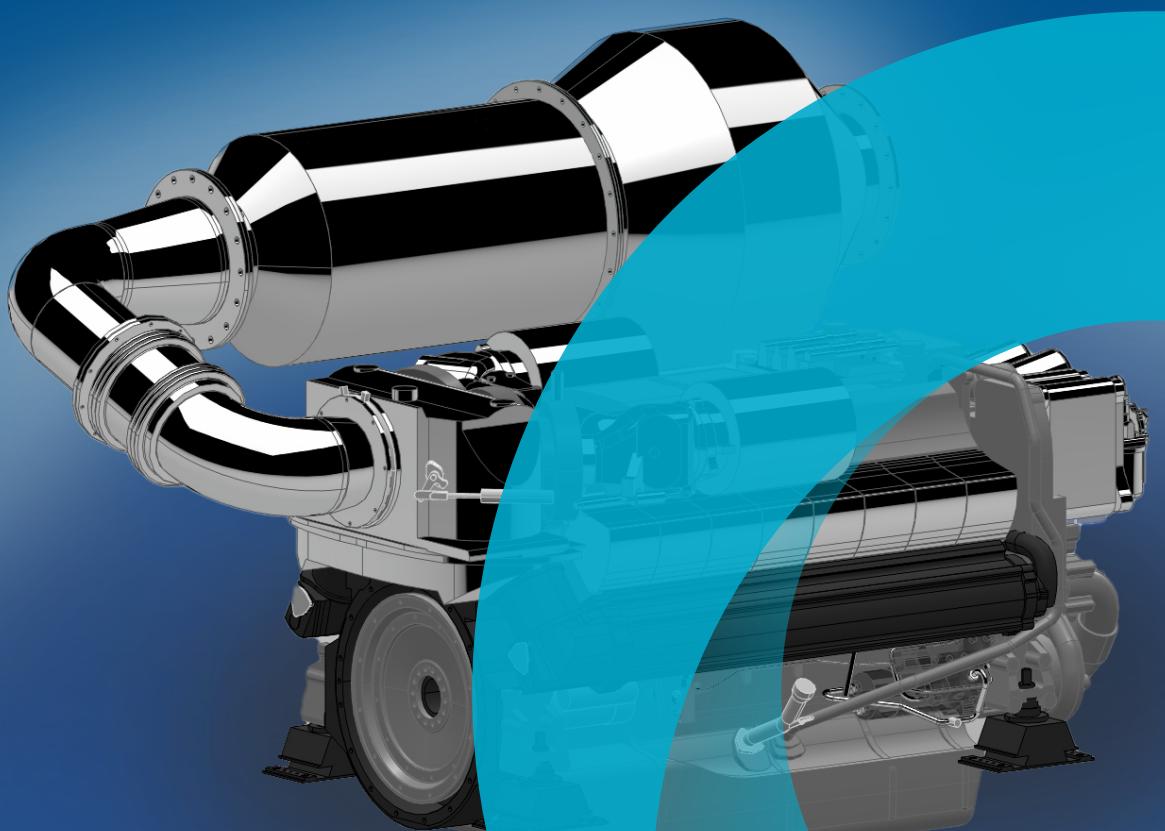




HÖGPRESTERANDE FRAMDREVNINGSSYSTEM

BOS Power S2000 M72 IMO Tier III



BROSCHYR

NAVIGERA MOT NOLLUTSLÄPP

BOS Power S2000 M72 IMO Tier III-motorn är en kompakt, lätt dieselmotor baserad på den marknadsledande motorserien **mtu** S2000.

Kombinerad med ett SCR-system uppfyller den utsläppsnivåerna enligt IMO Tier III och är certifierad av DNV för att uppfylla NOx-reduktionskraven för drift i ECA-områden.



FOTO: Magne Langåker

FLEXIBLA LÖSNINGAR

Systemet är utformat för små maskinrum och är lätt och kompakt, med en flexibel SCR-konfiguration som möjliggör optimalt utnyttjande av utrymmet.

Motorernas låga bränsleförbrukning gäller för hela prestandaintervallet.

Servicekomponenter är lättåtkomliga för att underlätta installation och service.



Flexibel design
anpassat till fartyg



Kompakt och lätt
design



Omfattande
tjänsteutbud och
Value Care

VÄL ANPASSAD

Mtu Series 2000 M72 common rail-motorerna är klassade för medeltung drift (1B) och har utmärkta accelerationsegenskaper och högt vridmoment vid låg belastning.

