
 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
شماره پیمان: 053-073-9184	MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN								شماره صفحه: 1 از 9
	نسخه	سریال	نوع مدرک	رشته	تهیه کننده	صادر کننده	بسته کاری	پروژه	
	D02	0029	DT	ME	120	PEDCO	GCS	BK	

طرح نگهداشت و افزایش تولید 27 مخزن

MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS - ELECT. MOTOR DRIVEN (P-2301 A)



نگهداشت و افزایش تولید میدان نفتی بینک

D02	AUG. 2022	IFA	H. Adineh	M. Fakharian	M. Mehrshad	
D01	MAY. 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-708860



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 شماره پیمان: 053-073-9184	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							
	MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN						شماره صفحه: 2 از 9	
پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته ME	نوع مدرک DT	سریال 0029	نسخه D02	

REVISION RECORD SHEET

page	D00	D01	D02	D03	D04	page	D00	D01	D02	D03	D04
1	x	x	x			65					
2	x	x	x			66					
3	x	x	x			67					
4	x					68					
5	x	x	x			69					
6	x	x	x			70					
7	x					71					
8	x					72					
9	x					73					
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 <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: 053-073-9184	<table border="1"> <tr> <th colspan="8">MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN</th> </tr> <tr> <th>نسخه</th> <th>سریال</th> <th>نوع محرک</th> <th>رشته</th> <th>تهیلات</th> <th>صادر کننده</th> <th>بسته کاری</th> <th>پروژه</th> </tr> <tr> <td>D02</td> <td>0029</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 MAIN PUMPS-ELECTRICAL MOTOR DRIVEN								نسخه	سریال	نوع محرک	رشته	تهیلات	صادر کننده	بسته کاری	پروژه	D02	0029	DT	ME	120	PEDCO	GCS	BK	شماره صفحه: 3 از 9
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D02	0029	DT	ME	120	PEDCO	GCS	BK																				
<p align="center">GENERAL NOTES</p>			<p align="center">D02</p>																								
<ol style="list-style-type: none"> 1 Vendor shall fill in the blanks and return the completed data sheet along with Motor data sheet, "DOC NO.: BK-GCS-PEDCO-120-EL-DT-0009. with his proposal. 2 Vendor shall submit ITP (Inspection & Testing Plan) with his proposal. 3 Vendor is requested to confirm the material, or propose appropriate alternative. 4 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. 5 Instead of mechanical seal, vendor shall advise the suitable Packing specification. 6 NPSH test shall be done & witnessed if the margin of NPSHr & NPSHa is less than 1. 7 The Tie-in flanges shall conform to ASME B-16.1. 8 Pump drain shall be terminated at skid edge with flange connection and valved. 9 Vendor to indicate which minimum flow pumps can achieve. 10 Nozzle loads shall be 2 times the loads shown in API 610 11th Edition. 11 Electrical motor shall be rated for 150% of rated capacity. 12 The Suction line size is 12" and discharge line is 10" . 13 Welding repair procedures shall be submitted for approval. 14 Air release valve to be considered by vendor. 15 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. 16 Ultrasonic Test shall be performed for forged shaft. 17 Couplings shall be dry, flexible and spacer type. 18 For electrical motor descriptions, refer to 'Specification For MV Induction Motors' Doc. No.BK-GNRAL-PEDCO-000-EL-SP-0017. 19 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." 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. 21 Pressure sensing lines are in the vendor's scope of supply. 22 The pumps shall furnish not less than 150% of rated capacity at not less than 65% of rated head. 																											



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



053-073-9184

MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN

شماره صفحه: 4 از 9

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادرکننده	بسته کاری	پروژه
D02	0029	DT	ME	120	PEDCO	GCS	BK

CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 A (Sheet 1 of 6)

CLIENT: National Iranian South Oil Company (NISOC)

PROJECT TITLE: BINAK Gas Compressor Station

JOB NUMBER:

EQUIPMENT NUMBER: P-2301 A

EQUIPMENT SERVICE: Fire Water Main Pumps - Electrical Motor Driven

SERIAL NUMBER:

REQ. / SPEC NO. : BK-GCS-PEDCO-120-ME-SP-0005.

PURCH ORDER NO.

