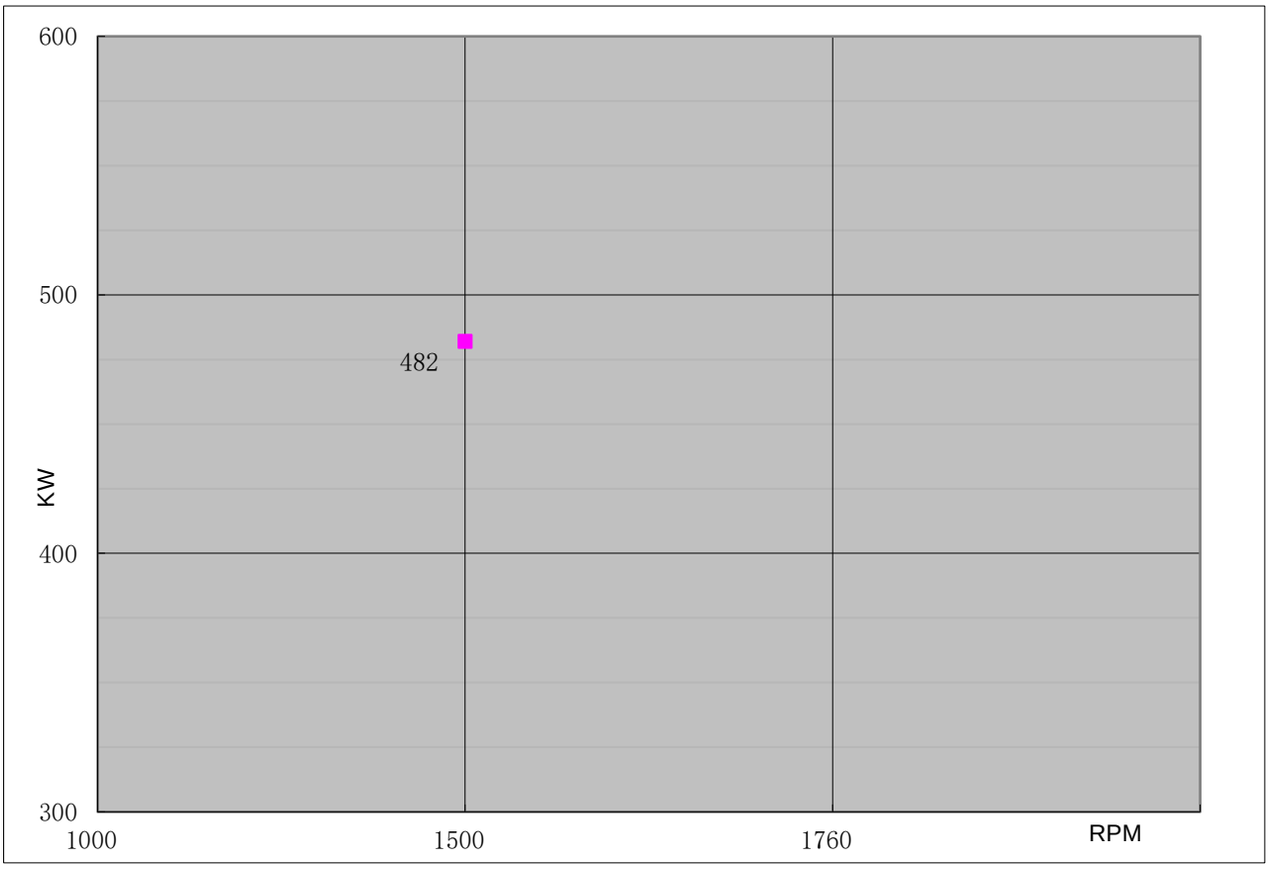
Performance Curve

Engine Model	CH6-170-EHD	Curve No.	C06170HD	Date	2024/6/7

Displacement	26.56 L	Aspiration	Turbocharged+Water cooled	Power Standard	UL/FM
Bore	170 mm	Cylinder Qty.	6，In-Line;	482 KW @ 1500 r/min	
Stroke	195 mm	Fuel System	Mechanical	646 HP @ 1500 r/min	



