

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 		
	MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN								
شماره پیمان: ۰۵۳-۰۷۳-۹۱۸۴	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	نهیلات 120	رشته ME	نوع مدرک DT	سریال 0030	نسخه D04	شماره صفحه: ۱ از ۱۳

طرح نگهداشت و افزایش تولید ۲۷ مخزن

MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-DIESEL ENGINE DRIVEN (P-2301 B)



نگهداشت و افزایش تولید میدان نفتی بینک

D04	DEC. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D03	OCT. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D02	JUL. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D01	APR. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D00	FEB. 2022	IFC	H. Adineh	M. Fakharian	M. Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 2 CLIENT Doc. Number: F0Z-708861



status:



- IDC: Inter-Discipline Check
- IFC: Issued For Comment
- IFA: Issued For Approval
- AFD: Approved For Design
- AFC: Approved For Construction
- AFP: Approved For Purchase
- AFQ: Approved For Quotation
- IFI: Issued For Information
- AB-R: As-Built for CLIENT Review
- AB-A: As-Built -Approved

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						
	احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						
شماره پیمان:	MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN						شماره صفحه: ۱۳ از ۱۲
۰۵۳-۰۰۷۳-۹۱۸۴	پروژه	بسته کاری	صادر کننده	تهیلات	رشته	نوع مدرک	
	BK	GCS	PEDCO	120	ME	DT	0030
							D04

REVISION RECORD SHEET

page	D00	D01	D02	D03	D04	D05	page	D00	D01	D02	D03	D04	D05
1	x	x	x	x	x		65						
2	x	x	x	x	x		66						
3	x	x	x	x			67						
4	x						68						
5	x	x	x	x			69						
6	x	x	x	x	x		70						
7	x						71						
8	x						72						
9	x						73						
10	x	x	x		x		74						
11	x		x				75						
12	x		x				76						
13	x	x					77						
14							78						
15							79						
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64							128						

 <p>NISOC</p>	<p>نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض</p> <p>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</p>																															
شماره پیمان: ۰۵۳-۰۷۳-۹۱۸۲	<table border="1"> <tr> <th colspan="8">MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN</th> </tr> <tr> <th>نسخه</th> <th>سریال</th> <th>نوع موتور</th> <th>رشته</th> <th>تجهیزات</th> <th>صادر کننده</th> <th>بسته کاری</th> <th>پروژه</th> </tr> <tr> <td>D04</td> <td>0030</td> <td>DT</td> <td>ME</td> <td>120</td> <td>PEDCO</td> <td>GCS</td> <td>BK</td> </tr> </table>							MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN								نسخه	سریال	نوع موتور	رشته	تجهیزات	صادر کننده	بسته کاری	پروژه	D04	0030	DT	ME	120	PEDCO	GCS	BK	شماره صفحه: ۱۳ از ۱۳
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D04	0030	DT	ME	120	PEDCO	GCS	BK																									
<p align="center">GENERAL NOTES</p>																																
<ol style="list-style-type: none"> Vendor shall fill in the blanks and return the completed data sheet along with Diesel data sheet with his proposal. Vendor shall submit ITP (Inspection & Testing Plan) with his proposal. Vendor is requested to confirm the material, or propose appropriate alternative. For Instrumentation, Project specification 'Specification For Instrument and Control of package Unit System (PU)' Doc. No. BK-GNRAL-PEDCO-000-IN-SP-0004. shall be followed. Instead of mechanical seal, vendor shall advise the suitable Packing specification. NPSH test shall be done & witnessed if the margin of NPSHr & NPSHa is less than 1. The Tie-in flanges shall conform to ASME B-16.1. Pump drain shall be terminated at skid edge with flange connection and valved. Supplier to indicate which minimum flow pumps can achieve. Nozzle loads shall be 2 times the loads shown in API 610 11th Edition. The Suction line size is 12" and discharge line is 10" . Air release valve shall be considered by vendor . As the pump jobsite environmental condition is fummy and dusty, any required protection for pumps, panels and electrical parts (in accordance with IPS-E-EL-100) in this regard shall be considered by pump manufacturer. Ultrasonic Test shall be performed for forged shaft. Couplings shall be dry, flexible and spacer type. A local control panel shall be considered by vendor to be located next to the pumps as per "Specification For Fire Water Pumps", Doc. No. BK-GCS-PEDCO-120-ME-SP-0005'. Alarm and trip shall be specified for diesel control based on NFPA 20. Pump LCP shall be designed to manage all required monitoring and control signals , as minimum in accordance with "P&ID For Fire Water Network", Doc.No.BK-GCS-PEDCO-120-SA-PI-0001. The electrical characteristics of panels shall be specified by vendor such as: - The power demand of control panel. - The number of control panel. Fuel daily tank shall be sized for 8 hours and all instruments such as level transmitter with HH/LL Alarm and etc. are in vendor's scope of supply. Diesel engine shall be tested at 110% rated speed in mechanical running test also the maximum speed of diesel engines shall be 2300 RPM. pressure sensing lines are in the vendor's scope of supply. The sparate power & control panels for main pump diesel engine shall be considered by vendor. Therefore required single line, wiring diagram and etc. shall be specified by vendor. Design pressure is 15.4 barg also as per NFPA 20 standard the hydrotest pressure shall not be less than 17.24 barg. Estimated BHP at rated capacity is 199.2 kW by considering 65% efficiency. The pumps shall furnish not less than 150% of rated capacity at not less than 65% of rated head. 																																

