



Data Sheet for Diesel Engines (SI Units) - page 1

1	* Facility Location:			
2	* Unit:		* Item/Tag No.:	
3	* Service:		* Owner Job No.:	
4	* Contractor:		* PO No.:	* By Co.:
5	† Manufacturer:		† Model No.:	
6			† Serial No.:	
7	GENERAL			
8	Note, symbols indicate information typically by: * BP † Vendor ‡ BP or Vendor			
9	as defined in specifications			
10	DIESEL FUEL PROPERTIES*			
11	Fuel Type	☐ 2-D ☐ Other		
12	API Gravity	26-34		
13	Density (kg/litre, average)	0,875		
14	LHV (kJ/kg)	42 454		
15	HHV (kJ/kg)	45 171		
16	Flash Point (Min°C)	52		
17	Min Viscosity (SSU @ 38°C)	32		
18	Max Viscosity (SSU @ 38°C)	45		
19	Pour Pt (Max °C Below Min Ambient)	5,5		
20	Water & Sediment (Max % Volume)	0,05		
21	Carbon Residue (Max 10% Res)	0,35		
22	Ash (Max % Weight)	0,02		
23	Sulfur (Max % Weight)	0,50		
24	Copper Strip Corrosion (Max)	No.3		
25	Cetane Number (Min)	40		
26	Distillation (°C, 90%, Max)	338		
27				
28				
29				
30				
31				
32				
33	Utility Evaluation	☐ Yes ☐ No		
34	Fuel Cost (US\$/litre):			
35	Utility Evaluation Period (720 hr/mo):	_____ months		
36	DRIVEN EQUIPMENT*			
37	Type:	☐ Compressor ☐ Generator ☐ Pump ☐ Other _____		
38	Equipment:	Item No: _____ Service: _____		
39	Power (kW):	Norm _____ Rated _____ Max _____		
40	rpm:	Norm _____ Rated _____ Max _____		
41	Type Drive:	☐ Direct ☐ Gear ☐ V-Belt ☐ Other _____		
42	Synchronization Requirements:	☐ Parallel ☐ Nonparallel		
43	NO.	DATE	REVISION	BY APP.
44				
45				
46				
47				
48				



Data Sheet for Diesel Engines (SI Units) - page 2

1 SITE CONDITIONS*	
2	Site Location: _____
3	Installation: ☐ Onshore ☐ Offshore ☐ Outdoor ☐ Covered ☐ Inside Building
4	Dust: _____ ppm>10 Micron _____ ppm<10 Micron Elevation: _____ m
5	Relative Humidity: _____% at Rated Temperature Barometric Pressure: _____ bar abs.
6	Ambient Temperature: _____°C Rated _____°C Max _____°C Norm _____°C Min
7	Atmosphere: ☐ Non-corrosive ☐ Corrosive from _____
8	Coating System: ☐ Mfr's Standard System _____
9	Copper Alloys: ☐ Allowed ☐ Not Allowed ☐ External Only
10	Electrical Area Classification: ☐ Unclassified ☐ Class _____ Group _____ Division _____
11	EN 60079-10 Area Classification: ☐ Unclassified ☐ Zone _____ Gas Group _____ Temp Class _____
12	European Union ATEX Directive (94/9/EC) Category: _____
13	Equipment Noise Control: ☐ None ☐ GIS 15-011 ☐ Other _____
14	Emission Control: ☐ None ☐ Other _____
15 ENGINE†	
16 Configuration	Performance
17 Manufacturer: _____	Standard Conditions (1) Rated (2) Max
18 Model: _____	rpm: _____
19 Stroke: ☐ Two ☐ Four	Engine (kW): _____
20 Inlet Air Blower: ☐ Yes ☐ No	Water Pump (kW) _____
21 Turbocharged: ☐ Yes ☐ No	Cooler Fan (kW) _____
22 After cooled: ☐ Yes ☐ No	BMEP (bar): _____
23 Cylinder Arrangement ☐ Inline ☐ Vee	Fuel Usage (litre/h): _____
24 Cylinders: No. _____ Bore x Stroke _____ x _____ mm	Standard-to-Site Correction
25 Displacement Compression Ratio: _____	Power (kW) _____
26 Speed: Rated _____ rpm Max _____ Min _____	Altitude: _____
27 Rated Piston Speed: _____ m/s	Temperature: _____
28 Exhaust ☐ Single ☐ Dual ☐ Multiple	Fuel: _____
29 Manifold: ☐ Water Cool ☐ Air Cool ☐ Insulated	Emission Control: _____
30 Rotation (Facing Flywheel): ☐ CW ☐ CCW	Site Totals
31 Barring Device: ☐ Yes ☐ No	Engine (kW) _____
32 Governor	Fuel Usage (litre/h): _____
33 NEMA Governor Class: ☐ A ☐ B ☐ C ☐ D	Site Heat Balance (kW)
34 Governor Type: _____	Power: _____
35 Manufacturer: _____ Model: _____	Jacket Water: _____
36 Speed Control Signal:	Aftercooler: _____
37 ☐ Pneumatic ☐ Electronic ☐ Remote	Exhaust: _____
38 Signal Range: Max _____ Min _____	Radiation: _____
39 Speed Range: Max _____ Min _____	
40 Diesel Fuel System	
41 Day Tank: ☐ Vendor ☐ Others	Item Description Vendor's Scope
42 Tank Mounting: ☐ Free Standing ☐ Skid	Hand Priming Pump: ☐ Yes ☐ No
43 Tank Capacity: _____ Run Hours _____ litres	Fuel Strainer: ☐ Yes ☐ No
44	Fuel Filter: ☐ Yes ☐ No
45	Fuel Piping/Tubing: ☐ Yes ☐ No
46	Fuel Piping Material: _____
47 NOTES‡	
48 1. Standard conditions are defined in ISO 15550:2002 paragraph 5.	
49 2. Fire pump engine drivers shall have ratings per clause 11 of GIS 34-305.	