Tack vare sin kompakta och kraftfulla design är 1B-motorerna särskilt lämpliga för snabba färjor, sjöräddningsfartyg, patrullfartyg, vindkraftservice och besättningsfartyg.



Hög driftsprestanda



Utmärkta accelerationsegenskaper



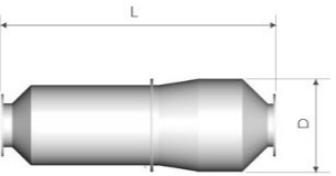
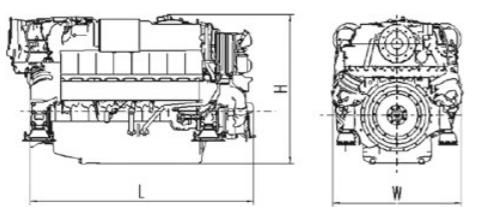
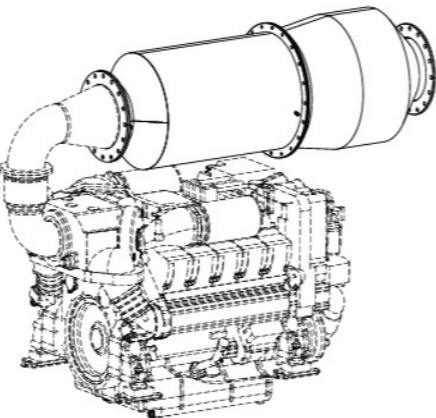
BOS POWER S2000 - IMO 3

MTU 8/10V 2000 M72 för snabba fartyg med hög belastningsfaktorer (1B)

Engine type	8V 2000 M72			10V 2000 M72		
Speed	rpm	2250	1950	1200	2250	1950
Maximum power	kW	720	710	370	900	880
	bhp	(965)	(950)	(495)	(1205)	(1180)
Power on propeller curve (n 3)	kW	720	475	115	900	585
	bhp	(965)	(635)	(155)	(1205)	(785)
Fuel consumption	g/kWh	214	215	219	213	211
on propeller curve 1)	l/hr	185,6	123,0	30,3	321,0	148,7
Urea consumption 2)	g/kWh	9,5	9,5	9,5	9,5	9,5

- 1) Tolerance +5% per ISO 3046, Diesel fuel to DIN 590 (low sulphur fuel) with a min L.H.V. of 42800 kJ/kg (18390 BTU/lb)
 2) AdBlue 32,5% Urea, tolerance 5%

ENGINE		SCR		
Engine with SCR	Dimensions (LxWxH) mm	Mass engine, dry [kg]	Dimensions (LxD) mm	Mass SCR system, dry [kg]
8V2000M72	1379 x 1130 x 1200	1970	2164 x 700	278 ¹⁾
10V2000M72	1544 x 1130 x 1230	2230	2164 x 750	300 ¹⁾



Typical applications: Fast ferries, wind mill service vessels, SAR, Patrol vessels(catamarans surface effect ships) and displacement yachts

1) Weight of complete SCR system including catalyst, mixer, 100 l urea tank (dry), control cabinet, wiring and dosing unit

Engine type	8V 2000 M72	12V 2000 M72
Rated power ICFN kW (bhp)	720 (965)	900 (1250)
Speed rpm	2250	2250
No. of cylinders	8	10
Bore stroke mm	135/156	135/156
Displacement, total l	17,9	22,3
Flywheel housing	SAE 1	SAE 1
Aftertreatment system	LD-type	LE-type
Max exhaust backpressure 2) mbar	45	45
Exhaust emissions	IMO III	IMO III