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پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه											
BK	GCS	PEDCO	120	ME	DT	0030	D04											



CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 B (Sheet 2 of 6)

APPLICABLE TO: PROPOSAL	APPLICABLE NTL/INTNTL STANDARD: NFPA20 (2019) & IPS-M-PM-125
FOR NISOC	UNIT _____
SITE BINAK Gas Compressor Station	SERVICE Fire Water Pumps - Diesel Engine Driven
NO. REQ 1	TYPE _____ No. STAGES _____
MANUFACTURER _____	MODEL BB1 (V.T.C) SERIAL NO. _____

LIQUID CHARACTERISTICS					
	Units	Maximum	Minimum	Note	SERVICE : INTERMITTENT
LIQUID TYPE OR NAME :		Water		Max & min values refer only to the property listed	• IF INTERMITTENT NO. OF STARTS : _____
VAPOR PRESSURE :	bara	0.0087	0.1219		PUMPS OPERATE IN: _____
DENSITY :	kg/m³	997			CORROSION DUE TO : (6.12.1.9) _____
SPECIFIC HEAT :	kJ/kgC	4.186			EROSION DUE TO : (6.12.1.9) _____
VISCOSITY :	cP	1			H2S CONCENTRATION (ppm) : (6.12.1.12) N.A.
OPERATING CONDITIONS (6.1.2)					
	Units	Maximum	Rated	Normal	Min
NPSH _a Datum:		C.L. Impeller			
PUMPING TEMPERATURE :	°C	50			5
FLOW :	m³/hr		454.20		
DISCHARGE PRESSURE : (6.3.2)	barg		10.4		
SUCTION PRESSURE :	barg	0.83	0.81		0.08
DIFFERENTIAL PRESSURE :	bar		10.3		
DIFFERENTIAL HEAD :	m		105.0		
NPSH _a :	m		8.8		
HYDRAULIC POWER:	KW		129.50		



SITE AND UTILITY DATA			
LOCATION: OUTDOOR UNHEATED UNDER ROOF		COOLING WATER :	
MOUNTED AT : _____		RETURN DESIGN	
ELECTRIC AREA CLASSIFICATION: (6.1.22) ZONE SAFE		TEMP _____	
GROUP _____ TEMP CLASS _____		PRESS. _____	
SITE DATA :		SOURCE _____	
ELEVATION (MSL) : 12.5 m		COOLING WATER CHLORIDE CONCENTRATION: _____	
BAROMETER : 990.77 mBar		INSTRUMENT AIR :	
RANGE OF DESIGN TEMPS. MIN / MAX 5 85 °C		STEAM _____ kg MIN _____ kg	
RELATIVE HUMIDITY: MIN / MAX 0 100 % (@ 25.6 °C)		TEMP _____	
UNUSUAL CONDITIONS: NA		PRESS. _____	
UTILITY CONDITIONS :		DRIVERS HEATING	
ELECTRICITY : AUXILIARY HEATING CONTROL SHUTDOWN			
VOLTAGE 400			
PHASE 3			
HERTZ 50			

