MAN Energy Solutions Future in the making



MAN V48/60CR Four-stroke diesel engine

- 1 Charge air cooler 16 Exhaust gas pipe
 - Turbocharger washing device
- Turbocharger TCA 77
- Charge air pipe
- 5 Rocker arm
- 6 Push rods
- 7 Fuel injection pipe
- 8 Inlet valve
- 9 Cylinder jacket
- 10 Cylinder head
- 11 Injection nozzle
- 12 Exhaust valve
- 13 Starting valve
- 14 Lube oil pipe
- 15 Cooling water pipes

- Connecting rod
- Crankshaft with flywheel
- Local operating panel SaCoSone
- Attached lube oil pump 20
- High pressure pump
- Accumulator 22
- Variable valve timing 23
- 24 Camshaft
- Piston 25
- Cylinder liner with fire land ring
- Cylinder crankcase
- Dry oil pan 28
- Control drive (29)







