

REFERENCE DRAWING	DWG. NO.
MOTOR OUTLINE DRAWING	NGL-V-2014-ME-DW-5018
COUPLING DRAWING	NGL-V-2014-ME-DW-5016
PUMP DATA SHEET	NGL-V-2014-ME-DT-5003
PUMP CROSSSECTION DRAWING	NGL-V-2014-ME-DW-5005
PUMP P&ID	NGL-V-2014-ME-PD-5006
Sea System Drawing and BOM	NGL-V-2014-ME-DW-5013

PUMP INFORMATION

Item No.:	P-3181-05 A/S
Service:	SRU LP BFW Pumps
Model:	EAP 40-315-45-I
Seal Plan:	23+61
Flow/Head	36.1m ³ /h & 91m
Motor:	30KW - 2P
Rotation:	Clockwise viewed from the drive-end
No of Stages:	1
Pump speed:	2950 rpm

Code1	<input type="checkbox"/> (Approved): No comment and release for Manufacturing (Document to be stamped as Final for considering in Vendor Data Book)
Code2	<input type="checkbox"/> (Approved with Comments): VENDOR/Sub-Contractor shall correct/revise document and issue it as "FOR APPROVAL" (Work May Be Proceeded)
Code3	<input type="checkbox"/> (Commented): VENDOR/Sub-Contractor shall correct /revise and resubmit it as "FOR APPROVAL" of the date documents specified (Corrected to be resubmitted before starting to manufacture.
No Code	<input type="checkbox"/> CONSULTANT and PURCHASER check results on Class 2 documents will be returned without any CODE. VENDOR/Sub-Contractor shall correct/revise document and issue it as "FOR INFORMATION"

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



DATE :
DEPT:
Signature :

Static loading calculation results			Dynamic loading calculation results		
FXstatic=	4080/4080	N	FXdynamic=	0/0	N
FYstatic=	3300/3300	N	FYdynamic=	1/1	N
FZstatic=	-5053/12173	N	FZdynamic=	1/1	N
MXstatic=	4910/4910	N*m	MXdynamic=	5730/-5730	N*m
MYstatic=	7774/5811	N*m	MYdynamic=	0/0	N*m
MZstatic=	4825/4825	N*m	MZdynamic=	0/0	N*m

Note:
Location of Loads & Moments Calculation is the geometric center of baseplate lower surface.

D3	20.08.13	ISSUED FOR APPROVAL	R.X	T.H	R.C	A.A.
D2	20.07.15	ISSUED FOR APPROVAL	R.X	T.H	R.C	A.A.
D1	20.06.02	ISSUED FOR APPROVAL	R.X	T.H	R.C	A.A.
D0	20.04.30	ISSUED FOR APPROVAL	R.X	T.H	R.C	A.A.
REV.	DATE	DESCRIPTION	PREP	CHECK	APPROVAL	OIEC APP.