PERFORMANCE				DRIVER (7.1.5) (NOTE 22)	
PROPOSAL CURVE NO. _____ RPM _____				Driver Type DIESEL ENGINE	
As Tested Curve No. _____				GEAR NO	
IMPELLER DIA.: RATED _____ MAX. _____ MIN. _____ mm				VARIABLE SPEED REQUIRED NO	
RATED POWER _____ Kw EFFICIENCY _____ (%)				SOURCE OF VARIABLE SPEED _____	
RATED CURVE BEP FLOW (at rated impeller dia) _____ m³/hr				OTHER _____	
MIN FLOW : _____ kJ/Nm³ _____ m³/hr				MANUFACTURER _____	
PREFERRED OPERATING REGION (6.1.11) _____ to _____ m³/hr				NAMEPLATE POWER _____ @Site Condition KW	
ALLOWABLE OPERATING REGION _____ to _____ m³/hr				Nominal RPM _____	
MAX HEAD @ RATED IMPELLER _____ m				RATED LOAD RPM _____	
MAX POWER @ RATED IMPELLER _____ kW				FRAME OR MODEL _____	
NPSH3 AT RATED FLOW : _____ m				ORIENTATION HORIZONTAL	
CL PUMP TO U/S BASEPLATE _____ m				LUBE _____	
NPSH MARGIN AT RATED FLOW : _____ m				RADIAL _____	
SPECIFIC SPEED (6.1.9) _____				THRUST _____	
SUCTION SPECIFIC SPEED LIMIT _____				STARTING METHOD _____	
SUCTION SPECIFIC SPEED _____				SEE DRIVER DATA SHEET _____	
MAX. ALLOW. SOUND PRESS. LEVEL REQD (6.1.14) 110 (dBA) @ 1 m				Max Voltage Variation _____	
EST MAX SOUND PRESS. LEVEL _____ (dBA)				Max Frequency Variation _____	
MAX. SOUND POWER LEVEL REQD (6.1.14) _____				Max Voltage and Frequency Variation together _____	
EST MAX SOUND POWER LEVEL _____					

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پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه											
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CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 B (Sheet 3 of 6)