1) IMO – International Maritime Organization

2) Including SCR system

Engine system	Standard equipment
Exhaust after treatment system	SCR-system with integrated mixer and catalyst. Air assisted Urea injection.
Engine starting system	Electric starter 24V
Auxiliary PTO	Alternator, 80A, 28V, 2 pole
Engine oil system	Gear driven lube oil pump, lube-oil duplex filter with diverter valve, lube-oil heat exchanger, handpump for oil extraction
Engine fuel system	Fuel feed pump, fuel hand pump, fuel pre-filter, fuel main filter with diverter valve, on-engine fuel oil cooler, HP fuel pump, jacketed HP fuel lines, injection nozzles (CR system), flame proof hose lines, leak-off fuel tank level monitored
Engine cooling system	Coolant-to-raw water plate core heat exchanger, self-priming centrifugal raw water pump, gear driven coolant circulation pump
Engine combustion air system	Sequential turbocharging with 2 water-cooled exhaust-gas turbochargers, on-engine set of combustion-air filters
Engine exhaust system	Triple-walled, liquid-cooled, on-engine exhaust manifolds, single centrally located exhaust outlet, 1 exhaust bellow horizontal discharge
Engine mounting system	Resilient mounts at free end
Engine management system	Engine control and monitoring system (ADEC)

Engine system	Optional equipment
Auxiliary PTO	Alternator, 140A, 28V, 2 pole, bilge pump, on-engine PTOs
Oil system	Centrifugal oil filter, oil replenishment system
Fuel system	Duplex fuel pre - filter
Cooling system	Coolant preheating system
Exhaust system	1 exhaust bellow vertical discharge
Mounting system	Resilient mounts at driving end
Engine Management system	In compliance with Classification Society Regulations
Monitoring / Control system	BlueVision New Generation MCS, RCS
Power Transmission	Torsional resilient coupling
Classification	ABS, BV, CCS, DNV-GL, KR, JG, LR, NK, RINA

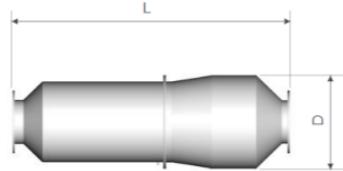
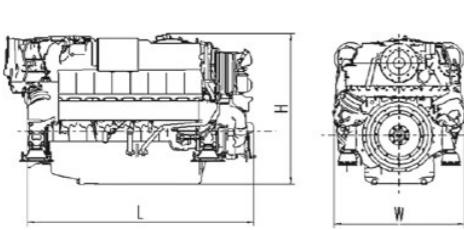
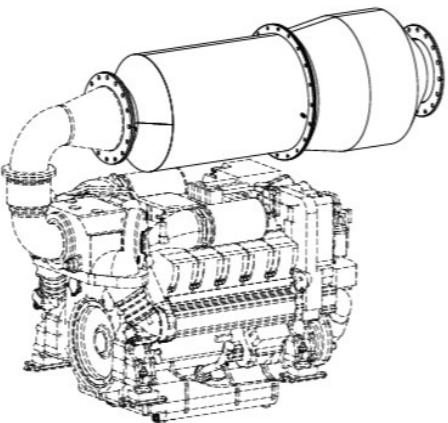
- > Power definition according ISO 3046
- > Intake air temperature 25°C/Sea water temperature 25°C
- > Intake air depression 15 mbar / Exhaust back pressure 30 mbar
- > Barometric pressure 1000 mbar
- > Power reduction at 45°C/32°C: none

Specifications are subject to change without notice. All dimensions are approximate. For complete information refer to installations drawing. For further information consult your MTU distributor/dealer. May have options that are not fitted as standard to the standard engine.

BOS POWER S2000 - IMO 3

MTU 12/16V 2000 M72 för snabba fartyg med hög belastningsfaktorer (1B)

	ENGINE	SCR		
Engine with SCR	Dimensions (LxWxH) mm	Mass engine, dry [kg]	Dimensions (LxD) mm	Mass SCR system, dry [kg]
12V2000M72	1869 x 1293 x 1364	2780	2194 x 850	340 ¹⁾
16V2000M72	2287 x 1293 x 1404	3337	2247 x 950	385 ¹⁾



Typical applications: Fast ferries, wind mill service vessels, SAR, Patrol vessels (catamarans monohulls, surface effect ships) and displacement yachts

1) Weight of complete SCR system including catalyst, mixer, 100 l urea tank (dry), control cabinet, wiring and dosing unit

Engine type	12V 2000 M72	16V 2000 M72
Rated power ICFN kW (bhp)	1080 (1450)	1440 (1930)
Speed rpm	2250	2250
No. of cylinders	12	16
Bore stroke mm	135/156	135/156
Displacement, total l	26,8	35,7
Flywheel housing	SAE 0	SAE 0
Aftertreatment system	LF-type	LG-type
Max exhaust backpressure 2) mbar	45	45
Exhaust emissions	IMO III	IMO III

