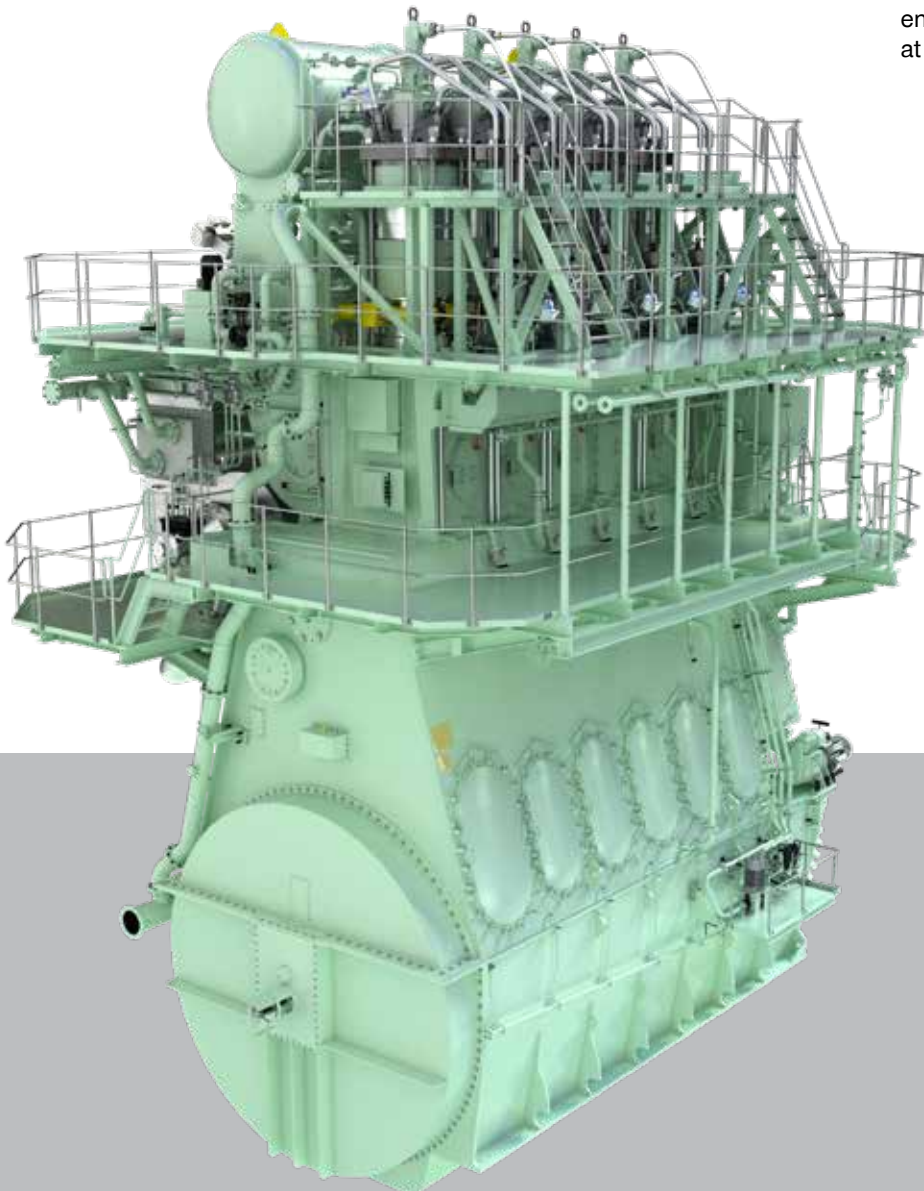


MAN B&W ME-GA Propulsion engine

**Lower the pressure on
your capital cost.**

Benefits at a glance

- Meet current and future SO_x and NO_x regulations
- Based on well-proven MAN B&W dual fuel platform
- Simple supply and purging concept, minimizing installation cost.
- Unique gas admission system enabling safe and reliable operation at lowest possible costs