CONSTRUCTION																																											
API PUMP TYPE: <u>BB1</u> [Based on API 610 definitions]	CASING MOUNTING:																																										
NOZZLE CONNECTIONS: (6.5.5) NOTES 7,11 <div><table><tr><td>Size</td><td>Facing</td><td>Rating</td><td>Position</td></tr><tr><td>RF</td><td>300</td><td>SIDE</td></tr><tr><td>RF</td><td>300</td><td>SIDE</td></tr></table></div>	Size	Facing	Rating	Position	RF	300	SIDE	RF	300	SIDE	CASING TYPE: (6.3.10) _____ OH3 BACKLAYOUT LIFTING DEVICE REQD. (9.1.2.6) _____ CASE PRESSURE RATING: MAWP : (6.3.5) <u>By vendor</u> barg @ _____ °C HYDROTEST : <u>1.5*MAWP</u> barg @ _____ °C																																
Size	Facing	Rating	Position																																								
RF	300	SIDE																																									
RF	300	SIDE																																									
PRESSURE CASING AUX. CONNECTIONS: (6.4.3.2) <table><tr><td>No.</td><td>Size</td><td>Type</td><td>Facing</td><td>Rating</td><td>Posn.</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> BAL/LEAK OFF _____ DRAIN _____ VENT _____ PRESSURE GAGE _____ TEMP GAGE _____ WARM-UP LINE _____ Drain Valve Supplied By <u>SUPPLIER</u> DRAINS MANIFOLDED <u>YES</u> VENT Valve Supplied By <u>SUPPLIER</u> VENTS MANIFOLDED <u>YES</u> THREAD. CONS FOR PIPELINE SERVICE & < 50°C (6.4.3.2) <u>NO</u> SPECIAL FITTINGS FOR TRANSITIONING (6.4.3.3) <u>NO</u> CYLINDRICAL THREADS REQUIRED (6.4.3.8) <u>NO</u> GUSSET SUPPORT REQUIRED <u>YES</u> If Needed MACHINED AND STUDDED CONNECTIONS (6.4.3.12) <u>NO</u> VS 6 DRAIN <u>N/A</u> DRAIN TO SKID EDGE <u>YES</u>	No.	Size	Type	Facing	Rating	Posn.																																					HYDROTEST OH PUMP AS ASSEMBLY <u>YES</u> SUCTN PRESS. REGIONS DESIGNED FOR MAWP <u>YES</u> ROTATION: (VIEWED FROM COUPLING END) _____ <ul style="list-style-type: none">IMPELLERS INDIVIDUALLY SECURED : _____BOLT OH 3/4/5 PUMP TO PAD / FOUNDATION : _____PROVIDE SOLEPLATE FOR OH 3/4/5 PUMPS _____ ROTOR: SHAFT FLEXIBILITY INDEX (SFI) (9.1.1.3) _____ First Critical Speed Wet (Multi stage pumps only) _____ COMPONENT BALANCE TO ISO 1940 G1.0 <u>NO</u> SHRINK FIT -LIMITED MOVEMENT IMPELLERS (9.2.2.3) _____ COUPLING: (7.2.3) (7.2.13.0) NOTE 16 MANUFACTURER _____ MODEL _____ RATING (POWER/100 RPM) _____ SPACER LENGTH _____ mm SERVICE FACTOR <u>Min 1.5</u> RIGID <u>NO</u> COUPLING WITH HYDRAULIC FIT (7.2.10) _____ COUPLING BALANCED TO ISO 1940-1 G6.3 (7.2.3) <u>YES</u> COUPLING WITH PROPRIETARY CLAMPING DEVICE (7.2.11) _____ COUPLING IN COMPLIANCE WITH (7.2.4) <u>API 671</u> COUPLING GUARD STANDARD PER (7.2.13.a) <u>ISO 14120</u> Window on Coupling Guard _____
No.	Size	Type	Facing	Rating	Posn.																																						
MATERIAL (6.12.1.1)																																											
APPENDIX H CLASS <u>I-2</u> NOTES 3 MIN DESIGN METAL TEMP (6.12.4.1) _____ 5 °C REDUCED-HARDNESS MATERIALS REQ'D (6.12.1.12.1) _____ Applicable Hardness Standard (6.12.1.12.3) _____ BARREL : _____ CASE : _____ DIFFUSERS _____ IMPELLER : _____ IMPELLER WEAR RING : _____ CASE WEAR RING : _____ SHAFT: _____ Bowl (if VS-type) _____ Inspection Class Note 2																																											
BEARINGS AND LUBRICATION (6.10.1.1)																																											
BEARING (TYPE / NUMBER): (6.11.4) _____ RADIAL _____ / _____ THRUST _____ / _____ REVIEW AND APPROVE THRUST BEARING SIZE : (9.2.5.2.4) _____ LUBRICATION : (6.10.2.2) (6.11.3) (9.2.6) _____ PRESSURE LUBE SYSTEM TO ISO 10438- _____ (9.2.6.5) _____ ISO 10438 DATA SHEETS ATTACHED _____ Pressurized Lube Oil System mtd on pump baseplate _____ Location of Pressurized Lube Oil System mounted on baseplate : _____ INTERCONNECTING PIPING PROVIDED BY <u>Supplier</u> OIL VISC. ISO GRADE VG _____ CONSTANT LEVEL OILER : _____																																											
BASEPLATE																																											
API BASEPLATE NUMBER : _____ BASEPLATE CONSTRUCTION (7.3.14) _____ BASEPLATE DRAINAGE (7.3.1) <u>Entire Baseplate Drain Pan</u> MOUNTING : _____ NON-GROUT CONSTRUCTION : (7.3.13) _____ VERTICAL LEVELING SCREWS : <u>REQUIRED</u> LONGITUDINAL DRIVER POSITIONING SCREWS : <u>REQUIRED</u> SUPPLIED WITH : <ul style="list-style-type: none">GROUT AND VENT HOLES <u>YES</u>DRAIN CONNECTION <u>YES</u> MOUNTING PADS SIZED FOR BASEPLATE LEVELING (7.3.5) <u>YES</u> MOUNTING PADS TO BE MACHINED (7.3.6) <u>YES</u> PROVIDE SPACER PLATE UNDER ALL EQUIPMENT FEET <u>YES</u> OTHER _____ REMARKS : _____ _____ _____ _____ _____																																											