Project Title: **NGL 3100 PROJECT**



STATUS CODE: A=Comment/Review B=Approval C=Final Issue

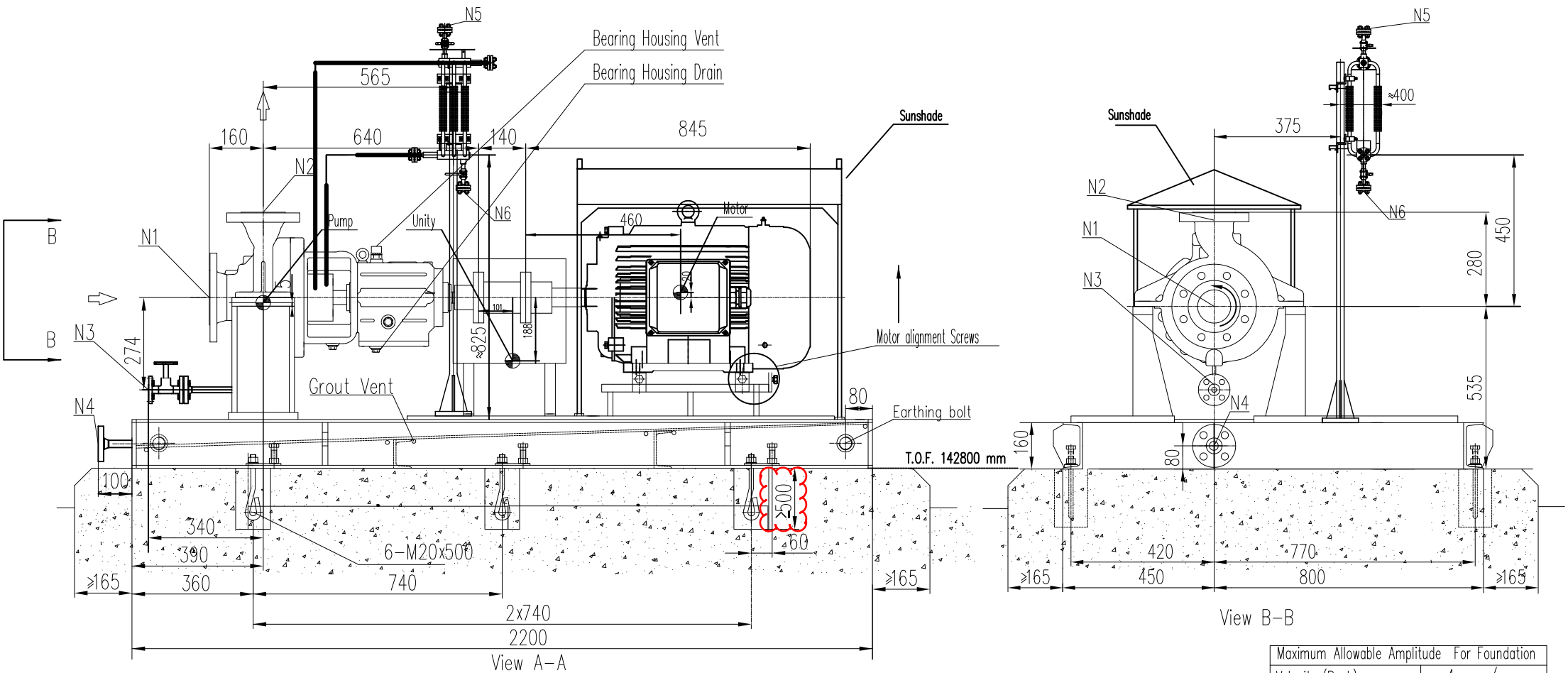
Pump General Arrangement Drawing For
SRU LP BFW Pumps P-3181-05 A/S

OWNER DRAWING NUMBER

Project Name	Originator	PO Serial No.	Disc.	Doc. Type	Seq No.	Rev.	Sheet No.	Status	Class	Size
NGL	V	2014	ME	DW	5002	D3	1 OF 1	B	I	A3

OIEC DRAWING NUMBER

Project Code	Source	Unit & Section	Phase	Disc.	Doc. Type	Serial No.	Rev.
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Maximum Allowable Amplitude For Foundation	
Velocity (Peak)	4 mm/s
Displacement	25.4 mm

- Note:
- The weight of maximum maintenance part is 60 kg(assembly pump casing)
 - Leveling pads(SS) will be supplied by vendor (qty.=anchor bolt qty)
 - Grout material shall be non-shrinkage cement mortar or epoxy mortar.

