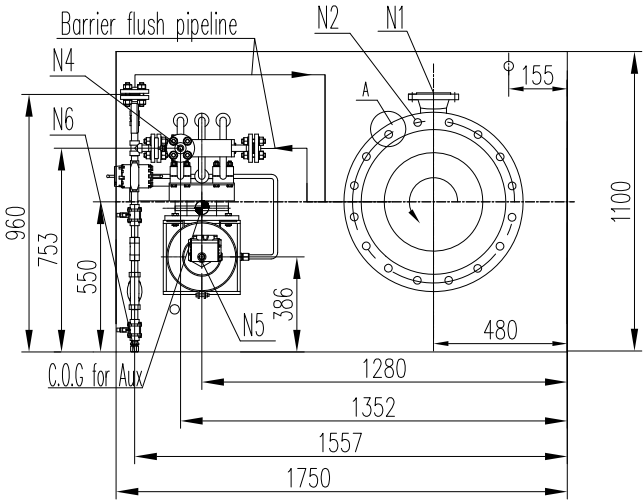
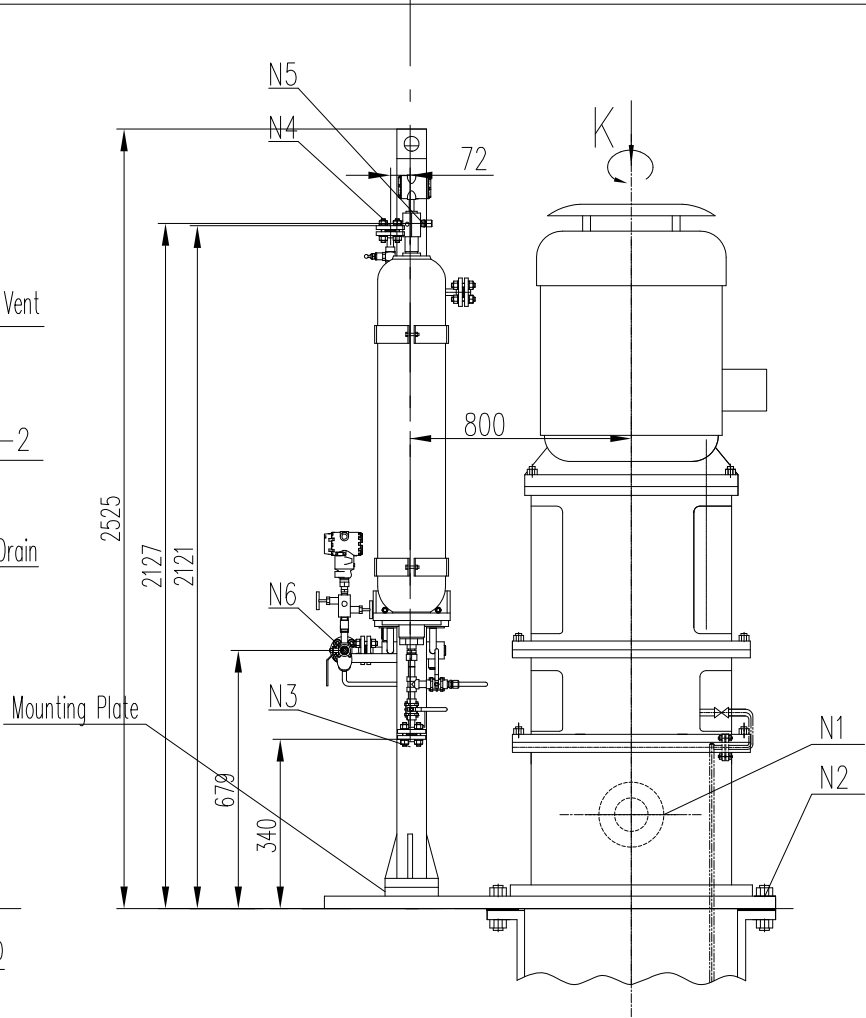


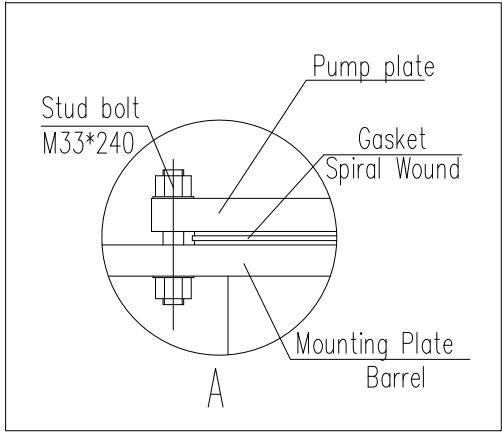
Anchor Bolt will be supplied by DBP.

