



MAN B&W Diesel



LNG Carrier Propulsion The low speed diesel option

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**MAN B&W Diesel A/S
Copenhagen, Denmark**

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3332885.2005.06.01

(3000/OG)

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6S70ME-C HSD, Korea, 15. July 2003



6S70ME-C No. 1
presented at HSD
for around 280
visitors



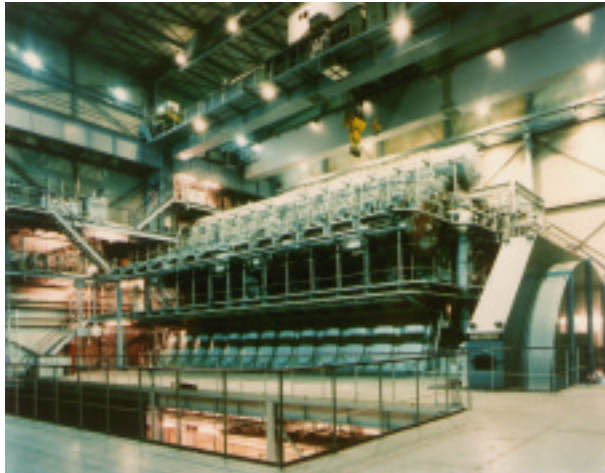
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12K80MC-GI-S Chiba Plant



