



## **YOUR CONNECTION TO THE RIGHT MACHINE**

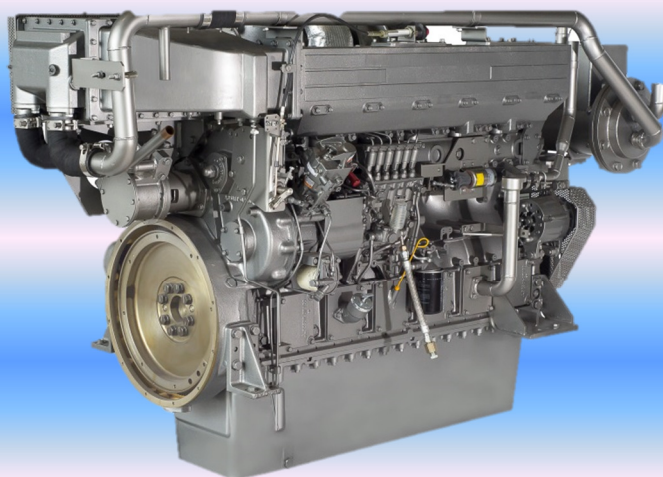
### **ABOUT US**



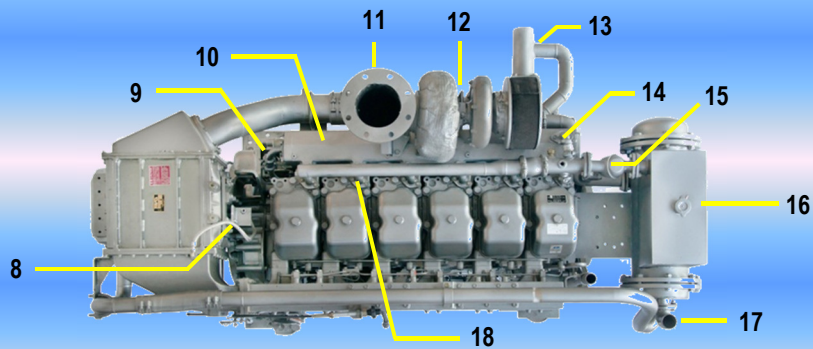
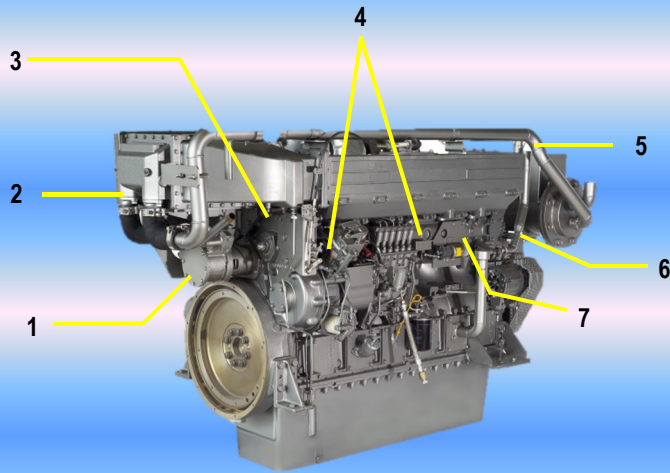
XMH has been in the business of dealing Mitsubishi marine engines for over 50 years.

In our continuous drive to provide value to our customers, we now offer XMH Engines, a cost competitive solution to meet customer's specific repowering needs. XMH Engine uses Mitsubishi base engine with auxiliary subsystems / components that are carefully sourced to meet overall performance / quality expectations at a cost competitive level.