WEIGHT	Earthing bolt detail	PUMP END	LIFTING LUG
Total	2892		
Skid weight	800		
Aux. weight	200		
Motor weight	300		
Pump weight	1592		



Plan View

Nozzle information					
6	Plan 53B Filling	N6	1/2" NPT Quikly connection		
5	Plan 53B N2 Charging	N5	M14X1.5		
4	Plan 53B Vent	N4	1/2" ASME B16.5-09 Class600	RF	
3	Plan 53B Drain	N3	1/2" ASME B16.5-09 Class600	RF	
2	Baseplate	N2	28" ASME B16.47 SERIE A Class150	RF	
1	Pump Discharge	N1	3" ASME B16.5-09 Class300	RF	
N0.	Nozzle	Sign	NPS	Standard	Rating

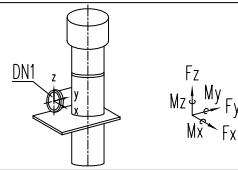


Note:

- The weight of maximum maintenance part is 1650 kg
- Required bolts and nuts, gasket and mounting plate for installation of pump on drum nozzle will be supplied DEEP BLUE. Spare bolts and nuts, gasket will also be supplied accordingly.

LIFTING INFORMATION	
Pump COG	AX 0
	AY -30
	AZ 60
Motor COG	BX 0
	BY 0
	BZ 195
Unity COG	CX 0
	CY -30
	CZ 38
COG	


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



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

REFERENCE DRAWING	DWG. NO.
Seal System Drawing and BOM For Cold Closed HC Drain Pump P-3190-01	NGL-V-0014-ME-DW-7205
Motor Outline Drawing For Cold Closed HC Drain Pump P-3190-01	NGL-V-0014-ME-DW-7207
Coupling Drawing and BOM For Cold Closed HC Drain Pump P-3190-01	NGL-V-0014-ME-DW-7206
Pump Data Sheet For Cold Closed HC Drain Pump P-3190-01	NGL-V-0014-ME-DT-7211
Pump Cross Section Drawing and BOM For Cold Closed HC Drain Pump P-3190-01	NGL-V-0014-ME-DW-7203
Pump PID Drawing For Cold Closed HC Drain Pump P-3190-01	NGL-V-0014-ME-PD-7216

PUMP INFORMATION	
Item No.:	P-3190-01
Service:	Cold Closed HC Drain Pump
Model:	LDB 60-90X6-BV
Seal Plan:	14+53B
Flow/Head	26m3/h & (125.9+4.76)m
Motor:	15KW - 4P
Rotation:	Anti-clockwise viewed from the drive-end
No of Stages:	6
Rotor weight:	290kg
Rotor speed:	1460 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	
 ...building trust شرکت مهندسی و ساختمان صنعت نفت	
DATE : DEPT: Signature :	

Static loading calculation results			Dynamic loading calculation results		
FXstatic=	2140/-2140	N	FXdynamic=	220/-220	N
FYstatic=	2660/-2660	N	FYdynamic=	220/-220	N
FZstatic=	-22819/-26379	N	FZdynamic=	0/0	N
MXstatic=	3561/-3561	N*m	MXdynamic=	365/-365	N*m
MYstatic=	1603/-1603	N*m	MYdynamic=	365/-365	N*m
MZstatic=	2446/-2446	N*m	MZdynamic=	99/99	N*m

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

D4	15.Aug.19	ISSUED FOR APPROVAL	N-Z	T.H	R.C	A. ALIPOUR
D3	31.Jul.19	ISSUED FOR APPROVAL	N-Z	T.H	R.C	A. ALIPOUR
D2	17.Jun.19	ISSUED FOR APPROVAL	N-Z	T.H	R.C	A. ALIPOUR
D1	20.May.19	ISSUED FOR APPROVAL	N-Z	T.H	R.C	A. ALIPOUR
D0	03.Apr.19	ISSUED FOR APPROVAL	N-Z	T.H	R.C	BKHODADADEH

REV.	DATE	DESCRIPTION	PREP	CHECK	APPROVAL	OIEC APP
Project Title: NGL 3100 PROJECT						
Contractor:  ...building trust شرکت مهندسی و ساختمان صنعت نفت						
STATUS CODE: A=Comment/Review B=Approval C=Final Issue						
Pump General Arrangement Drawing For Cold Closed HC Drain Pump P-3190-01						
OWNER DRAWING NUMBER						
Project Name	Originator	PO Serial No.	Disc.	Doc. Type	Seq No.	Rev.
NGL	V	0014	ME	DW	7201	D4
OIEC DRAWING NUMBER						
Project Code	Source	Unit & Section	Phase	Disc.	Doc. Type	Serial No.
						Rev.