

1	GENERAL									
2	Project: INSTALLATION OF GTC AT GANDHAR				Job No.: B240					
3	Owner: GAIL (INDIA) LIMITED				Site: GPU, GANDHAR					
4	Purchaser:				Unit: NEW COMPR. AREA		Unit No.: 910			
5	Item No.: 910-CP-LS-101				Service: Cent. Comp. thru' Gear unit & Gas Turbine					
6	No. of Units: One	Working: One	Standby: None							
7	Applicable to: ☒ Proposal ☐ Purchase ☐ As Built									
8	☒ Scope, Option & Information specified by Purchaser. ☐ Information required from and options left to vendor. Vendor to cross (:) the selected option.									
9	Driver: Type: Gas Turbine		Manufacturer:		Model:					
10	Nameplate Power (kW):		Service Factor:		S.No.:		Tag No.:			
11	Driven Unit: Gear Unit		Manufacturer:		Model:					
12	Serial No.:				Tag No.					
13	Coupling Type: ☒ Metallic Flex. Element (Diaphragm) ☐ Gear ☐ Quill Shaft ☐ Other:									
14	Manufacturer:		Model:		Size:		Assy. Dwg. No.:			
15										
16	☐ CONDITIONS CONSIDERED FOR COUPLING SELECTION					☐ RATINGS				
17	Conditions		Torque (kgf-m)		@ rpm		Torque (kgf-m)		@ rpm	
18	Normal						Normal			
19	Driven Rated Load						Peak			
20	Maximum Steady State						Momentary			
21	Maximum Transient						Shaft Juncture (Driving)			
22	Trip Condition						Shaft Juncture (Driven)			
23	Continuous Cyclic									
24	Other:									
25	☐ Frequency of Transients (Events/Time):				☐ Non-synchronous exciting frequency:					
26	☒ Coupling Minimum Required Service Factor, SF: 1.5 (Rem-3)					☐ Actual SF				
27	Ambient Temperature (°C): (Rem-2)		Maximum:		Minimum:					
28	Environment: ☐ Hyd. Chloride ☐ Hyd. Sulphide ☒ Other: Dust, Fumes & Refinery Atmosphere									
29	LUBRICATION									
30	☐ Continuous ☐ Batch ☐ Non-Lubricated		☐ Viscosity:		cP @		°C			
31	☐ Filtration Microns:		☐ Pressure (kg/cm²g)		☐ Temp. (°C):					
32			☐ Flow (m³/hr)							
33	COUPLING DATA									
34	☐ Shaft Separation (including thermal growth) (mm B.S.E):									
35	@ Ambient Temp.:		@ Normal Operation:		@ Maximum Transient:					
36	☐ Motor Rotor Float (mm):		☐ Limited End Float (mm):							
37	☐ Marine Type Required		☐ Flex-Hub Type Required		☐ Electrically Insulated					
38	☐ Required Misalignment Capability:									
39	Steady State: Angular (°):		Parallel Offset (mm):		Axial (mm):					
40	Transient: Angular (°):		Parallel Offset (mm):		Axial (mm):					
41	☐ Maximum Allowable Misalignment:									
42	Steady State: Angular (°):		Parallel Offset (mm):		Axial (mm):					
43	Transient: Angular (°):		Parallel Offset (mm):		Axial (mm):					
44	☐ Component Balance		☐ Component Balance & Assembly Check Balance		☐ Component Balance with Assy. Balance					
45	☐ Residual Unbalance Check of Assembled Couplings					☐ Balance Repeatability Check				
46	☐ Max. Allowable Residual Unbalance g-mm		Driver End:		Driven End:					
47	☐ Max. Actual Residual Unbalance g-mm		Driver End:		Driven End:					
48	☐ Torsional Stiffness (kg-mm/Rad):									
49	☐ WR² (kg-m²):		Driver End:		Driven End:					
50	☐ Spacer Lateral Natural Frequency:				☐ Torque Capacity of Hub/Shaft Interface for keyless fits (kgf-m):					
51	Flexible-Element Coupling:									
52	☐ Initial Deflection (mm):		☐ Pre-Stretch		☐ Compression		☐ Max. Axial Deflection (mm):			
53	☐ Calculated Axial Natural Frequency:				☐ Test of ANF:		☐ Actual ANF:			
54	☐ Maximum Enclosure Temperature at Max. Continuous speed (°C):									
55	REMARKS:									
56	1. Coupling shall be of non-lubricated diaphragm type/SS flexible membrane type with spacer.									
57	2. Refer site & Utility Data enclosed elsewhere.									
58	3. Service factor shall be over the driver rating. However, coupling service factor shall not be higher than Gear-unit service factor.									
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63	MATERIALS			
64	Component	Drive End Materials	Driven End Materials	
65	Hub / Flange			
66	Spacer			
67	Sleeve			
68	Flexible-Element			
69	Flexible-Element Guard			
70	Bolts			
71	Nuts			
72	☐ Protective Coating:		☐ Vendor Standard	☐ Other:
73	☐ Internal Teeth Hardness: Rockwell C		Drive End Actual:	Driven End Actual:
74	☐ External Teeth Hardness: Rockwell C		Drive End Actual:	Driven End Actual:
75	COUPLING HUB MACHINING			
76		Drive End	Driven End	
77	☐ Type (Integral / Cylindrical / Taper)			
78	☐ Keyed or Hydraulically Fitted			
79	☐ Taper			
80	☐ Keyway Dimensions and Number			
81	☐ Nominal Bore Diameter (mm)			
82	☐ Interference Fit (mm): Max. Min.			
83	☐ Puller Holes			
84	☐ Trim Balance Holes			
85	COUPLING GUARD			
86	☐ Co-ordinator: Compressor Vendor		☐ Purge Gas:	☐ Dry Air Purge:
87	☐ Flanged Cylindrical:		☐ Base Mount:	☐ Purge Connection Size & Type:
88	☐ Air Tight:		☐ Oil Tight:	☐ Purge m ³ /hr Required:
89	☐ Spark Resistant		☐ Oil Mist Cooling	☐ Gas Cooling
90	☐ Transparent Window for Each Oil Spray Point:		☐ Contract Guard to be used during Shop Test	
91	☐ Vent Connection:		☐ Additional Guard Details:	
92	☐ 1 inch NPT with Filter Breather			
93	☐ 1 inch Flanged, Rating & Facing:			
94	ACCESSORIES			
95	☐ Prime Eqpt. supplier to furnish one set of Plug & Ring Gauges (Appe. D)		☐ Hydraulic Installation/Removal Tooling (To include Hand	
96	☐ Lapping Tools		Pump(s), Pressure Gauge(s), Fittings & Hose(s)) By:	
97	☐ Drill Template for Internal Flanged Hubs by:		☐ Coupling Manufacturer	☐ Purchaser
98	☐ Coupling Manufacturer		☐ Purchaser	☐ Puller By Coupling Manufacturer
99	☐ Two-Piece Stop Rings by Coupling Manufacturer		☐ Moment Simulator	☐ Solo Plate
100	APPLICABLE SPECIFICATIONS		PREPARATION FOR SHIPMENT	
101	☐ API Std. 671 3 rd edition, October 1998		☐ Outdoor Storage for more than 12 months	
102	☐ Others: Special Purpose Couplings, 3rd edition		☐ Expected Storage Time (Months):	
103	☐		☐ Shipping	☐ Domestic
104	☐ Coordination Meeting Attendance Required		☐ Storage	☐ Indoor
105			☐ Export	☐ Outdoor
106	REMARKS:			
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02/03/2009	A	AS	NK
Date	Rev	Job	Rev. & Approved