

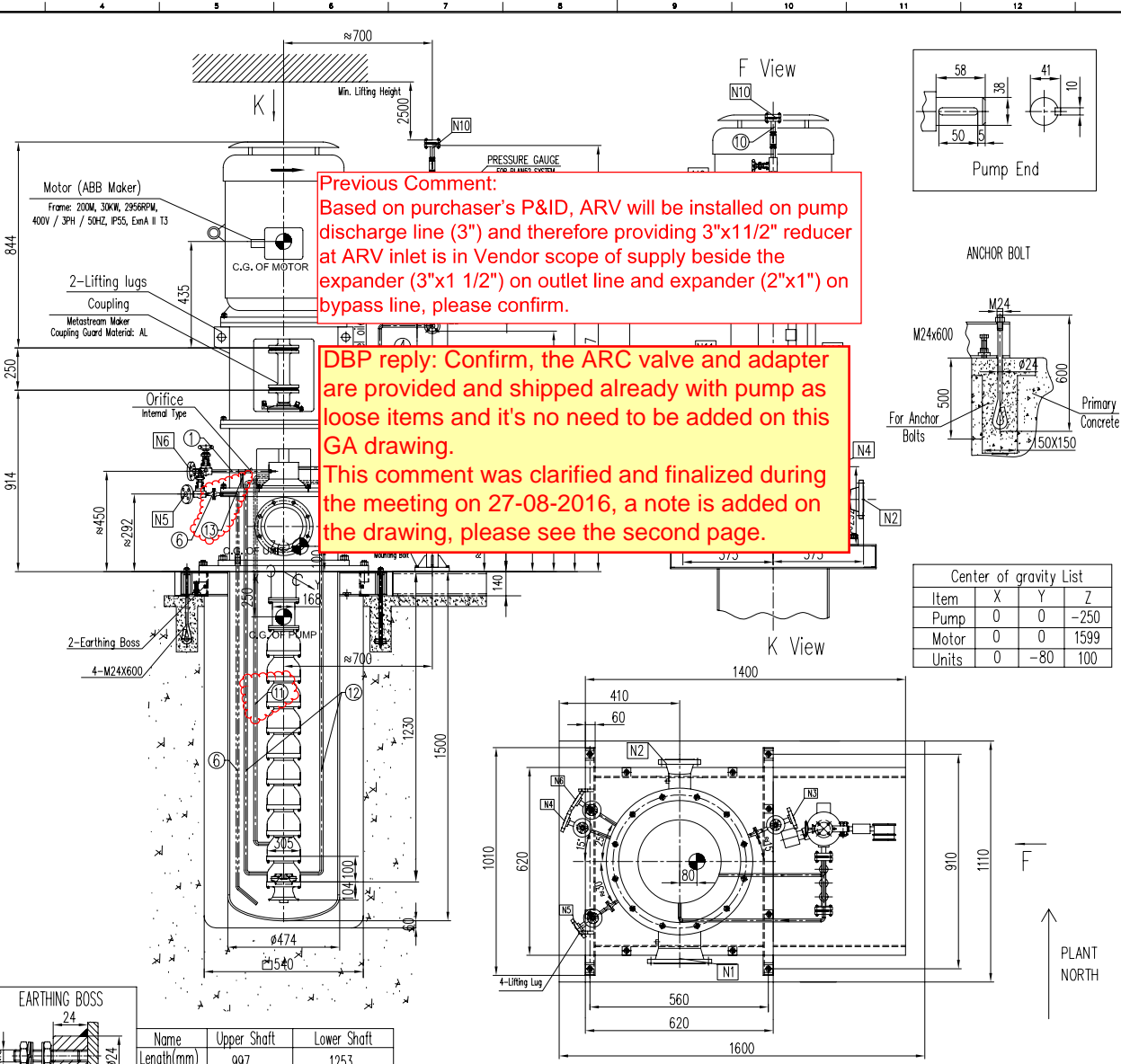
PROCESS CONNECTIONS			
Code	Name	Size & Rating	Remark
N1	Pump Suction	3", 300lb, RF	
N2	Pump Discharge	1 1/2", 300lb, RF	
N3	Pump Barrel Vent	3/4", 300lb, RF	Flange with valve & blind flange
N4	External Casing Drain	3/4", 300lb, RF	Flange with valve & blind flange
N5	Pump Barrel Drain	3/4", 300lb, RF	Flange with valve & blind flange
N6	Mechanical Seal Vent	3/4", 300lb, RF	Flange with valve & blind flange
N7	Plan 52 Cooler Drain	3/4", 300lb, RF	Flange with valve & blind flange
N8	Plan 52 Drain	1/2", 300lb, RF	Flange with valve & blind flange
N9	Plan 52 Filling	1/2" Quick Fitting	
N10	Plan 52 Vent (to flare)	3/4", 300lb, RF	Flange with valve & blind flange
N11	Cooling Water Inlet	3/4", 150lb, RF	Blind Flange
N12	Cooling Water Outlet	3/4", 150lb, RF	Blind Flange