12K80MC-GI-S
 Bore: 800 mm
 Stroke: 2300 mm
 Output: 40 MW

Fuels (Main/Pilot):
 M: Natural gas
 P: Marine diesel oil

July 1994: Start of commercial operation

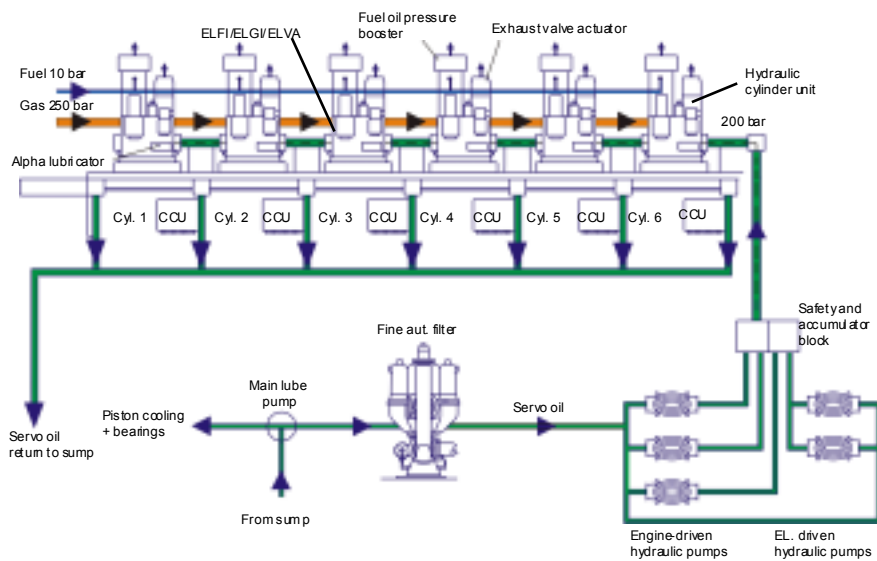
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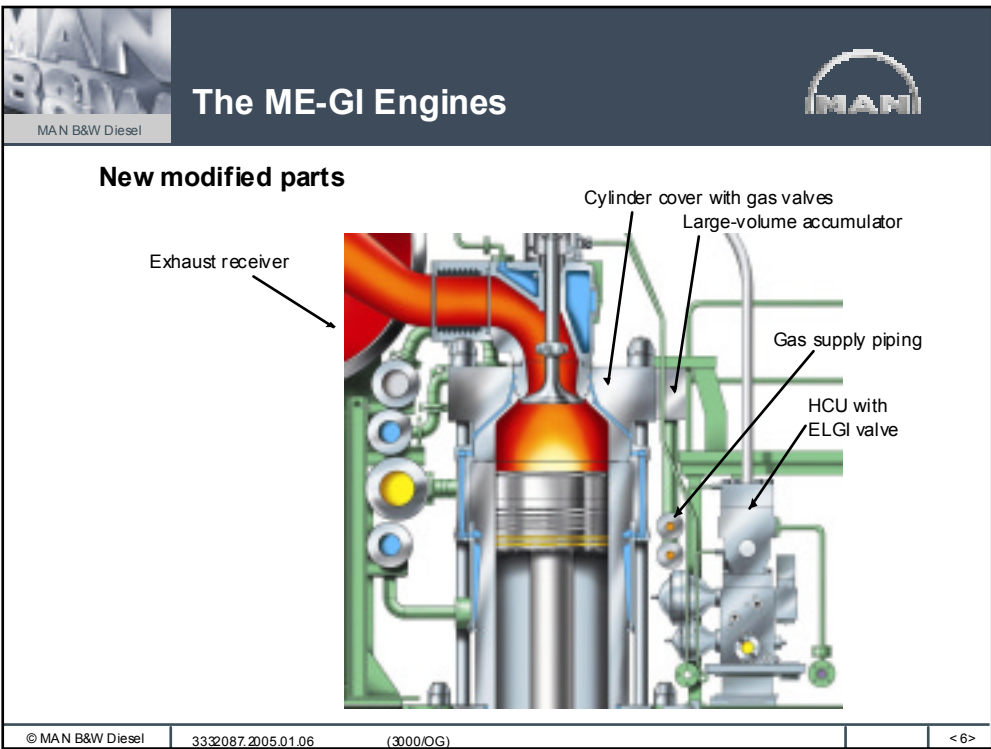
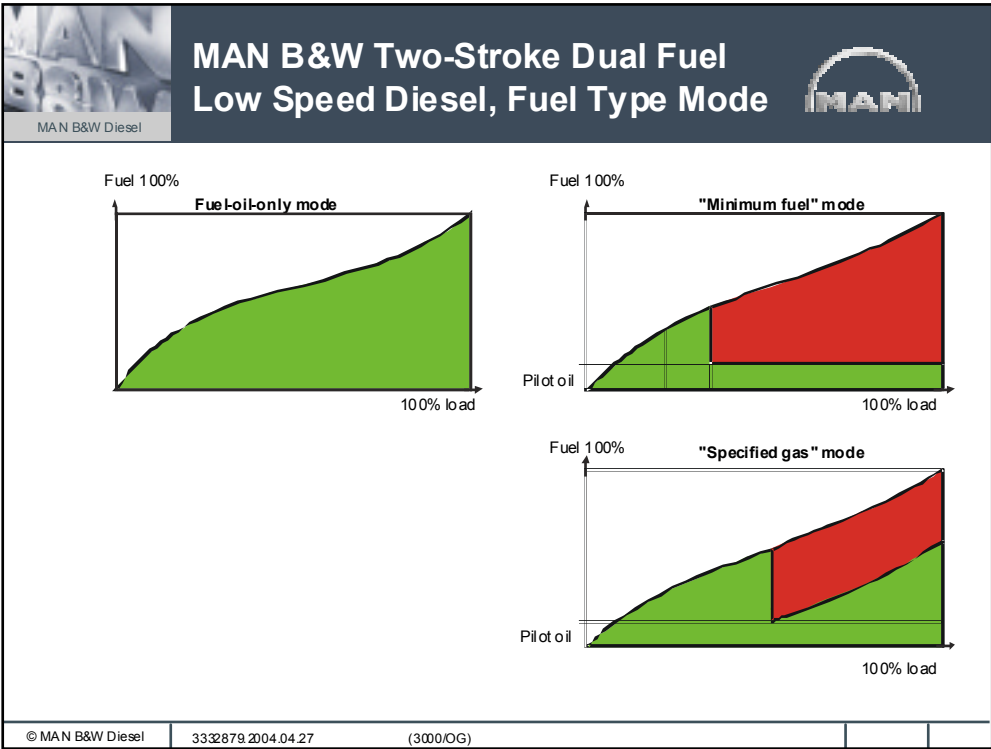
The ME-GI Engine Hydraulic Oil Loop