1) IMO – International Maritime Organization
2) Including SCR system

Engine type	12V 2000 M72	16V 2000 M72
Speed rpm	2250 1950 1200	2250 1950 1200
Maximum power kW bhp	1080 1060 525 1450 1420 705	1440 1420 690 1930 1905 925
Power on propeller curve (n 3) kW bhp	1080 720 170 965 635 155	1440 950 225 1930 1275 300
Fuel consumption g/kWh on propeller curve 1) l/hr	208 217 218 270.7 188.2 44.6	208 209 218 360.9 239.2 59.1
Urea consumption 2) g/kWh	9.5 9.5 9.5	9.5 9.5 9.5

1) Tolerance +5% per ISO 3046, Diesel fuel to DIN 590 (low sulphur fuel) with a min L.H.V. of 42800 kJ/kg (18390 BTU/lb)
2) AdBlue 32,5% Urea, tolerance 5%

Engine system	Standard equipment
Exhaust after treatment system	SCR-system with integrated mixer and catalyst. Air assisted Urea injection.
Engine starting system	Electric starter 24V
Auxiliary PTO	Alternator, 80A, 28V, 2 pole
Engine oil system	Gear driven lube oil pump, lube-oil duplex filter with diverter valve, lube-oil heat exchanger, handpump for oil extraction
Engine fuel system	Fuel feed pump, fuel hand pump, fuel pre-filter, fuel main filter with diverter valve, on-engine fuel oil cooler, HP fuel pump, jacketed HP fuel lines, injection nozzles (CR system), flame proof hose lines, leak-off fuel tank level monitored
Engine cooling system	Coolant-to-raw water plate core heat exchanger, self-priming centrifugal raw water pump, gear driven coolant circulation pump
Engine combustion air system	Sequential turbocharging with 2 water-cooled exhaust-gas turbochargers, on-engine set of combustion-air filters
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Engine system	Optional equipment
Auxiliary PTO	Alternator, 140A, 28V, 2 pole, bilge pump, on-engine PTOs
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Monitoring / Control system	BlueVision New Generation MCS, RCS
Power Transmission	Torsional resilient coupling
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UTVALDA REFERENSER

BOS Power S2000 M72 IMO Tier III
Betrodd av operatörer.

MS RygerCruice

Drivs av: 4 x **mtu** 8V 2000 M72
Varv: Brødrene Aa
Leverans: 2024

MS Fjordfart

Drivs av: 4 x **mtu** 10V 2000 M72
Varv: Brødrene Aa
Leverans: 2024

MS Rygerfonn

Drivs av: 2 x **mtu** 10V 2000 M72
Varv: Brødrene Aa
Leverans: 2023

MS Fredrikke Tønder-Olsen

Drivs av: 4 x **mtu** 10V 2000 M72
Varv: Brødrene Aa
Leverans: 2020

MS Fjordglimt

Drivs av: 2 x **mtu** 8V 2000 M72
Varv: Brødrene Aa
Leverans: 2018

MS Fjordsol

Drivs av: 2 x **mtu** Series 60
Varv: Brødrene Aa
Leverans: 2018

MS Seacat Mayflower

Drivs av: 2 x **mtu** 12V 2000 M72
Varv: Mainstay Marine Solutions
Leverans: 2024

MS Fjorgyn

Drivs av: 4 x **mtu** 10V 2000 M72
Varv: Oma Baatbyggeri
Leverans: 2021

MS Rygerprinsessen

Drivs av: 2 x **mtu** 8V 2000 M72
Varv: Oma Baatbyggeri
Leverans: 2019

MS Regine Normann

Drivs av: 4 x **mtu** 10V 2000 M72
Varv: Brødrene Aa
Leverans: 2018

MS Elsa Lula Renberg

Drivs av: 4 x **mtu** 10V 2000 M72
Varv: Brødrene Aa
Leverans: 2018



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BOS Power är specialiserat på hållbara framdrivningssystem, energilagring och kraftgenereringslösningar, vilket säkerställer kritisk drift inom sjöfartsnäringen, datacenter, sjukvård, energi, telekommunikation och mer.

Som systemintegrator hanterar vi design, produktion, idrifttagning, service och support. Med huvudkontor i Bergen verkar BOS Power i hela Norden och är en del av Bertel O. Steen Group i Norge.