MINIMUM CLEARANCE (mm)		
Wear Ring	Second Stage (front)	0.35~0.407
	Second Stage (behind)	0.35~0.399
Balance Disc / Balance Sleeve	Radial	0.1~0.15
	Axial	0.35~0.4
Shaft Bushing / Shaft Sleeve	Radial	0.2~0.26
	Axial	0.1~0.2

Pipeline Instruction	
①	Mechanical Seal Vent
②	External Casing Drain
③	Plan 52 Flushing Pipeline (to seal chamber)
④	Plan 52 Flushing Pipeline (from seal chamber)
⑤	Pump Barrel Vent
⑥	Pump Barrel Drain
⑦	Plan 52 Cooler Drain
⑧	Plan 52 Drain
⑨	Plan 52 Filling
⑩	Plan 52 Vent (to flare)
⑪	Plan 14 Flushing Pipeline
⑫	Balance Pipeline
⑬	Plan 14 Return Pipeline

WEIGHT TABLE	
PUMP	1500 KG
MOTOR	275 KG
SEAL SYSTEM	80 KG
MOUNTING PLATE	240 KG
OTHERS	40 KG
TOTAL WEIGHT	2135 KG
ROTOR OF PUMP	80 KG
ROTOR OF MOTOR	47 KG
MAX. MAINTANCE WEIGHT	1200 KG

Outer Diameter	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)		



GENERAL NOTES

PUMP INFORMATION	
Item No.:	145-P-101 A/B
Unit:	145
Service:	PROPANE TRANSFER PUMPS
Model:	APIFLO-VB 20-35X10-A
Seal Plan:	14+52
Motor:	30KW - 2P
Capacity:	11 m ³ /h
Head:	355 m

Note: 1. Maximum Allowable Amplitude For Foundation:
Velocity Peak-Peak: 4 mm/s
Displacement Peak-Peak: 25.4 μm
2. Max. allowable working pressure: 50 barg
3. 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-P101-0013
MOTOR OUTLINE DRAWING	VP-SP2021-ON-MA-145-P101-0016
COUPLING DRAWING AND BOM	VP-SP2021-ON-MA-145-P101-0008
ELECTRICAL MOTOR DATASHEET	VP-SP2021-ON-MA-145-P101-0009
PUMP DATASHEET	VP-SP2021-ON-MA-145-P101-0003

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 : 30-04-2014
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
6	14. Apr. 2014	FOR APPROVAL	DBP	Eric	Tino	Ryan	
5	7. Mar. 2014	FOR APPROVAL	DBP	Eric	Tino	Ryan	
4	27. Feb. 2014	FOR APPROVAL	DBP	Eric	Tino	Ryan	
3	13. Feb. 2014	FOR APPROVAL	DBP	Eric	Tino	Ryan	

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

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

DEEP BLUE PUMP CO.