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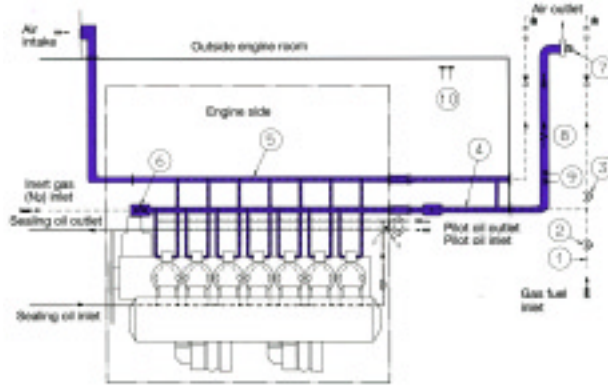




The ME-GI Engine



General arrangement of double wall piping system for gas



- High pressure pipe from gas compressor
- Main gas valve
- Main venting valve
- Main gas pipe (double pipe)
- 5. Main venting pipe (double pipe)
- 6. Inert gas valve in main gas pipe
- 7. Suction fan
- 8. Flow control
- 9. HC sensors in double wall pipes
- 10. HC sensors in engine room (optional)

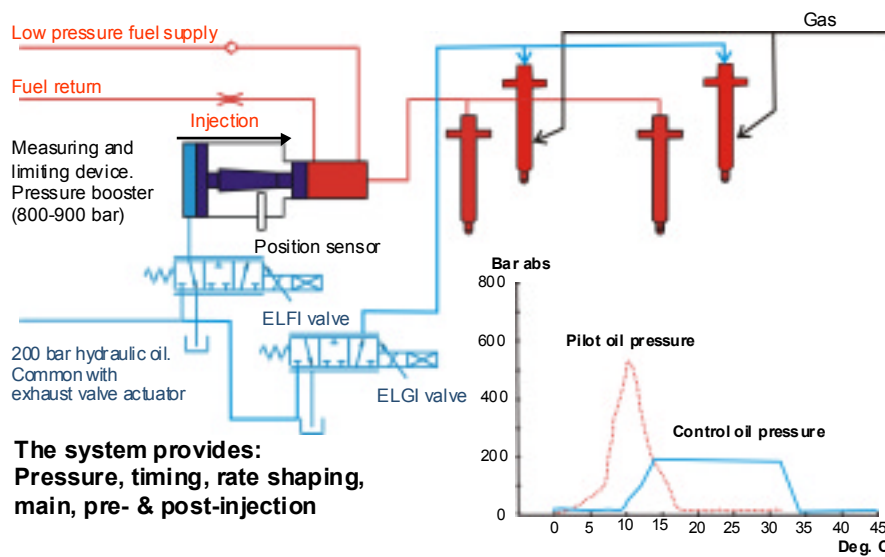
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The ME-GI Engine