Torque

Speed	Torque	
RPM	N-m	lb-ft.
1000		
1500	3068	2262
1760		

Output Power

Speed	Output Power	
RPM	KW	HP
1000		
1500	482	646
1760		

Fuel Consumption

Speed	Consumption	
RPM	g/KW-HR	lb/BHP-HR
1000		
1500	195	0.321
1760		

REV: A

Engine Data Sheet

Engine Model	CH6-170-EHD	**Date**	**2024/6/7**
Drawing No.	CH6-170-EHD.**00**	**Document No.**	**DS06170HD**
Rated Power	**646 HP @ 1500 RPM**	**Performance Curve No.**	**C06170HD**
	482 KW @1500 RPM	**Version**	**A**

GENERAL ENGINE DATA				
Type			4 Cycle; In-line; water cooled; 6 Cylinder	
Aspiration			Turbocharged+Water cooled	
Bore and Stroke			mm×mm	170x195
Cylinder Liner Type			☑ Wet	☐ Dry
Displacement			L	26.56
Compression Ratio			14:01	
Firing Order			1-5-3-6-2-4	
Combustion System			Direct Injection	
Rotation Viewed from flywheel			Counter Clockwise	
Valves Per Cylinder			Intake :2 Exhuast :2	
Valves lashes at cold		Intake	mm	0.4
		Exhaust	mm	0.5
Charge Air Cooling Type			Raw Water	
Dry Weight Approx.			kg	3290
Dimension Approx. (L*W*H)			mm	2315*1440*2030
Flywheel/ Flywheel House Dimension			14"/ SAE 0	
EXHAUST SYSTEM				
Exhaust Gas Temp.			℃	450
Exhaust Gas Flow			m^3/h	6143
Max. Allowable Back Pressure			kpa	4.4
Minimum Exhaust Pipe Diameter			DN	200
Minimum exhaust pipe diameter is based on 6 meter of pipe, one elbow, and a silencer. Pressure drop no greater than one half the max. allowable back pressure				
AIR INTAKE SYSTEM				
Air Cleaner Type			Dry Type	
Air Flow			m^3/h	2645
Max. Allowable Air Inlet Restriction			kpa	0.9
LUBRICATION SYSTEM				
Oil Capacity			L	86
Engine Normal Operating Sump Oil Temp.			℃	80-105
Normal Operating Oil Pressure Range			bars	3~4.2
Oil Pressure at Idle			bar	>1
COOLING SYSTEM				
Coolant Capacity - Engine + Heat Exchanger			L	100
Thermostat Range		Start Open	℃	72
		Full Open	℃	82
Coolant Pressure Cap			bar	0.9
Raw Water Working Pressure Range at Heat Exchanger			bar	5
Engine Normal Operating Coolant Temp.			℃	70-95
Engine Coolant Flow at Full Load			m^3/h	30
Minimum Raw Water Flow @ Engine Speed (rpm)			1500	
	Raw Water Temperatures to 16 ℃ (m^3/h)		18	
	Raw Water Temperatures to 38 ℃ (m^3/h)		20.5	

Engine Data Sheet

Raw Water Pipe Size	Raw Water Inlet	DN40	
	Raw Water Outlet	DN50	
HEATER SYSTEM			
Wattage		W	4000
Voltage AC		V	230
ELECTRICAL SYSTEM-DC			
System Voltage(Nominal)		V	24
Starter motor		Kw	6.6
Recommended Battery Capacity		AH	200
Cold Cranking Amperes @ -18℃ (0°F)		CCA	1000
Charging Alternator Output		Amps	28
FUEL SYSTEM			
Injection Pump			
Injection Advance Angle		°	30±0.5
Minimum Supply line Size		mm	15
Minimum Return line Size		mm	15
Fuel Management Control		Mechanical	
Idle Speed		rpm	725±25
Governed Speed Rate		%	<10
Engine Performance Data			
All data is based on the engine operating with fuel system, lubricating oil pump, air cleaner, and alternator; not included are compressor, fan, optional equipment, and driven components.;Data is based on operation at SAE standard J1394 conditions of 300ft (91,4m) altitude, 29.61 in.(752mm) Hg dry barometer, and 77°F (25°C) intake air temperature, using 0# diesel fuel follow the standard GB 19147-2016.			
Altitude above which output should be Limited		m (ft.)	91 (300)
Correction Factor per 305m.(1,000ft.) above Altitude Limit		3%	
Temperature above which output should be Limited		°C (°F)	25 (77)
Correction Factor per 5.6°C (10°F) above Temperature Limit		1%	

Remark:

1.All data certified within 5%;
2.TBD - To Be Determined;
3.N/A - Not Applicable;