


COSIGN	DISCIPLINE	SIGNATURE
		DATE


渤中 25-1 油田 WHPB 平台部分老旧设备设施升级
改造项目（详细设计）


工号: 2024MD027

MACHINERY

1 OF 3

0	2024.10.11	ISSUED FOR APPROVAL	隋永奇 安行 许端杰				
REV	DATE	DESCRIPTION	BY.	CH'K	REV'W	EXAM.	APPR.
CLIENT CNOOC (China) Limited Tianjin		BZ25-1 WHPB WELL SERVICE PUMP (WHPB-P-602) (CN-USP-BHB-BZ25-1)	 中海油能源发展装备技术有限公司 CNOOC EnerTech Equipment Technology Co., Ltd.				
			DOCUMENT NO.				REV.
			MD(DD)-DDS-WHPB-MA-1001				0
CERTIFI. NO. A212002897							

DATA SHEET NO. MD(DD)-DDS-WHPB-MA-1001				TITLE: RECIPROCATATE PUMP				JOB NO. 2024MD027						
EQUIPMENT NO. WHPB-P-602								PAGE NO. 2 OF 3						REV. 0
NO. REQUIRED ONE (1)		PURCHASE ORDER NO.		REQUISITION NO. MD(DD)-REQ-GEN-MA-1001				SPECIFICATION NO. SPC-BZ25-1-MA-0004						
CLIENT: CNOOC Ltd. Tianjin				SERVICE: WELL SERVICE PUMP										
1	VENDOR					3	REFERENCE							
2	TYPE					4	SERIAL NUMBER							
OPERATING CONDITION (EACH PUMP)										PERFORMANCE				
5	FLUID NOTE 4			13	OPERATION		RATED	MAX.	MIN.	21			RATED	MAX
6	PUMPING TEMP. °C 5~35			14	CAPACITY		m³/h	10			22	CURVE NO.		
7	SP. GR. AT PT 0.85~1.023			15	DISCH. PRESS.		kPaG	6000			23	PUMP SPEED		rpm
8	VISC AT PT cP 3~8			16	SUCT.PRESS.		kPaG	ATM			24	EFF.		%
9	VAP.PRESS. kPaA 0.28			17	DIFF.PRESS.		kPa	5900			25	POWER ABS.		kW
10	CORROSION/EROSION: YES			18	DIFF. HEAD		m				26	MIN. CONT.		m³/h
11	CLASS AREA: UNCLASSIFIED AREA			19	NPSHA		m				27	MAX. HEAD		m
12	ENVIRONMENT TEMP °C -13~34.6			20							28	NPSH R		m
CONSTRUCTION										SHOP TESTS				
29	NOZZLE		SIZE	RATING	FACE		POSITION	59			REQ'D	WITNESS		
30	SUCTION		3"	150 lb	RF		INLET	60	PERFORMANCE		YES	YES		
31	DISCHARGE		2"	600 lb	RTJ		OUTLET	61	HYDRO		YES	YES		
32	TYPE: SIMPLEX/DUPLEX-/ MULTIPLEX /PLUNGER /DIAPHRAGM							62	NPSH		IF REQUIRED			
33	NUMBER OF CYLINDERS/PISTONS:							63	MECH. STRING		YES	YES		
34	NUMBER OF VALVES:							64	DISMANTLE / INSPECT		IF REQUIRED			
35	VALVE TYPE: DISC/DOUBEL PORTED/BALL							65						
36	REMOVABLE LINER YES/NO							SEALING REQUIREMENTS						
37	PISTON DIAMETER		mm		STROKE	mm		66	TYPE		NO.OF RINGS			
38	RELEASE VALVE PRESS. SET POINT				kPaG			67	MANUFACTURER					
39	TEST PRESS.		kPaG					68	MATERIAL					
40	DESIGN PRESS.		kPaG			TEMP.	°C	69	CIRCULATION/FILL					
41	BEARING TYPE: LUBRICATION: OIL/GREASE							70						
42	LUBRICATION EQUIPMENT: PRODUCE/TYPE							ACCESSORIES						
43	PUMP FOUNDATION TYPE: SEPARATE/ASSEMBLED/ PACKAGED							71	PULSATION DAMPER: YES SUCTION/DISCHARGE					
44	SERVICE BY VENDOR							72	TENDERER					
45	FOUNDATION BOLTS: YES							73	MANUFACTURE:					
MATERIAL		CODE		SPECIFICATION		KEY		74	TYPE					
46	CYLINDER		API 674 (NOTE2)		12%Cr			75	SIZE					
47	LINER				12%Cr			76						
48	PISTON/PLUNGER				12%Cr			77	RELEASE VALVE : YES					
49	PISTON RINGS							78	PRESSURE SET POINT:					
50	PISTON ROD				12%Cr			79	TYPE: COMBINED / SEPARATE					
51	CRANKSHAFT				42CrMo			80	PRESSURE GAUGE: YES					
52	VALVE/VALVESEATS				12%Cr			81	TEMPERATURE GAGE: YES					
53	GLAND				12%Cr			82						
54	THROAT BUSHING							83						
55	LANTERN RING							84						
56	MENBRANE				85									
57	BOLTING/NUTS		35CrMoA/ 30CrMoA				86							