### **OUR VERY OWN BRAND OF XMH ENGINE M6AC-TK**



## MARINISED ENGINE COMPONENTS



ITEM NO.	NAME OF PART	ITEM NO.	NAME OF PART	ITEM NO.	NAME OF PART
1	Seawater Pump c/w Inlet + Outlet Pipes	7	Stop Solenoid c/w Bracket	13	Freshwater Pump + Pulley & Belt c/w Inlet + Outlet Pipes c/w Bracket
2	Intercooler Seawater Pipes Inlet + Outlet	8	Boost Pressure Stay	14	Exhaust Coolant Pipe Manifold to Heat Exchanger
3	Speed Control Bracket	9	Exhaust Coolant Pipe Engine to Manifold	15	Thermostat (externally located) c/w Bypass Pipe
4	Speed Control System Bracket Linkages	10	Exhaust Manifold	16	Heat Exchanger c/w Bracket
5	Seawater Pipe Intercooler to Heat Exchanger	11	Exhaust Gas Pipe	17	Seawater Outlet Pipe For Heat Exchanger
6	Mist Extractor	12	Lubrication Oil Pipes Linked to Turbocharger Assembly	18	Freshwater Pipe
*	Control Panel + Engine Harness				
*	Additional Spacer Element between Turbocharger Assembly & Exhaust Manifold				

### XIN MING HUA PTE LTD.

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\* Note: All Data Subject to Change Without Notice

### Engine Ratings (In accordance with ISO 15550)

Rating	Typical Operation	Typical Vessel
Heavy Duty	Allowable Load Factor < 100% Rated Power Allowable Cruising Speed < 100% Rated Speed Operating Hours is unlimited per year	Fishing Boats Cargo Boats Pusher Boats
Medium Duty	Allowable Load Factor up to 83% Rated Power Allowable Cruising Speed up to 94% Rated Speed 100% of Rated Power is available intermittently for 8hr per every 24hr operation Operating Hours < 6000hr per year	Fishing Boats Bay Area Tug Boats Working Boats Ferry Boats
Light Duty	Allowable Load Factor up to 75% Rated Power Allowable Cruising Speed up to 91% Rated Speed 100% of Rated Power is available intermittently for 1hr per every 6hr operation Operating Hours < 3000hr per year	Fishing Boats Yachts Patrol Boats Fire Fighting Boats

### General Engine Data

Type	4 Cycle, Water Cooled
Aspiration	Turbocharged, Intercooler (Raw Water to Cooler)
Cylinder Arrangement	Inline
No. of Cylinders	6
Bore (mm)	150
Stroke (mm)	175
Displacement (liter)	18.56
Compression Ratio	14.5 : 1
Dry Weight (kg)	1900
Wet Weight (kg)	2030
Idling Speed (rpm)	600-650
Maximum Overspeed Capacity (rpm)	2195
Dimensions (mm)	2319(L) x 1313(B) x 1149(H)

### Engine Rating

A: Light Duty    B: Medium Duty    C: Heavy Duty

ITEM	UNIT	PROPULSION USE		
		A	B	C
Engine Speed	rpm	1960	1900	1840
Brake Horse Power	kW (HP)	490 (657)	445 (597)	405 (543)
Brake Mean Effective Pressure	MPa (psi)	1.62 (235)	1.52 (220)	1.42 (206)
Mean Piston Speed	m/s	11.4	11.1	10.7
Max. Regenerative Power Absorption Capacity	kW (HP)	63 (84)	59 (79)	56 (79)
Intake Air Flow	m <sup>3</sup> /min (CFM)	44 (1554)	40 (1412)	35 (1236)
Exhaust Gas Flow	m <sup>3</sup> /min (CFM)	116 (4096)	105 (3708)	93 (3284)
Coolant Flow	liter/min (U.S. GPM)	635 (168)	620 (164)	590 (156)
Coolant (Jacket water) Pressure (water pump outlet)	MPa (psi)	0.16 (23)	0.15 (22)	0.14 (21)
Coolant Flow to Intercooler	liter/min (U.S. GPM)	120 (32)	120 (32)	120 (32)
Oil Flow	liter/min (U.S. GPM)	270 (71)	263 (69)	255 (67)
Radiated Heat to Ambient	kJ/hr (BTU/min)	69008 (1090)	62706 (991)	55643 (879)
Heat Rejection to Coolant (include water cooled manifold)	kJ/hr (BTU/min)	1127132 (17809)	1024197 (16182)	908836 (14360)
Heat Rejection to Intercooler	kJ/hr (BTU/min)	184022 (2908)	167216 (2642)	148381 (2344)
Heat Rejection to Exhaust	kJ/hr (BTU/min)	1456304 (23010)	1323308 (20908)	1138695 (17991)
Maximum No Load Governed Speed	rpm	2107	2043	1978

