



Information Required for Turbo Matching

Vessel / Plant Name:

<p>1 . Engine manufacturer <input style="width: 90%; height: 20px;" type="text"/></p> <p>2 . Engine type <input style="width: 90%; height: 20px;" type="text"/></p> <p>3 . Cylinder bore <input style="width: 80%; height: 20px;" type="text"/> mm</p> <p>4 . Piston stroke <input style="width: 80%; height: 20px;" type="text"/> mm</p> <p>5 . Number of cylinders <input style="width: 80%; height: 20px;" type="text"/></p> <p>6 . Engine output <input style="width: 80%; height: 20px;" type="text"/> <input type="checkbox"/> kW <input type="checkbox"/> Hp</p> <p>7 . Engine speed <input style="width: 80%; height: 20px;" type="text"/> r/min</p> <p>8 . Specific fuel consumption <input style="width: 80%; height: 20px;" type="text"/> <input type="checkbox"/> kg/kWh <input type="checkbox"/> kg/Hph</p> <p>9 . Ambient pressure <input style="width: 80%; height: 20px;" type="text"/> bar</p> <p>10 . Intake temperature <input style="width: 80%; height: 20px;" type="text"/> °C</p> <p>11 . Charging air pressure <input style="width: 80%; height: 20px;" type="text"/> bar</p> <p>12 . Cylinder firing pressure <input style="width: 80%; height: 20px;" type="text"/> bar</p> <p>13 . Compression pressure <input style="width: 80%; height: 20px;" type="text"/> bar</p> <p>14 . Geometric compression ratio <input style="width: 80%; height: 20px;" type="text"/></p> <p>15 . Specific air consumption <input style="width: 80%; height: 20px;" type="text"/> <input type="checkbox"/> kg/kWh <input type="checkbox"/> kg/Hph</p> <p>16 . With air inter cooler <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>17 . Pressure drop across the air cooler <input style="width: 80%; height: 20px;" type="text"/> mmWg</p>	<p>18 . With protect grid before turbine <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>19 . Pressure before turbine <input style="width: 80%; height: 20px;" type="text"/> bar</p> <p>20 . Temperature before turbine <input style="width: 80%; height: 20px;" type="text"/> °C</p> <p>21 . Temperature after turbine <input style="width: 80%; height: 20px;" type="text"/> °C</p> <p>22 . Charging system <input type="checkbox"/> Constant <input type="checkbox"/> Pulse <input type="checkbox"/> Pulse converter <input type="checkbox"/> MPC</p> <p>23 . Number of turbochargers per engine <input style="width: 80%; height: 20px;" type="text"/></p> <p>24 . Turbocharger intake with <input type="checkbox"/> Silencer filter <input type="checkbox"/> Air suction branch</p> <p>25 . Valve timing IO <input style="width: 80%; height: 20px;" type="text"/> ° crank angle before TDC IC <input style="width: 80%; height: 20px;" type="text"/> ° crank angle after BDC EO <input style="width: 80%; height: 20px;" type="text"/> ° crank angle before BDC EC <input style="width: 80%; height: 20px;" type="text"/> ° crank angle after TDC</p> <p>26 . Type of application <input type="checkbox"/> Marine propulsion with FP propeller <input type="checkbox"/> Marine propulsion with CP propeller <input type="checkbox"/> Marine generator <input type="checkbox"/> Land generator <input type="checkbox"/> Locomotive <input type="checkbox"/> Hydrofoil</p>
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Data Required from Current Logbook

Ref. No.:
Plant Name.: Mv
Engine Type.:

Main Engine Aux. Engine

Date								
Time								
Engine Output	Ne	Bhp						
Engine Speed	n	r / min						
Specific Fuel Consumption	Be	Kg / kWh						
Barometer	p_1	Bar						
Intake Air Temperature	t_1	°C						
Maximum Firing Pressure	p_{max}	Bar						
Compression Pressure	$p_{comp.}$	Bar						
Mean Cylinder Temperature	t_{cyl}	°C						
Charge Air Pressure	p_s	Bar						
Air Temperature after Cooler	t_s	°C						
Air Pressure before Cooler	p_{VK}	Bar						
Air Temperature before Cooler	t_2	°C						
Pressure Drop of Air Cooler	Δp_k	Bar						
Gas Pressure before Turbine	p_3	Bar						
Pressure Drop, Protect Grid	Δp_{FG}	Bar						
Gas Temperature before Turbine	T_3	°C						
Gas Temperature after Turbine	T_4	°C						
Back Pressure of Turbine	Δp_4	Bar						
Turbocharger Speed	n_{TL}	r / min						
Auxiliary Blower On / Off								