OIEC

PROPANE TRANSFER PUMPS
145-P-101 A/B
GENERAL ARRANGEMENT DRAWING

DRAWING No. VP-SP2021-ON-MA-145-P101-0001 SHEET No. 1 OF 1 REV. 6

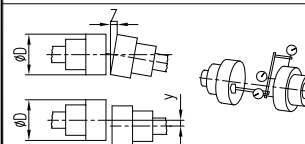
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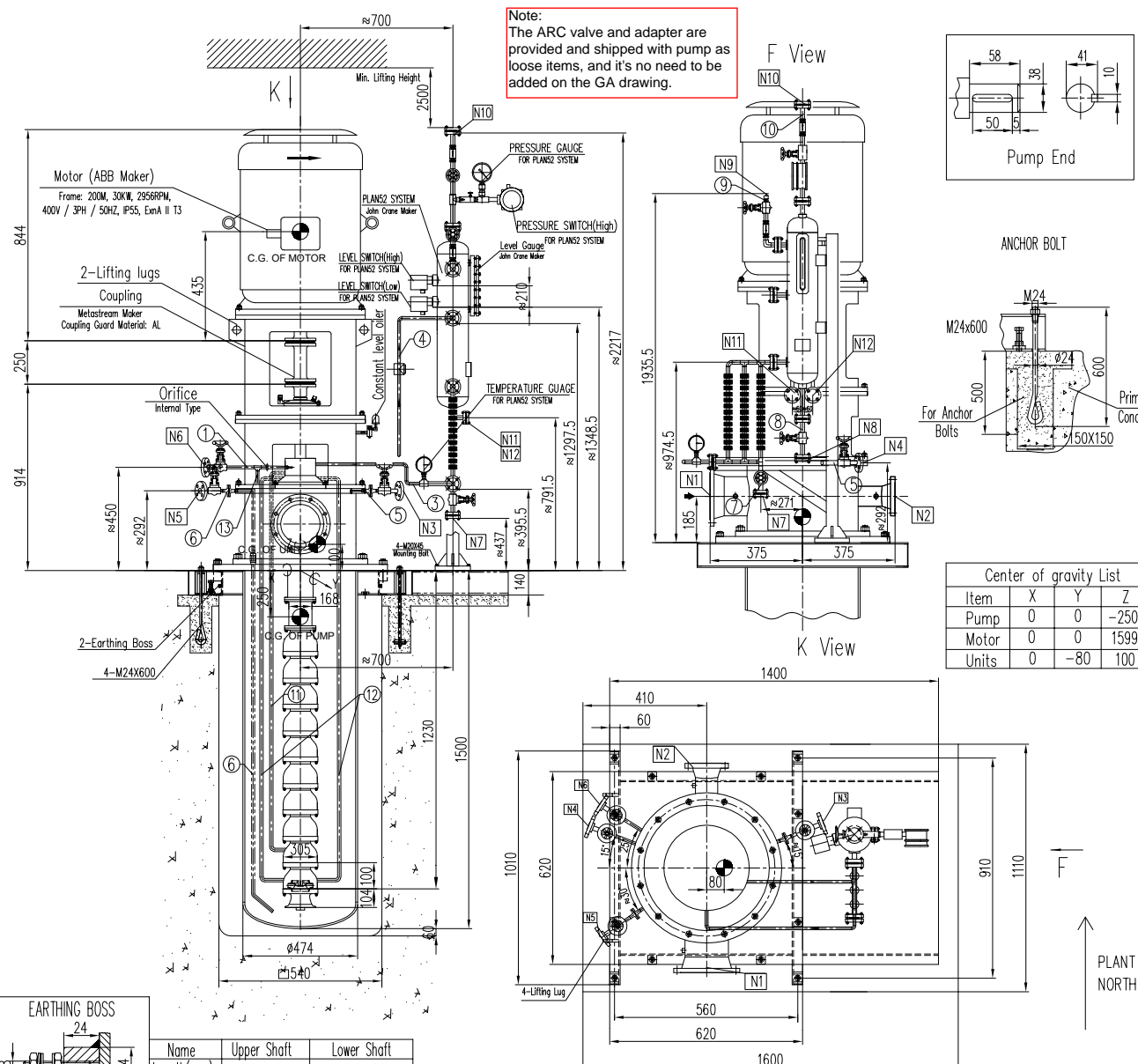
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Bearing / Cover		0.1~0.2

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②	External Casing Drain
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MAX. ALLOWABLE MISALIGNMENT(mm)		



Center of gravity List			
Item	X	Y	Z
Pump	0	0	-250
Motor	0	0	1599
Units	0	-80	100

GENERAL NOTES	
PUMP INFORMATION	
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DEPT:	
Signature :	
Only for internal review	
CV	PI EL IN ME MA
ST	BU PR SA HV TL

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

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

PROPANE TRANSFER PUMPS 145-P-101 A/B GENERAL ARRANGEMENT DRAWING

DRAWING No. VP-SP2021-ON-MA-145-P101-0001 SHEET No. 1 OF 1 REV. 6

Nozzle Allowable Force & Moment		N6	ANSI B16.5 300lb RF	3/4"	117.3	15.7	82.5	42.9	4-ø18
Force (N)	N1 2XAPI	Fx	±2140	±2660	±1780				
		Fy							
		Fz							
Moment (N.m)	N2 2XAPI	Mx	±1900	±940	±1440				
		My							
		Mz							
Name	N1	Fx	±1420	±1780	±1160				
		Fy							
		Fz							
Standard	N2	Mx	±1420	±1780	±1160				
		My							
		Mz							
DN	N1	øD	210	28.6	168.3	127	8-ø22		
		b							
		øK							
ød	N1	ød							
		n-ød1							