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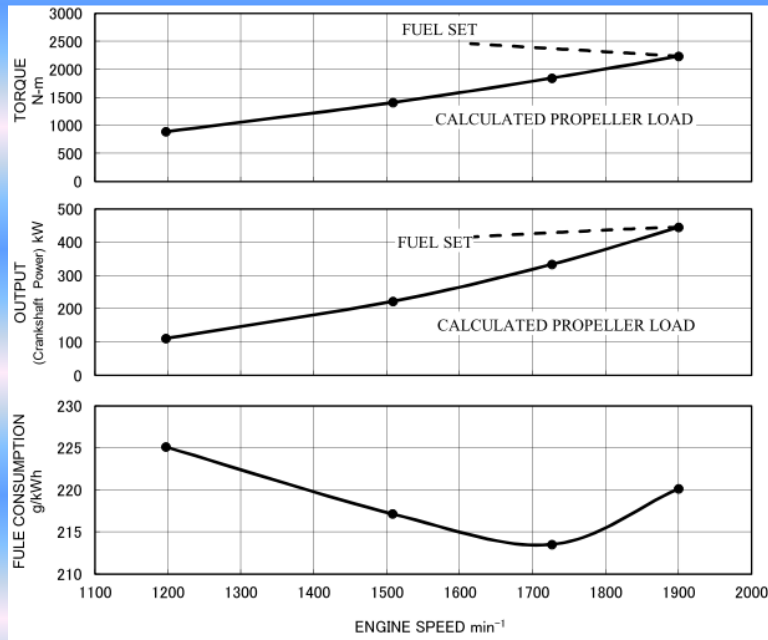
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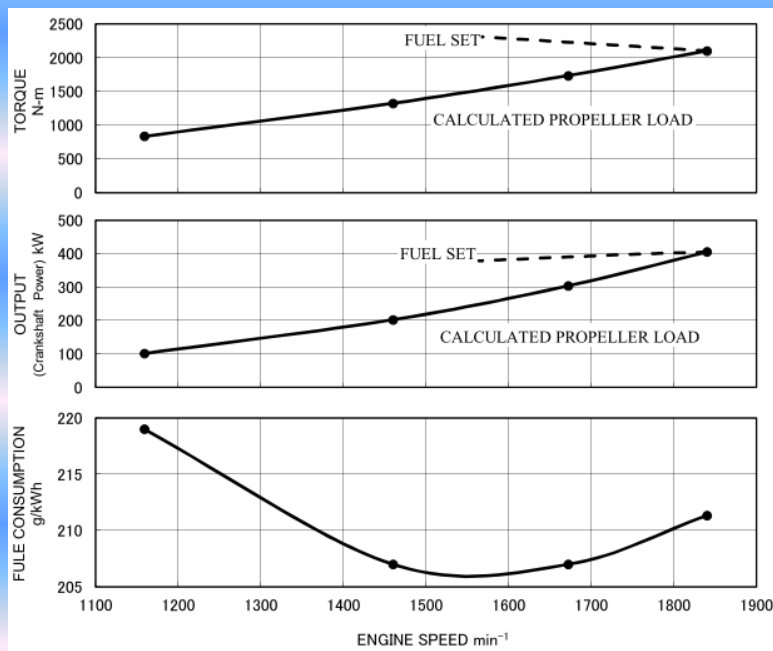
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**Rating: B-rating RATED OUTPUT: 445kW@1900min<sup>-1</sup> (at FLYWHEEL)**



- 1<sup>st</sup> Indicated Point – 25% Loading
- 2<sup>nd</sup> Indicated Point – 50% Loading
- 3<sup>rd</sup> Indicated Point – 75% Loading
- 4<sup>th</sup> Indicated Point – 100% Loading

**Rating: C-rating RATED OUTPUT 405kW@1840min<sup>-1</sup> (at FLYWHEEL)**



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