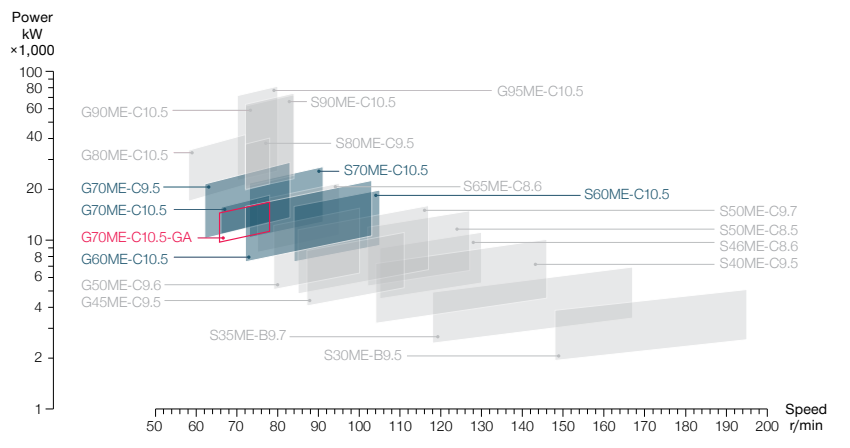
MAN B&W ME-GA dual-fuel engine

Propulsion

- 1 Double wall supply pipe
- 2 Safe gas admission valve, SGAV on liner wall

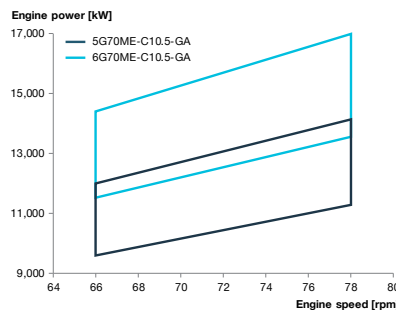


MAN B&W engines



Engine layout and fuel consumption

MAN B&W G70ME-C10.5-GA



Layout diagram data

Layout point	kW	rpm
L1	2,830	78
L2	2,260	78
L3	2,400	66
L4	1,920	66

Typical LNGC application

*SFOC 5G70ME-C10.5-GA (SMCR: 12 MW @ 69 rpm)

Load	Dual fuel mode
100%	168.2 g/kWh

*SFOC equivalent gas + pilot fuel. Gas fuel LCV (50,000 kJ/kg) is converted to fuel oil LCV (42,700 kJ/kg) for comparison with an engine operated on fuel oil.

General

- Engine cycle (gas): two-stroke Otto
- Number of cylinders: 5 to 6
- Bore: 700 mm
- Stroke/bore ratio: 4,65

Compliance with emission regulations

- IMO Tier III compliant when running on gas
- IMO Tier III in fuel oil mode with EGR or SCR

Main data

G70ME-C10.5-GA

Engine type	V _{plst}	S	B	S/B	MEP _{L1}	P _{cy1} _{L1}	Speed _{L1}	Speed _{L3}
	m/s	mm	mm	-	bar	kW	rpm	rpm
G70ME-C10.5-GA	8.47	3,256	700	4.65	17.4	2,830	78	66

Main features

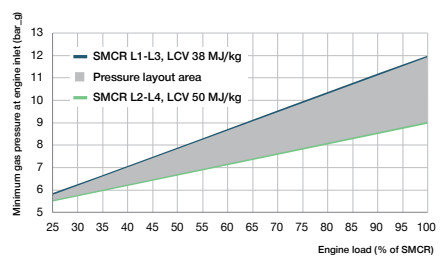
- Simple supply and purging concept, minimizing installation costs
- Based on well-proven MAN B&W dual fuel platform
- Robust piston ring package with three piston rings and uniform pressure drop
- Well-known engine room design similar to ME-C and ME-GI
- Take advantage of crew's existing ME-GI know-how
- Unique gas admission system enabling safe and reliable operation at lowest possible costs
- Worldwide service network providing maximum security

Auxiliary systems

- Gas supply requirements

Typical gas pressure layout area

- depending on engine SMCR and nitrogen content



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