Cells coloured thus

contain drop-down options

contain calculated values based on input data; do not change.

identify a cross referenced paragraph in the document note, and may also contain a drop down list



When you have completed the DS, highlight the whole page format cells pattern none

Delete these notes on completion

COMMENTS:



DATA SHEETS					
ITEM No.	ATT	ITEM No.	ATT	ITEM No.	ATT
P-2301 A	YES				

PUMP
MOTOR
GEAR
TURBINE

 NISOC شماره پیمان: 053-073-9184	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 شماره صفحه: 5 از 9
	MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN							
	پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	
BK	GCS	PEDCO	120	ME	DT	0029	D02	



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

APPLICABLE TO: PROPOSAL FOR: NISOC SITE: BINAK Gas Compressor Station NO. REQ: 1 PUMP SIZE: _____ MANUFACTURER: _____				APPLICABLE NTL/INTNL STANDARD: NFPA20 (2019) & IPS-M-PM-125 UNIT: _____ SERVICE: Fire Water Main Pumps - Electrical Motor Driven TYPE: _____ No. STAGES: _____ MODEL: BB1 (V.T.C) SERIAL NO.: _____																																																					
LIQUID CHARACTERISTICS																																																									
<table border="1"> <thead> <tr> <th>Units</th> <th>Maximum</th> <th>Minimum</th> </tr> </thead> <tbody> <tr> <td colspan="3">Liquid Type OR NAME : Water</td> </tr> <tr> <td>VAPOR PRESSURE :</td> <td>bara</td> <td>0.0087</td> </tr> <tr> <td>DENSITY :</td> <td>kg/m³</td> <td>997</td> </tr> <tr> <td>SPECIFIC HEAT :</td> <td>kJ/kgC</td> <td>4.186</td> </tr> <tr> <td>VISCOSITY :</td> <td>cP</td> <td>1</td> </tr> </tbody> </table>				Units	Maximum	Minimum	Liquid Type OR NAME : Water			VAPOR PRESSURE :	bara	0.0087	DENSITY :	kg/m ³	997	SPECIFIC HEAT :	kJ/kgC	4.186	VISCOSITY :	cP	1	<table border="1"> <thead> <tr> <th>Note</th> </tr> </thead> <tbody> <tr> <td>Max & min values refer only to the property listed</td> </tr> </tbody> </table>				Note	Max & min values refer only to the property listed																														
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OPERATING CONDITIONS (6.1.2)				SERVICE : • IF INTERMITTENT NO. OF STARTS : _____ PUMPS OPERATE IN: _____ CORROSION DUE TO : (6.12.1.9) _____ EROSION DUE TO : (6.12.1.9) _____ H2S CONCENTRATION (ppm) : (6.12.1.12) N.A. CHLORIDE CONCENTRATION (ppm) : _____ PARTICULATE SIZE (DIA IN MICRONS) : _____ PARTICULATE CONCENTRATION (PPM) : _____																																																					