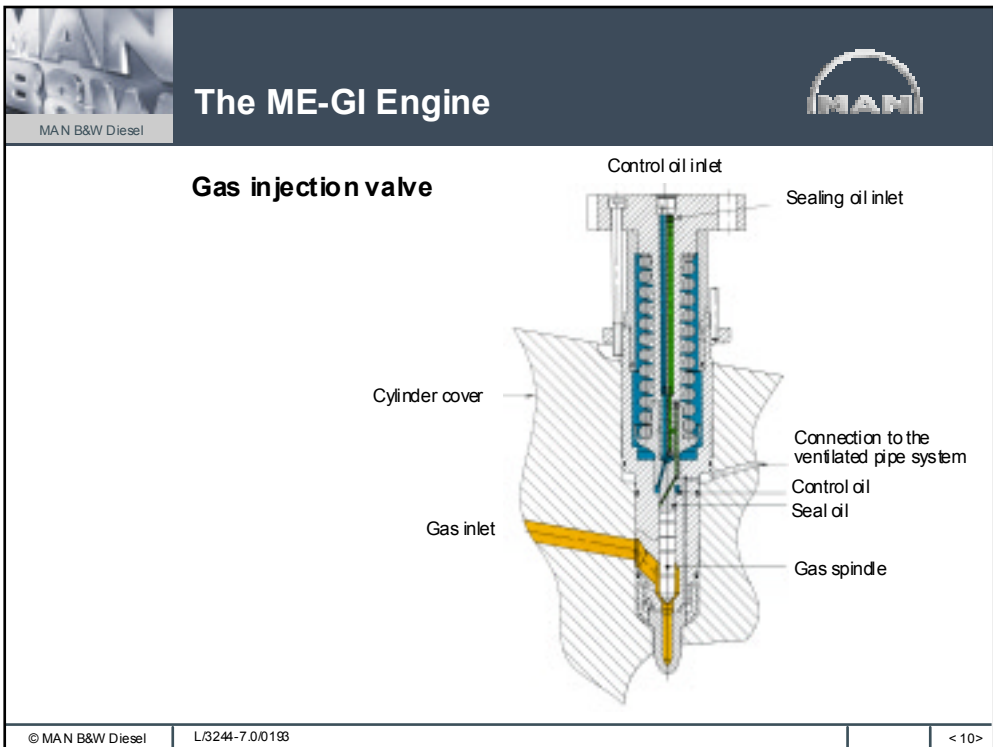
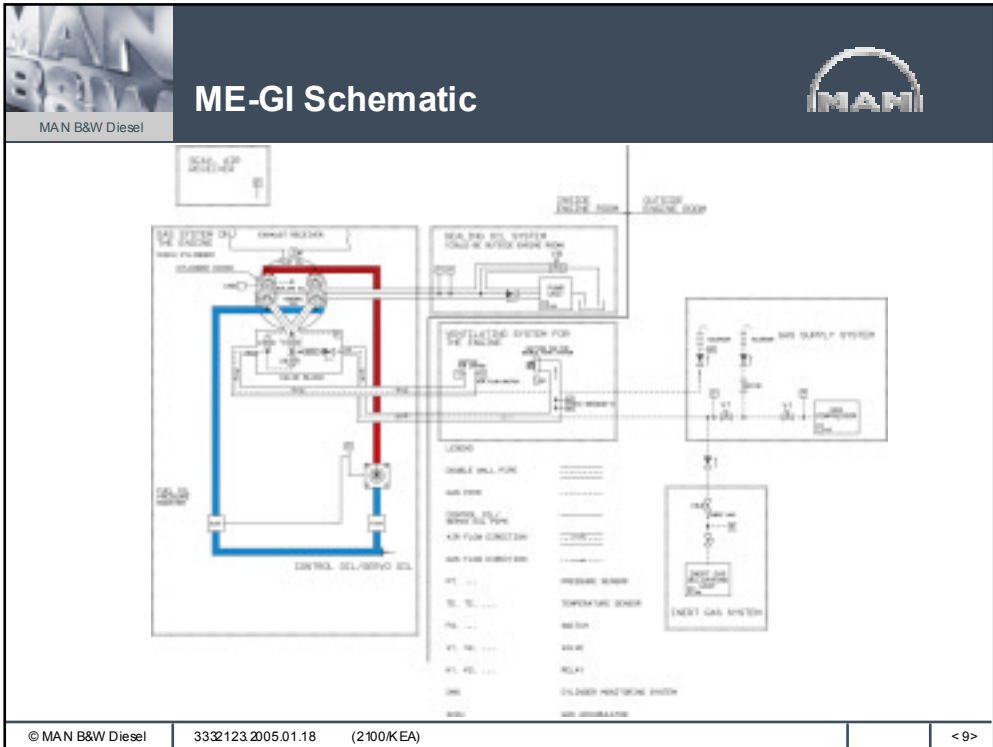