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CENTRIFUGAL PUMP DATA SHEET (SI UNIT) -P-2301 B (Sheet 5 of 6)																										
SURFACE PREPARATION AND PAINT					TEST																					
MANUFACTURER'S STANDARD _____ OTHER (SEE BELOW) _____ SPECIFICATION NO. BK-GNRAL-PEDCO-000-PI-SP-0006, "Specification for Painting" PUMP: PUMP SURFACE PREPARATION _____ PRIMER AS PER PROJECT PAINTING SPEC. FINISH COAT AS PER PROJECT PAINTING SPEC. BASEPLATE: BASEPLATE SURFACE PREPARATION _____ PRIMER: AS PER PROJECT PAINTING SPEC. FINISH COAT AS PER PROJECT PAINTING SPEC. DETAILS OF LIFTING DEVICES _____ SHIPMENT: (8.4.1) EXPORT EXPORT BOXING REQUIRED YES OUTDOOR STORAGE MORE THAN 6 MONTHS YES SPARE ROTOR ASSEMBLY PACKAGED FOR: ROTOR STORAGE ORIENTATION (9.2.8.2) _____ SHIPPING & STORAGE CONTAINER FOR VERT STORAGE (9.2.8.3) _____ N ₂ PURGE (9.2.8.4) _____ SPARE PARTS START-UP YES NORMAL MAINTENANCE YES					SHOP INSPECTION (8.1.1) Yes PERFORMANCE CURVE _____ & DATA APPROVAL PRIOR TO SHIPMENT. YES TEST WITH SUBSTITUTE SEAL (8.3.3.2.b) _____ MATERIAL CERTIFICATION REQUIRED _____ SHAFT YES (6.12.1.8) CASING YES OTHER YES IMPELLER YES Casing and impeller Wear ring CASTING REPAIR WELD PROCEDURE APPR REQD YES INSPECTION REQUIRED FOR CONNECTION WELDS (6.12.3.4.d) _____ LIQUID PENETRANT YES MAG PARTICLE _____ ULTRASONIC _____ RADIOGRAPHY YES INSPECTION REQUIRED FOR CASTINGS _____ LIQUID PENETRANT YES MAG PARTICLE YES ULTRASONIC YES RADIOGRAPHY _____ HARDNESS TEST REQUIRED (8.2.2.7) _____ ADDNL SUBSURFACE EXAMINATION (6.12.1.5) (8.2.1.3) _____ FOR _____ METHOD _____ PMI TESTING REQUIRED (8.2.2.8) _____ COMPONENTS TO BE TESTED _____ RESIDUAL UNBALANCE TEST (J.4.1.2) _____ NOTIFICATION OF SUCCESSFUL SHOP _____ PERFORMANCE TEST (8.1.1.c) (8.3.3.5) YES BASEPLATE TEST (7.3.21) YES HYDROSTATIC _____ HYDROSTATIC TEST OF BOWLS & COLUMN (9.3.13.2) WIT PERFORMANCE TEST WIT TEST IN COMPLIANCE WITH (8.3.3.2) NFPA 20 TEST DATA POINTS TO (8.3.3.3) NFPA 20 TEST TOLERANCES TO (8.3.3.4) TABLE 16 NPSH (8.3.4.3.1) (8.3.4.3.4) NOTE 6 WIT NPSH-1ST STG ONLY (8.3.4.3.2) _____ NPSH TESTING TO HI 1.6 OR ISO 9906 (8.3.4.3.3) _____ TEST NPSHA LIMITED TO 110% SITE NPSHA (8.3.3.6) _____ RETEST ON SEAL LEAKAGE (8.3.3.2.d) OBSERVE RETEST REQUIRED AFTER FINAL