DATA SHEET NO. MD(DD)-DDS-WHPB-MA-1001		TITLE: RECIPROCATATE PUMP		JOB NO. 2024MD027		
EQUIPMENT NO. WHPB-P-602				PAGE NO. 3 OF 3	REV. 0	
NO. REQUIRED ONE (1)	PURCHASE ORDER NO.	REQUISITION NO. MD(DD)-REQ-WHPB-MA-1001		SPECIFICATION NO. SPC-BZ25-1-MA-0004		
CLIENT: CNOOC Ltd. Tianjin		SERVICE: WELL SERVICE PUMP				
WEIGHT						
1	PUMP AND BASE		DRIVERS			
2	OTHER					
3	GROSSWEIGHT		MAXIMUM MAINTAIN WEIGHT			
4	TURN DIRECTION (FROM PUMP COUPLING SIDE): CLOCKWISE/ANTICLOCKWISE					
DRIVER AND TRANSMISSION						
5	DRIVER TYPE: ELECTRIC MOTOR /TURBINE/DIESEL ENGINE		SERVICE		BY VENDOR	
6	MANUFACTURE:		ELECTRICAL SUPPLY:		380 v 50Hz 3Ph	
7	PROTECTION DEGREE OF ENCLOSURE / FRAME: IP56		TYPE OF EXPLOSION-PROOF: Exd II BT4			
8	TEMPERATURE RISE: CLASS B		INSULATION LEVEL: CLASS F		SPACE HEATER: NOTE 5	
9	RATING POWER / SPEED:	kW	r/min			
10	TRANSMISSION: DIRECT/ GEAR /BELT		SERVICE		BY VENDOR	
11	COUPLING MANUFACTURE : NON-SPARKING COUPLING GUARD (BRASS OR EQUAL, ALUMINUM NOT BE PERMITTED)					
12						
13	REFERENCE DATA SHEETS:		DRIVER		TRANSMISSION UNIT:	
STANDARDS AND SPECIFICATIONS						
14	API674 (LATEST EDITION)		16			
15	MD(DD)-DWG-WHPB-PR-0602		17			
NOTES						
1、DESIGN LIFE SHALL BE 20 YEARS.						
2、VENDOR MAY OFFER ALTERNATIVE MATERIALS FOR CONSTRUCTION, WHICH SHALL BE EQUAL OR BETTER IN PERFORMANCE THAN THOSE LISTED HERE AND MUST BE APPROVED BY PURCHASER.						
3、SKID SIZE SHALL BE NOT MORE THAN 1960X1000(LXW)mm, THE WEIGHT SHALL BE NOT MORE THAN 1.8 T.						
4、THE FLUID IS DIESEL AND UNDERGROUND WATER & PRODUCTION WATER. THE DIESEL GRADE SHALL BE 0# AND - 10#.						
5、MOTOR RATED 5 kW AND ABOVE SHALL BE PROVIDED WITH SPACE HEATER (220V, 1PH, 50Hz).						
6、THE PUMP IS INSULATED AND HEAT TRACED (5℃). THE CALCULATION SHALL BE SUBMITTED TO PURCHASER FOR APPROVAL.						