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ME-GI Engine



Pilot oil and gas injection valves



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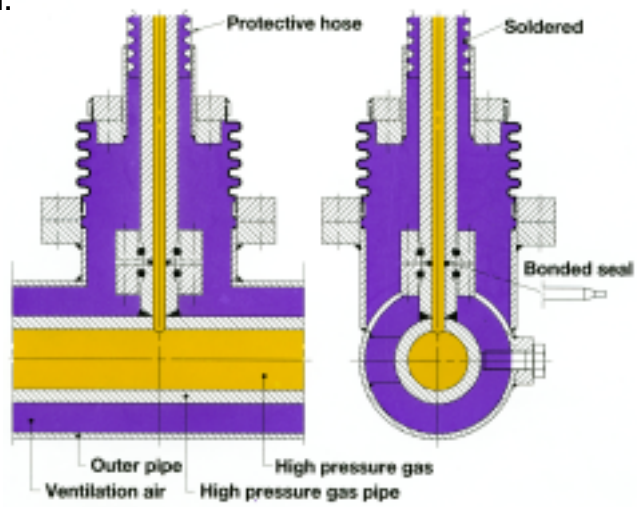
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The ME-GI Engine



Gas piping system: Branching



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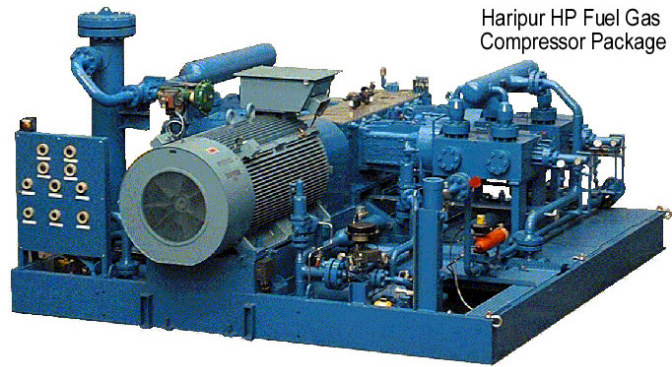
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Typical HP fuel gas compressor



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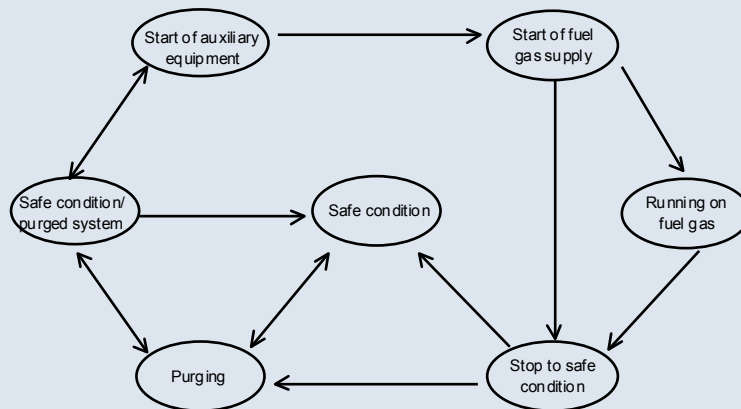
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NG Operation State Model