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LOCATION: OUTDOOR UNHEATED UNDER ROOF MOUNTED AT : ● TROPICALISATION REQ'D ELECTRIC AREA CLASSIFICATION: (6.1.22) SAFE GROUP _____ TEMP CLASS _____ SITE DATA : ELEVATION (MSL) : 12.5 m BAROMETER : 990.77 mBar RANGE OF DESIGN TEMPS: MIN / MAX 5 85 °C RELATIVE HUMIDITY: MIN / MAX 0 100 % (@ 25.6 °C) UNUSUAL CONDITIONS: NA UTILITY CONDITIONS : <table border="1"> <thead> <tr> <th>ELECTRICITY :</th> <th>DRIVERS</th> <th>HEATING</th> <th>CONTROL</th> <th>SHUTDOWN</th> </tr> </thead> <tbody> <tr> <td>VOLTAGE</td> <td>3300</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PHASE</td> <td>3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>HERTZ</td> <td>50</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				ELECTRICITY :	DRIVERS	HEATING	CONTROL	SHUTDOWN	VOLTAGE	3300				PHASE	3				HERTZ	50				COOLING WATER : <table border="1"> <thead> <tr> <th></th> <th>RETURN</th> <th>DESIGN</th> </tr> </thead> <tbody> <tr> <td>TEMP</td> <td></td> <td></td> </tr> <tr> <td>PRESS.</td> <td></td> <td></td> </tr> <tr> <td>SOURCE</td> <td></td> <td></td> </tr> </tbody> </table> COOLING WATER CHLORIDE CONCENTRATION: _____ kg MIN _____ kg INSTRUMENT AIR : _____ kg MIN _____ kg STEAM <table border="1"> <thead> <tr> <th></th> <th>DRIVERS</th> <th>HEATING</th> </tr> </thead> <tbody> <tr> <td>TEMP</td> <td></td> <td></td> </tr> <tr> <td>PRESS.</td> <td></td> <td></td> </tr> </tbody> </table>					RETURN	DESIGN	TEMP			PRESS.			SOURCE				DRIVERS	HEATING	TEMP			PRESS.											
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PERFORMANCE				DRIVER (7.1.5)																																																					
PROPOSAL CURVE NO. _____ RPM _____ As Tested Curve No. _____ IMPELLER DIA.: RATED _____ MAX. _____ MIN. _____ mm RATED POWER _____ Kw EFFICIENCY _____ (%) RATED CURVE BEP FLOW (at rated impeller dia) _____ m ³ /hr MIN FLOW : _____ kJ/Nm ³ _____ m ³ /hr PREFERRED OPERATING REGION (6.1.11) _____ to _____ m ³ /hr ALLOWABLE OPERATING REGION _____ to _____ m ³ /hr MAX HEAD @ RATED IMPELLER _____ m MAX POWER @ RATED IMPELLER _____ kW NPSH ₃ AT RATED FLOW : _____ m CL.PUMP TO U/S BASEPLATE _____ m NPSH MARGIN AT RATED FLOW : _____ m SPECIFIC SPEED (6.1.9) _____ SUCTION SPECIFIC SPEED LIMIT _____ SUCTION SPECIFIC SPEED _____ MAX. ALLOW. SOUND PRESS. LEVEL REQD (6.1.14) 85 (dBA) @ 1 m EST MAX SOUND PRESS. LEVEL _____ (dBA) MAX. SOUND POWER LEVEL REQD (6.1.14) _____ EST MAX SOUND POWER LEVEL _____				Driver Type INDUCTION MOTOR GEAR NO VARIABLE SPEED REQUIRED NO SOURCE OF VARIABLE SPEED _____ OTHER _____ MANUFACTURER _____ NAMEPLATE POWER _____ @ Site Condition _____ KW Nominal RPM _____ RATED LOAD RPM _____ FRAME OR MODEL _____ ORIENTATION HORIZONTAL LUBE _____ BEARING TYPE: _____ RADIAL _____ / THRUST _____ / STARTING METHOD D.O.L/Open Discharge Valve SEE DRIVER DATA SHEET Note 1 Max Voltage Variation ±5% Max Frequency Variation ±2% Max Voltage and Frequency Variation together ±5%																																																					

