

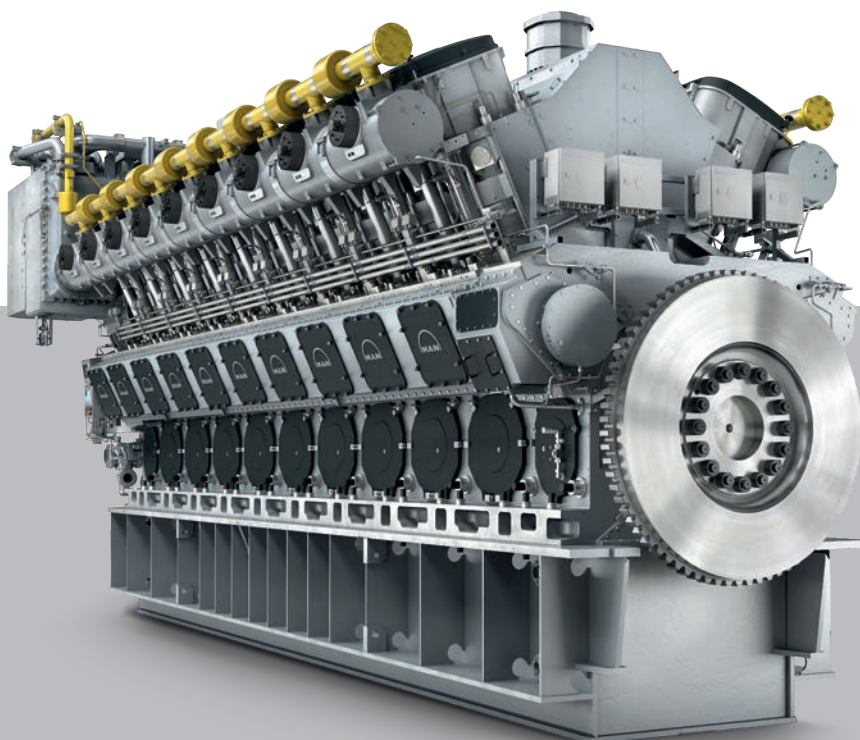
MAN V51/60G

High efficiency and high power

The MAN 51/60G gas engine is a perfect component for power plants, achieving an efficiency of approximately 50 % in single cycle and up to 95 % in cogeneration (CHP). The engine is not only highly efficient but dynamic, which gives it a fast starting time. Building on the experience of its predecessors, the MAN 51/60G with two-stage turbocharging is even more efficient and powerful.

Benefits at a glance

- Excellent efficiency of > 50 %
- High reliability
- No derating due to high altitude or high temperatures thanks to two-stage turbocharging
- High fuel flexibility
- High efficiency even in part load

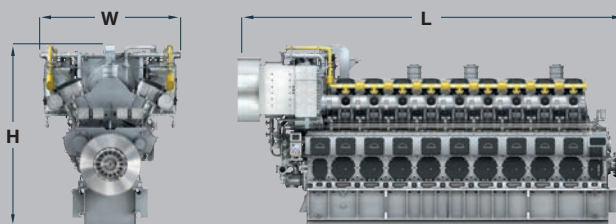


MAN V51/60G

High efficiency and high power

Dimensions

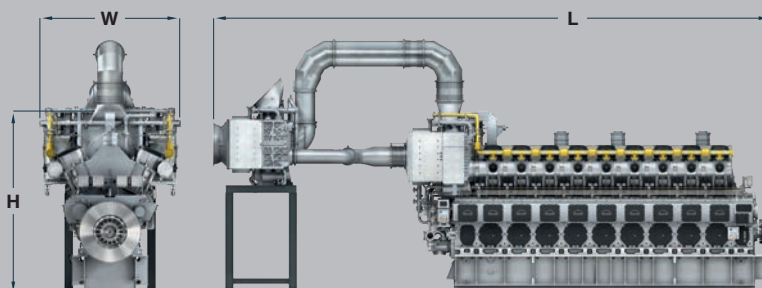
Cyl. No.		18
L	mm	13,148
H	mm	6,530
W	mm	4,700
Engine weight	t	310



High efficiency and high power with two-stage turbocharging

Dimensions

Cyl. No.		18
L	mm	19,100
H	mm	9,023
W	mm	4,700
Engine weight	t	345



Output

Engine model	MAN 18V51/60G and MAN 18V51/60G with two-stage turbocharging	
	High efficiency	High power
Output mech. (kW)	18,900	20,700
Speed (rpm)	500/514	500/514
Frequency (Hz)	50/60	50/60

Values according to ISO 3046-1:2002; ISO 15550:2002. Last updated August 2019

Engine Features

General data

- Engine cycle: four-stroke
- No. of cylinders: 18V
- Bore: 510 mm - Stroke: 600 mm

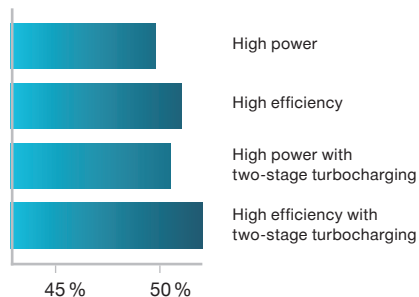
Engine automation and control

- MAN SaCoS_{one} safety and control system on engine, developed in-house at MAN

Starting system

- Starting air valves in the cylinder head

Fuel efficiency comparison



Turbocharging system

- High efficiency constant pressure
- MAN TCA series exhaust turbocharging system
- Individual engine/turbocharger optimization matching

Applications

- Various gaseous fuels, like natural gas, hydrogen-enriched natural gas
- LNG, biogas
- CHP plants
- Base load and peaking plants
- Hybrid power plants

Fuel & gas system

- Individual cylinder low pressure gas admission system (5 bar(g) at inlet of gas valve unit)
- Automatic adjustment of engine operation to variable gas qualities

MAN Energy Solutions

86224 Augsburg, Germany
 P + 49 821 322-0
 F + 49 821 322-3382
 info@man-es.com
 www.man-es.com