HEAD ADJ (8.3.3.7.b) _____ COMPLETE UNIT TEST (8.3.4.4.1) WIT SOUND LEVEL TEST (8.3.4.5) WIT CLEANLINESS PRIOR TO FINAL ASSEMBLY (8.2.2.6) OBSERVE LOCATION OF CLEANLINESS INSPECTION _____ NOZZLE LOAD TEST _____ CHECK FOR CO-PLANAR MOUNTING PAD SURFACES _____ MECHANICAL RUN TEST UNTIL OIL TEMP STABLE _____ 4 HR. MECH RUN AFTER OIL TEMP STABLE (8.3.4.2.1) WIT 4 HR. MECH RUN TEST (8.3.4.2.2) _____ BRG HSG RESONANCE TEST (8.3.4.7) _____ STRUCTURAL RESONANCE TEST (9.3.9.2) _____ REMOVE / INSPECT HYDRODYNAMIC BEARINGS AFTER TEST (9.2.7.5) _____ AUXILIARY EQUIPMENT TEST (8.3.4.6) _____ EQUIPMENT TO BE INCLUDED IN AUXILIARY TESTS _____ LOCATION OF AUXILIARY EQUIPMENT TEST _____ IMPACT TEST PER EN 13445 _____ REMOVE CASING AFTER TEST PER ASME SECTION VIII _____																					
<table><tr><th>ITEM No</th><th>PUMP</th><th>DRIVER</th><th>GEAR</th><th>BASE</th><th>TOTAL</th></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>					ITEM No	PUMP	DRIVER	GEAR	BASE	TOTAL																
ITEM No	PUMP	DRIVER	GEAR	BASE	TOTAL																					
OTHER PURCHASER REQUIREMENTS																										
COORDINATION MEETING REQUIRED (10.1.3) YES MAXIMUM DISCHARGE PRESSURE TO INCLUDE _____ OPERATION TO TRIP SPEED _____ MAX DIA. IMPELLERS AND/OR NO OF STAGES YES CONNECTION DESIGN APPROVAL (9.2.1.4) YES TORSIONAL ANALYSIS / REPORT (6.9.2.10) NO PROGRESS REPORTS YES OUTLINE OF PROC FOR OPTIONAL TESTS (10.2.5) _____ ADDITIONAL DATA REQUIRING 20 YEARS RETENTION (8.2.1.1) _____ LATERAL ANALYSIS REQUIRED (9.1.3.4) (9.2.4.1.3) NO MODAL ANALYSIS REQUIRED (9.3.9.2) _____ DYNAMIC BALANCE ROTOR (6.9.4.4) YES INSTALLATION LIST IN PROPOSAL (10.2.3.1) YES VFD STEADY STATE DAMPED RESPONSE ANALYSIS (6.9.2.3) NO TRANSIENT TORSIONAL RESPONSE _____ BEARING LIFE CALCULATIONS REQUIRED (6.10.1.6) _____ IGNITION HAZARD ASSMT TO EN 13463-1 (7.2.13.e) _____ CASING RETIREMENT THICKNESS DRAWING (10.3.2.3) _____ FLANGES RQD IN PLACE OF SKT WELD UNIONS (7.5.2.8) _____ INCLUDE PLOTTED VIBRATION SPECTRA (6.9.3.3) _____ CONNECTION BOLTING (7.5.1.7) _____ CADMIUM PLATED BOLTS PROHIBITED _____ VENDOR TO KEEP REPAIR AND HT RCDS (8.2.1.1.c) _____ VENDOR SUBMIT TEST PROCEDURES (8.3.1.1) YES SUBMIT INSPECTION CHECK LIST (8.1.5) NOTE 2 YES																										