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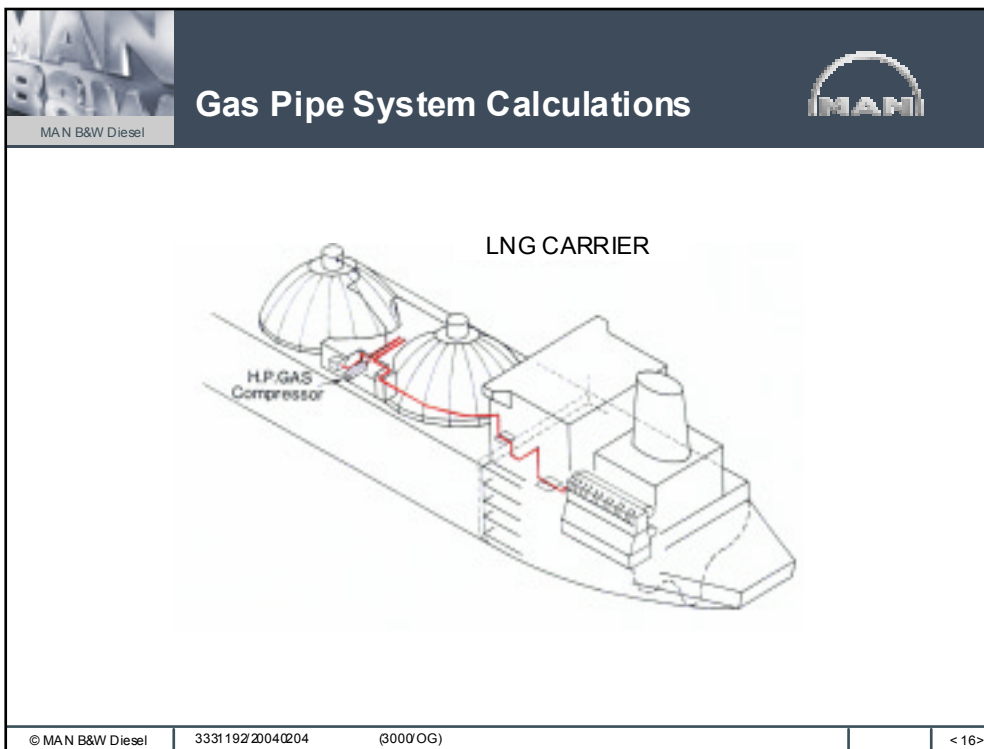
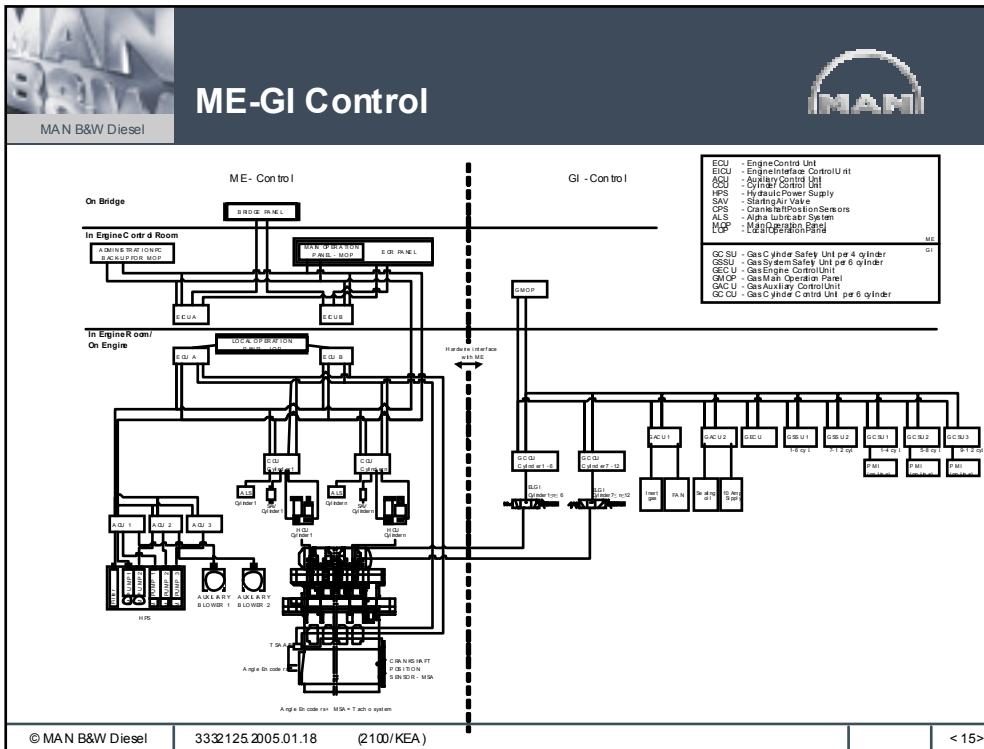