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CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 A (Sheet 3 of 6)

CONSTRUCTION																																											
API PUMP TYPE: <u>BB1</u> [Based on API 610 definitions]	CASING MOUNTING:																																										
NOZZLE CONNECTIONS: (6.5.5) NOTES 7,12	CASING TYPE: (6.3.10) _____																																										
<table><tr><td>SUCTION</td><td>Size</td><td>Facing</td><td>Rating</td><td>Position</td></tr><tr><td>DISCHARGE</td><td>RF</td><td>150</td><td>SIDE</td><td></td></tr></table>	SUCTION	Size	Facing	Rating	Position	DISCHARGE	RF	150	SIDE		OH3 BACKPULLOUT LIFTING DEVICE REQD. (9.1.2.6) _____																																
SUCTION	Size	Facing	Rating	Position																																							
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PRESSURE CASING AUX. CONNECTIONS: (6.4.3.2)	CASE PRESSURE RATING:																																										
<table><tr><td>No.</td><td>Size</td><td>Type</td><td>Facing</td><td>Rating</td><td>Posn.</td></tr><tr><td>BAL./LEAK OFF</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>DRAIN</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>VENT</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>PRESSURE GAGE</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>TEMP GAGE</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>WARM-UP LINE</td><td></td><td></td><td></td><td></td><td></td></tr></table>	No.	Size	Type	Facing	Rating	Posn.	BAL./LEAK OFF						DRAIN						VENT						PRESSURE GAGE						TEMP GAGE						WARM-UP LINE						MAWP : (6.3.5) By Vendor barg @ _____ °C
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Drain Valve Supplied By _____ SUPPLIER	HYDROTEST : 1.5*MAWP barg @ _____ °C																																										
DRAINS MANIFOLDED _____ YES	HYDROTEST OH PUMP AS ASSEMBLY YES																																										
VENT Valve Supplied By _____ SUPPLIER	SUCT'N PRESS. REGIONS DESIGNED FOR MAWP YES																																										
VENTS MANIFOLDED _____ YES	ROTATION: (VIEWED FROM COUPLING END) _____																																										
THREAD, CONS FOR PIPELINE SERVICE & < 50°C (6.4.3.2) _____ NO	<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 _____																																										
SPECIAL FITTINGS FOR TRANSITIONING (6.4.3.3) _____ NO	ROTOR:																																										
CYLINDRICAL THREADS REQUIRED (6.4.3.8) _____ NO	SHAFT FLEXIBILITY INDEX (SFI) (9.1.1.3) _____																																										
GUSSET SUPPORT REQUIRED _____ YES If Needed	First Critical Speed Wet (Multi stage pumps only) _____																																										
MACHINED AND STUDDED CONNECTIONS (6.4.3.12) _____ NO	COMPONENT BALANCE TO ISO 1940 G1.0 _____ NO																																										
VS 6 DRAIN _____ N/A	SHRINK FIT -LIMITED MOVEMENT IMPELLERS (9.2.2.3) _____																																										
DRAIN TO SKID EDGE _____ YES	COUPLING:(7.2.3) (7.2.13.f) NOTE 17 _____																																										
MATERIAL (6.12.1.1)	MANUFACTURER _____																																										
APPENDIX H CLASS I-2 NOTE 3	MODEL _____																																										
MIN DESIGN METAL TEMP (6.12.4.1) _____ 5 °C	RATING (POWER/100 RPM) _____																																										
REDUCED-HARDNESS MATERIALS REQD (6.12.1.12.1) _____	SPACER LENGTH _____ mm																																										
Applicable Hardness Standard (6.12.1.12.3) _____	SERVICE FACTOR Min 1.5																																										
BARREL : _____	RIGID _____ NO																																										
CASE : _____	COUPLING WITH HYDRAULIC FIT (7.2.10) _____																																										
DIFFUSERS _____	COUPLING BALANCED TO ISO 1940-1 G6.3 (7.2.3) _____ YES																																										
IMPELLER : _____	COUPLING WITH PROPRIETARY CLAMPING DEVICE (7.2.11) _____																																										
IMPELLER WEAR RING : _____	COUPLING IN COMPLIANCE WITH (7.2.4) API 610 compliant																																										
CASE WEAR RING : _____	COUPLING GUARD STANDARD PER (7.2.13.a) ISO 14120																																										
SHAFT: _____	Window on Coupling Guard _____																																										
Bowl (if VS-type) _____																																											
Inspection Class (Note 2) _____																																											
BEARINGS AND LUBRICATION (6.10.1.1) (VTA)	BASEPLATE																																										
BEARING (TYPE / NUMBER): (6.11.4)	API BASEPLATE NUMBER : _____																																										
RADIAL _____ / _____	BASEPLATE CONSTRUCTION (7.3.14) _____																																										
THRUST _____ / _____	BASEPLATE DRAINAGE (7.3.1) Entire Baseplate Drain Pan																																										
REVIEW AND APPROVE THRUST BEARING SIZE : (9.2.5.2.4) _____	MOUNTING : _____																																										
LUBRICATION : (6.10.2.2) (6.11.3) (9.2.6)	NON-GROUT CONSTRUCTION : (7.3.13) _____																																										
PRESSURE LUBE SYSTEM TO ISO 10438- _____ (9.2.6.5)	VERTICAL LEVELING SCREWS : REQUIRED																																										
ISO 10438 DATA SHEETS ATTACHED	LONGITUDINAL DRIVER POSITIONING SCREWS : REQUIRED																																										
Pressurized Lube Oil System mtd on pump baseplate	SUPPLIED WITH : <ul style="list-style-type: none">GROUT AND VENT HOLES YESDRAIN CONNECTION YES																																										
Location of Pressurized Lube Oil System mounted on baseplate : _____	MOUNTING PADS SIZED FOR BASEPLATE LEVELING (7.3.5) YES																																										
INTERCONNECTING PIPING PROVIDED BY Supplier	MOUNTING PADS TO BE MACHINED (7.3.6) YES																																										
OIL VISC. ISO GRADE VG _____	PROVIDE SPACER PLATE UNDER ALL EQUIPMENT FEET YES																																										
CONSTANT LEVEL OILER : _____	OTHER _____																																										
	REMARKS :																																										