LIFTING INFORMATION

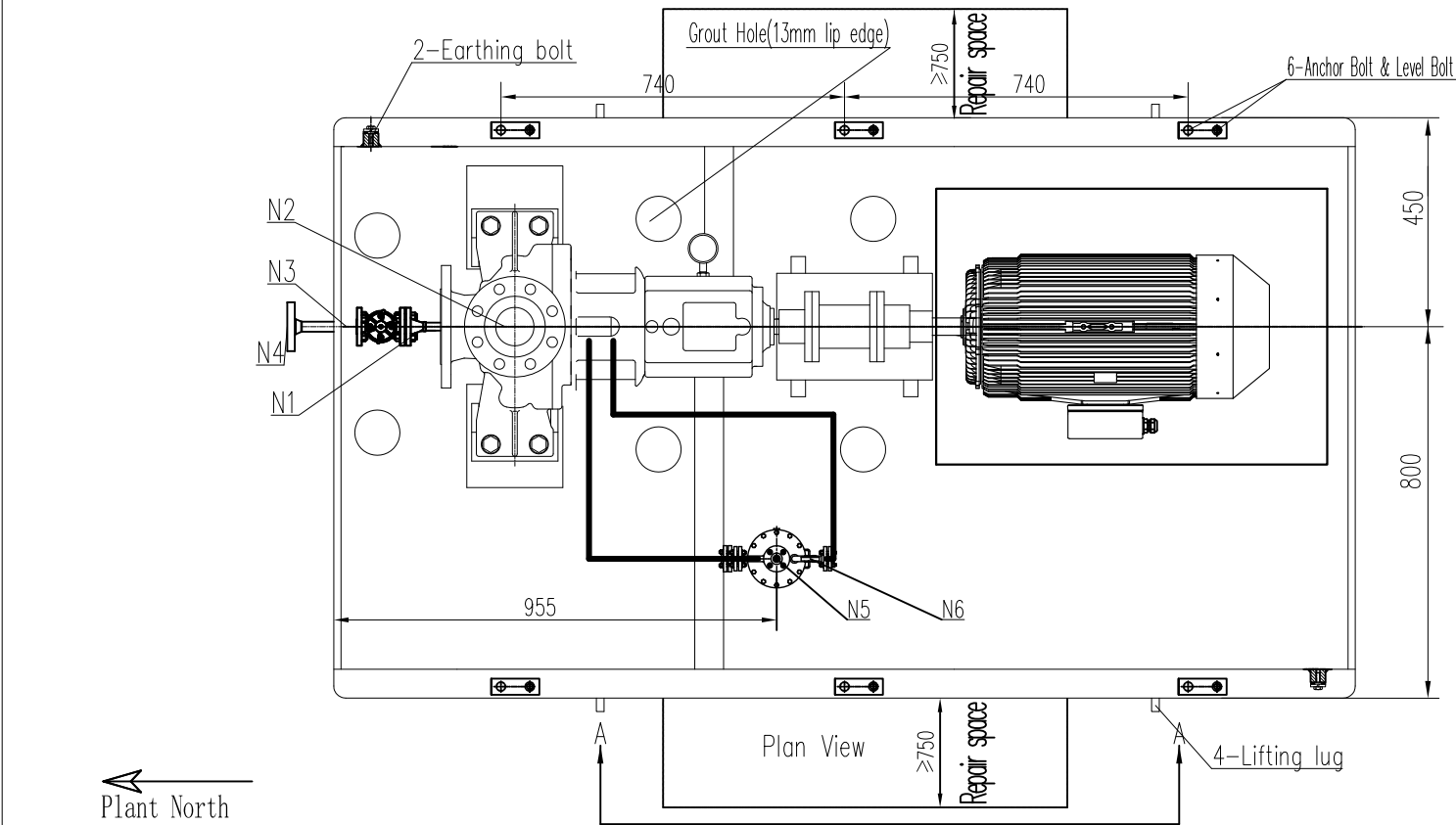
Pump	AX	0
	AY	0
Motor	AZ	5
	BX	460
Unity	BY	0
	BZ	20
	CX	101
	CY	0
	CZ	188

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

Nozzle load,Force(N)/Moment(N.m)

DN1	Fx	2660
	Fy	2140
DN2	Fz	1780
	Mx	1900
	My	940
	Mz	1440
	Fx	1420
	Fy	1160
	Fz	1780
	Mx	920
	My	460
	Mz	700

NGL-CT-1-0000-ME-PO-0014-D0



WEIGHT(Kg)		Anchor Bolt Detail	Earthing bolt detail	PUMP END	LIFTING LUG
Total	928				
Skid weight	390				
Aux. weight	70				
Motor weight	290				
Pump weight	178				

Nozzle information								
6	Plan 23 drain	N6	1/2"	ASME B16.5-09	Class600	RF		
5	Plan 23 vent	N5	1/2"	ASME B16.5-09	Class600	RF		
4	Baseplate drain	N4	1"	ASME B16.5-09	Class150	RF		
3	Pump drain	N3	3/4"	ASME B16.5-09	Class300	RF		
2	Pump Discharge	N2	1-1/2"	ASME B16.5-09	Class300	RF		
1	Pump Suction	N1	3"	ASME B16.5-09	Class300	RF		
NO.	Nozzle	Sign	NPS	Standard	Rating	Face		