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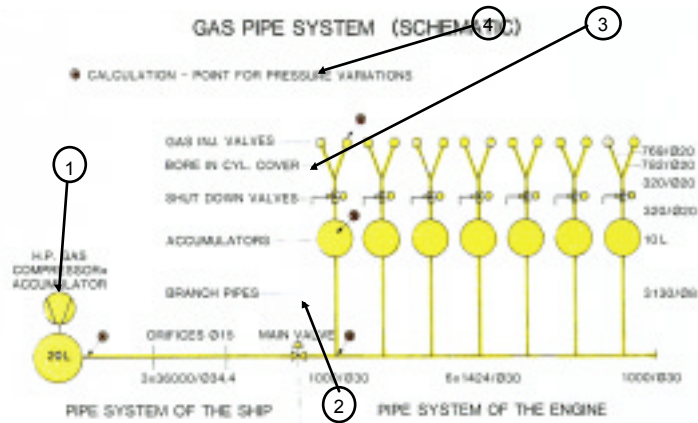
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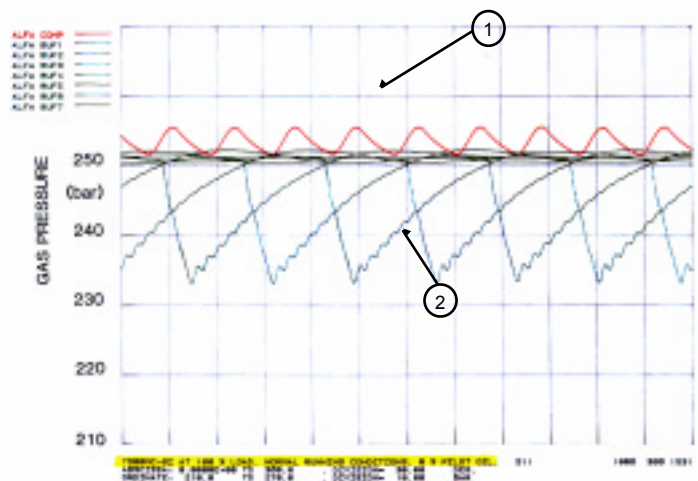