**Data Sheet for Diesel Engines (SI Units) - page 3**

Air Inlet Filter					Spark Arresting Exhaust Silencer			
1								
2	Mounting:	☐ Engine	☐ Skid	☐ Remote	Mounting:	☐ Skid	☐ Remote	
3	Filter:	☐ Oil Bath	☐ Dry		Type:	☐ Residential	☐ Commercial	
4	Manufacturer: _____				Rain Cover:	☐ Yes	☐ No	
5	Stages: _____				Manufacturer:	_____		
6	Element: _____				Model:	_____		
7	ΔP (millibar): Clean _____ Max _____				Material:	_____		
8	Rain Shield	☐ Yes	☐ No	☐ Vendor	☐ Others	Inlet: _____	Outlet: _____	
9	Oil				Piping:	☐ Vendor	☐ Others	
10	Type Filters:	☐ Single	☐ Dual w/Transfer Valve		Starting System			
11	Elements: Material _____	Collapse Pressure _____			Mounting:	☐ Engine	☐ Skid	
12	Heater:	☐ Yes	☐ No	_____ kW/ _____ ϕ / _____ Hz/ _____ V	Method:	☐ Pneumatic	☐ Battery	
13	Pre-lube Pump:	☐ Yes	☐ No		Pneumatic:	☐ Air	☐ Gas	
14	Instrumentation				Starter(s):	☐ Qty	☐ Type _____	
15		Indicator		Shut	Number of 15-Second Starts: _____			
16	<u>Description</u>	<u>Mounted On</u>	<u>Alarm</u>	<u>Down</u>	<u>Item Description</u>	<u>Vendor's Scope</u>	<u>Manufacturer</u>	
17		<u>Panel</u>	<u>Eqpt</u>					
18	Pressure				B.P. Regulator:	☐ Yes	☐ No	
19	Fuel Gas Inlet	☐	☐		Globe Valve:	☐ Yes	☐ No	
20	Starting Air/Gas Receiver	☐	☐		Filter:	☐ Yes	☐ No	
21	Intake Filter ΔP	☐	☐	☐	Relief Valve:	☐ Yes	☐ No	
22	Jacket Water Inlet	☐	☐	☐	Pressure Gauge:	☐ Yes	☐ No	
23	Lube Oil	☐	☐	☐	Start Valve:	☐ Yes	☐ No	
24	Lube Oil Filter ΔP	☐	☐	☐	Piping:	☐ Yes	☐ No	
25	Temperature				Receiver:	☐ Yes	☐ No	
26	Jacket Water	☐	☐	☐	Receiver Code Stamp:	☐ Yes	☐ No	
27	Lube Oil	☐	☐	☐	Receiver:	☐ Yes	☐ No	
28	Cyl. Exhaust Gas(_____)	☐	☐	☐	barg: Rated _____ Min _____ Max _____			
29	Turbocharger Exhaust	☐	☐	☐	Batteries:	☐ Vendor	☐ Others	
30	Gas Outlet					☐ Cables	☐ Racks	
31	Level				No. _____	☐ Lead Acid	☐ Ni-Cad	
32	Low Lube Oil	☐	☐	☐	Trickle Charger:	☐ Vendor	☐ Others	
33	Low Fuel	☐	☐	☐	Trickle Charger: _____ Amps @ _____ V/ _____ ϕ / _____ Hz			
34	High Fuel	☐	☐	☐	High Tension Lead/Plugs	☐ Shielded	☐ Unshielded	
35	Vibration				Cooling Requirements			
36	Engine - Coupling End	☐	☐	☐	<u>Jacket Water</u>	<u>Aftercooler</u>	<u>Lube Oil</u>	
37	Engine - Front End	☐	☐	☐	Type Cooler _____	_____	_____	
38	Operation				kW _____	_____	_____	
39	Engine Service Hours	☐	☐		Temp Rise, $^{\circ}\text{C}$ _____	_____	_____	
40	Engine Speed	☐	☐		Rated, litre/h _____	_____	_____	
41	Engine Over Speed	☐	☐	☐	Total External Cooling Water: _____ litre/h			
42	Fuel Gas Flow	☐	☐	☐	Jacket Water Heaters:	☐ Yes	☐ No	
43	Fuel Shutdown Valve	☐	☐	☐	Qty _____	Type _____		
44	Barring Device - Out	☐	☐	☐	_____ Amps @ _____ V/ _____ ϕ / _____ Hz			
45	Panel Power	☐	☐	☐	_____			
46	Battery Charger Power	☐	☐	☐	_____			
47	Battery Amps	☐	☐		_____			
48	Air/Gas Starting Valve	☐	☐	☐	_____			
49	_____	☐	☐	☐	_____			
50	_____	☐	☐	☐	_____			