 NISOC	<div>نگهداشت و افزایش تولید میدان نفتی بینک</div> <div>سطح الارض</div> <div>احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک</div>							
شماره پیمان: 053-073-9184	MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN							شماره صفحه: 8 از 9
	نسخه	سریال	نوع مدرک	رشته	تجهیزات	صادر کننده	بسته کاری	
	D02	0029	DT	ME	120	PEDCO	GCS	
							BK	

CENTRIFUGAL PUMP DATA SHEET (SI UNIT) - P-2301 A (Sheet 5 of 6)

SURFACE PREPARATION AND PAINT						TEST					
MANUFACTURER'S STANDARD						SHOP INSPECTION (8.1.1)				Yes	
OTHER (SEE BELOW)						PERFORMANCE CURVE					
SPECIFICATION NO. BK-GNRL-PEDCO-000-PI-SP-0006, "Specification for Painting"						& DATA APPROVAL PRIOR TO SHIPMENT.				YES	
PUMP:						TEST WITH SUBSTITUTE SEAL (8.3.3.2.b)					
PUMP SURFACE PREPARATION						MATERIAL CERTIFICATION REQUIRED		CASING	YES		
PRIMER						SHAFT	YES	(6.12.1.8) IMPELLER	YES		
FINISH COAT						OTHER	YES	Casing and impeller Wear ring			
						CASTING REPAIR WELD PROCEDURE APPR REQD				YES	
BASEPLATE:						INSPECTION REQUIRED FOR CONNECTION WELDS (6.12.3.4.d)					
BASEPLATE SURFACE PREPARATION						LIQUID PENETRANT		YES	MAG PARTICLE		
PRIMER:						ULTRASONIC			RADIOGRAPHY	YES	
FINISH COAT											
DETAILS OF LIFTING DEVICES						INSPECTION REQUIRED FOR CASTINGS					
SHIPMENT: (8.4.1)						LIQUID PENETRANT		YES	MAG PARTICLE	YES	
EXPORT BOXING REQUIRED						ULTRASONIC		YES	RADIOGRAPHY		
OUTDOOR STORAGE MORE THAN 6 MONTHS						HARDNESS TEST REQUIRED (8.2.2.7)					
SPARE ROTOR ASSEMBLY PACKAGED FOR:						ADDNL SUBSURFACE EXAMINATION (6.12.1.5) (8.2.1.3)					
ROTOR STORAGE ORIENTATION (9.2.8.2)										FOR	
SHIPPING & STORAGE CONTAINER FOR VERT STORAGE (9.2.8.3)										METHOD	
N ₂ PURGE (9.2.8.4)											
SPARE PARTS											
START-UP										YES	
NORMAL MAINTENANCE										YES	
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)											
						YES					
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						NO					
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					
PMI TESTING REQUIRED (8.2.2.8)						COMPONENTS TO BE TESTED					
RESIDUAL UNBALANCE TEST (J.4.1.2)											
NOTIFICATION OF SUCCESSFUL SHOP										YES	
PERFORMANCE TEST (8.1.1.c) (8.3.3.5)										YES	
BASEPLATE TEST (7.3.21)											
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					
						PER ASME SECTION VIII					
REMOVE CASING AFTER TEST											



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



053-073-9184

MECHANICAL DATA SHEETS FOR FIRE WATER MAIN PUMPS-ELECTRICAL MOTOR DRIVEN

شماره صفحه: 9 از 9

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه
D02	0029	DT	ME	120	PEDCO	GCS	BK

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

PRESSURE VESSEL DESIGN CODE REFERENCES

WELDING AND REPAIRS (NOTE 13)

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

ALTERNATIVE MATERIAL INSPECTIONS AND ACCEPTANCE CRITERIA (SEE TABLE 15) (8.2.2.5)

DEFAULT TO TABLE 14

YES

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

REMARKS :

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.