احداث ردیف تراکم گاز در ایستگاه جمع آوری پینک



• 53-• 73-9184

MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN

شماره صفحه: ۱۹ از ۱۳

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
D04	0030	DT	ME	120	PEDCO	GCS	BK

CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 B (Sheet 6 of 6)

PRESSURE VESSEL DESIGN CODE REFERENCES

THESE REFERENCES MUST BE LISTED BY THE MANUFACTURER
CASTING FACTORS USED IN DESIGN (TABLE 3)
SOURCE OF MATERIAL PROPERTIES

WELDING AND REPAIRS (NOTE 12)

THESE REFERENCES MUST BE LISTED BY THE PURCHASER. (DEFAULT TO TABLE 11 IF NO PURCHASER PREFERENCE IS STATED)

ALTERNATE WELDING CODES AND STANDARDS

WELDING REQUIREMENT (APPLICABLE CODE OR STANDARD)

WELDER/OPERATOR QUALIFICATION

WELDING PROCEDURE QUALIFICATION

NON-PRESSURE RETAINING STRUCTURAL WELDING SUCH AS BASEPLATES OR SUPPORTS

MAGNETIC PARTICLE OR LIQUID PENETRANT EXAMINATION OF PLATE EDGES

POSTWELD HEAT TREATMENT

POSTWELD HEAT TREATMENT OF CASING FABRICATION WELDS

DEFAULT PER TABLE 11

DEFAULT PER TABLE 11

DEFAULT PER TABLE 11

DEFAULT PER TABLE 11

DEFAULT PER TABLE 11

DEFAULT PER TABLE 11

DEFAULT PER TABLE 11

MATERIAL INSPECTION

THESE REFERENCES MUST BE LISTED BY THE PURCHASER

DEFAULT TO TABLE 14

YES

ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8 2 2 5)

TYPE OF INSPECTION	METHOD	FOR FABRICATIONS	FOR CASTINGS
RADIOGRAPHY			
ULTRASONIC INSPECTION			
MAGNETIC PARTICLE INSPECTION			
LIQUID PENETRANT INSPECTION			
VISUAL INSPECTION (all surfaces)			

REMARKS :

[illegible]



سطح الارض

شماره صفحه: ۱۱ از ۱۳

شماره پیمان:

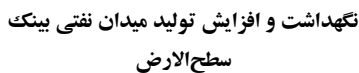
MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN

• 53-073-9184

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D04	0030	DT	ME	120	PEDCO	GCS	BK

Diesel Engine Data Sheet For Fire Water Pump - P-2301 B (SI UNIT) (2 of 4)

HYDRAULIC:-			
ACCUMULATOR/MOTOR			
NO OF STARTS PER 5 SEC CRANKS			
NO OF ACCUMULATORS			
BARRING SYSTEM			
MANUAL/ELEC/HYDRAULIC IF REQ'D			MANUAL
LUBRICATION			
DRY SUMP			
SYSTEM:- PRESSURE	bar g / Kpa g		
OIL QUANTITY			
OIL CONSUMPTION	g/kwh		
PUMPS	Main/Aux		
OIL FILTER:-			
CHANGE OVER WHILE RUNNING	Reqd y/n		
INLET SYSTEM			
FILTER:-			TWO STAGE
TYPE	Wet or dry		
NUMBER			
AIR CUT OFF SYSTEM ("RIG SAVER")			YES
EXHAUST SYSTEM			
ENGINE PIPE OUTLET			YES
SPARK ARRESTOR			YES
SILENCER	dBA @1m		YES - 85
EXPANSION JOINT			YES
EXHAUST MANIFOLD	Cooling		PERSONNEL PROTECTION
FUEL			
MAX STATIC HEAD ABOVE FUEL INLET			
FILTER CLEANABLE WHILE RUNNING	Y/N		YES
SELF CLEANING	Y/N		YES
CHANGE OVER WHILE RUNNING	Y/N		YES
HEAT EMISSIONS			
TO COOLING SYSTEM	kW		
TO AMBIENT	kW		
SITE AND INSTALLATION DATA			
ALTITUDE	m		
AMBIENT TEMPERATURE MIN/MAX	°C		5 / 50
DESIGN TEMPERATURE	°C		52
HUMIDITY	%		0 / 100
WIND SPEED	km/h		
ATMOSPHERIC AIR (DUST/FUMES)			
CORROSION BY			
LOCATION:- INDOOR/OUTDOOR			OUTDOOR



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک

شماره پیمان:

MECHANICAL DATA SHEETS FOR FIRE WATER PUMPS-DIESEL ENGINE DRIVEN

• 53-• 73-9184

شماره صفحه: ۱۳ از ۱۳

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D04	0030	DT	ME	120	PEDCO	GCS	BK

Diesel Engine Data Sheet For Fire Water Pump - P-2301 B (SI UNIT) (4 of 4)

[illegible]