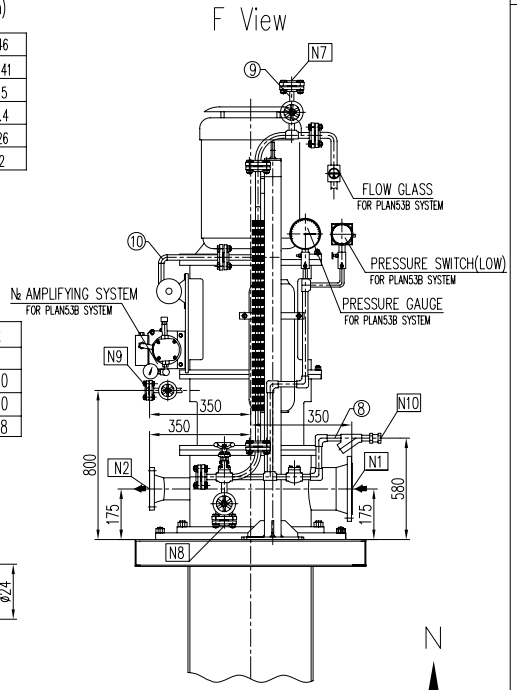
Wear Ring	Second Stage(front)	0.4~0.46
	Second Stage(behind)	0.35~0.41
Balance Disc / Balance Sleeve	Axial	0.1~0.15
	Radial	0.35~0.4
Shaft Bushing / Shaft Sleeve		0.2~0.26
Bearing / Cover		0.1~0.2

Center of gravity List			
Item	X	Y	Z
Pump	0	0	-270
Motor	0	0	1400
Units	43	0	128

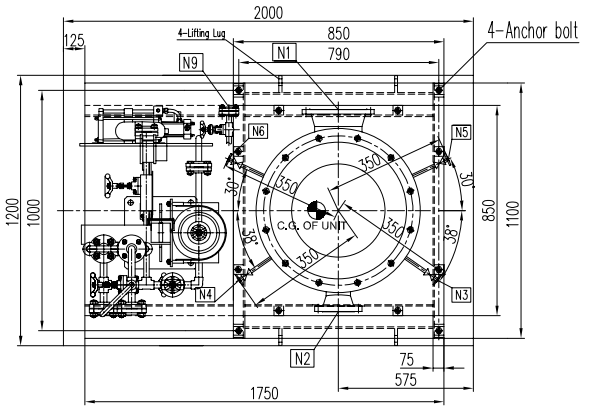
EARTHING BOSS



F View



K View



N

GENERAL NOTES

PUMP INFORMATION		
Item No.:	145-P-103	
Unit:	145	
Service:	Propane Truck Unloading Pump	
Model:	APIFLO-VB 8.5-25X2	
Seal Plan:	53B+61	
Motor:	7.5KW - 2P	
Capacity:	10	m^3/h
Head:	39.9	m

Note: 1. Maximum Allowable Amplitude For Foundation:
Velocity Peak-Peak: 4 mm/s
Displacement Peak-Peak: 25.4 μm
2. Cable gland: 2XM32
Cable cores: 3X10 mm^2
3. Max. allowable working pressure: 40 barg
4. For lifting position, Deep Blue suggest:
1. through the bottom of suction-discharge nozzle;
2. through the motor frame.

REFERENCE DRAWINGS	DWG NO.
SEAL SYSTEM DRAWING	VP-SP2021-ON-MA-145-P103-0013
MOTOR OUTLINE DRAWING	VP-SP2021-ON-MA-145-P103-0016
COUPLING DRAWING AND BOM	VP-SP2021-ON-MA-145-P103-0008

Code1	☒	(Approved) Vendor to submit "For Final (No comment & release for manufacturing)
Code2	☐	(Approved with comments) Vendor shall correct / revise & submit it as "For Final" (Released for manufacturing if change incorporated as indicated)
Code3	☐	(Commented) : Vendor shall correct / revise & resubmit . It as " For Approval" of the date specified : (Corrected documents to be
Code4	☐	Not Acceptable quality (Reject)

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

OIEC-SP 20&21

DATE : 28-01-2014
DEPT: Machinery
Signature : S.Shahriarian

Only for internal review

CV	PI	EL	IN	ME	MA
ST	BU	PR	SA	HV	TL

REV.	DATE	DESCRIPTION	ORIG.	PREP.	CH'D.	APP'D.	Contractor APP'D
8	09. Jan. 2014	FOR APPROVAL	DBP	Tino	Ryan		
7	14. Dec. 2013	FOR APPROVAL	DBP	Tino	Ryan		
6	23. Nov. 2013	FOR APPROVAL	DBP	Tino	Ryan		
5	17. Oct. 2013	FOR APPROVAL	DBP	Tino	Ryan		

SOUTH PARS GAS FIELD DEVELOPMENT-
PHASES 20 & 21, ASSALUYEH-IRAN
ONSHORE FACILITIES

NIOC
PARS OIL AND GAS COMPANY

PROJECT No.: POGC-572-88-35 | DOC.CLASS: | SCALE :

DEEP BLUE PUMP CO.

OIEC

Propane Truck Unloading Pump
145-P-103
GENERAL ARRANGEMENT DRAWING

DRAWING No. VP-SP2021-ON-MA-145-P103-0001 | SHEET No. 1 OF 1 | REV. 7