Gas Pipe System Calculations



Gas Pipe System Calculations

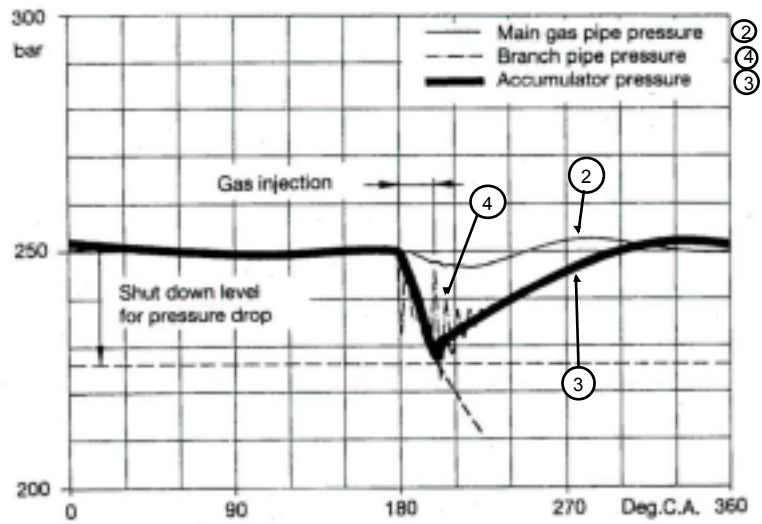




Pressure Variation in the Gas pipe at the Fuel Valve and the Accumulator



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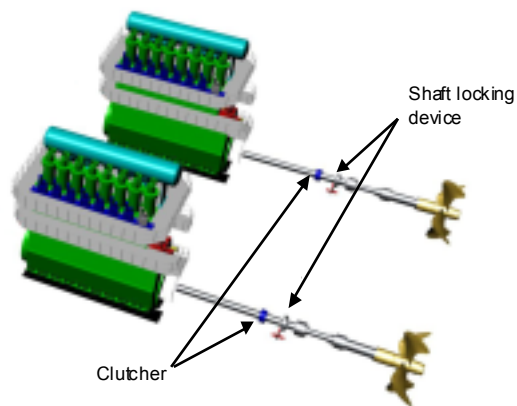
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Twin Engine Configuration



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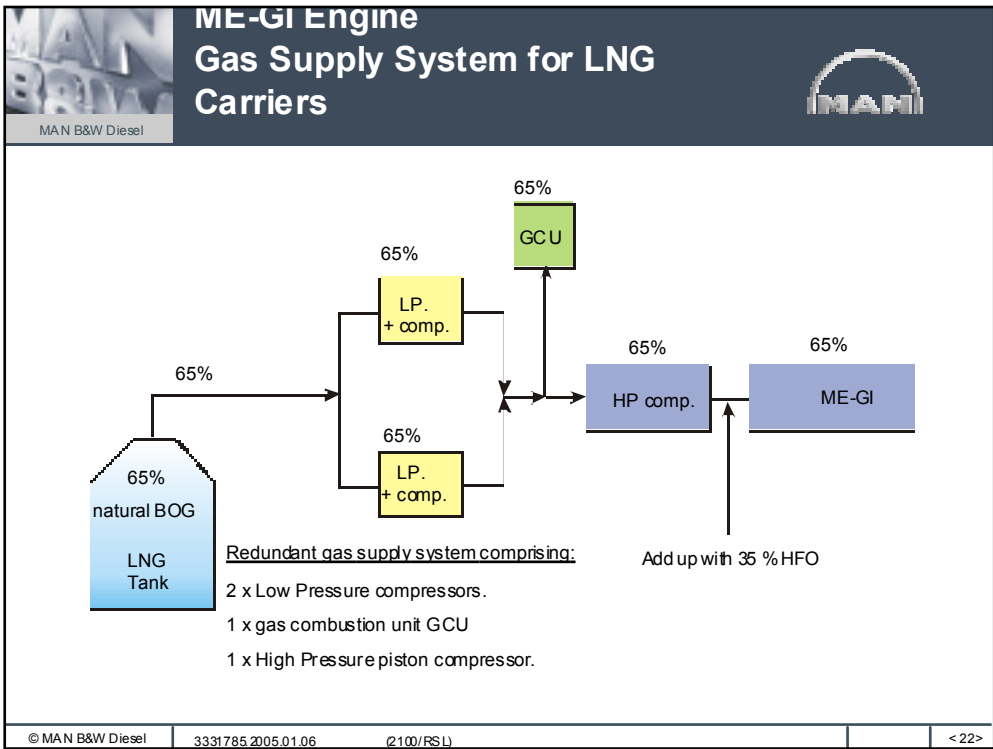
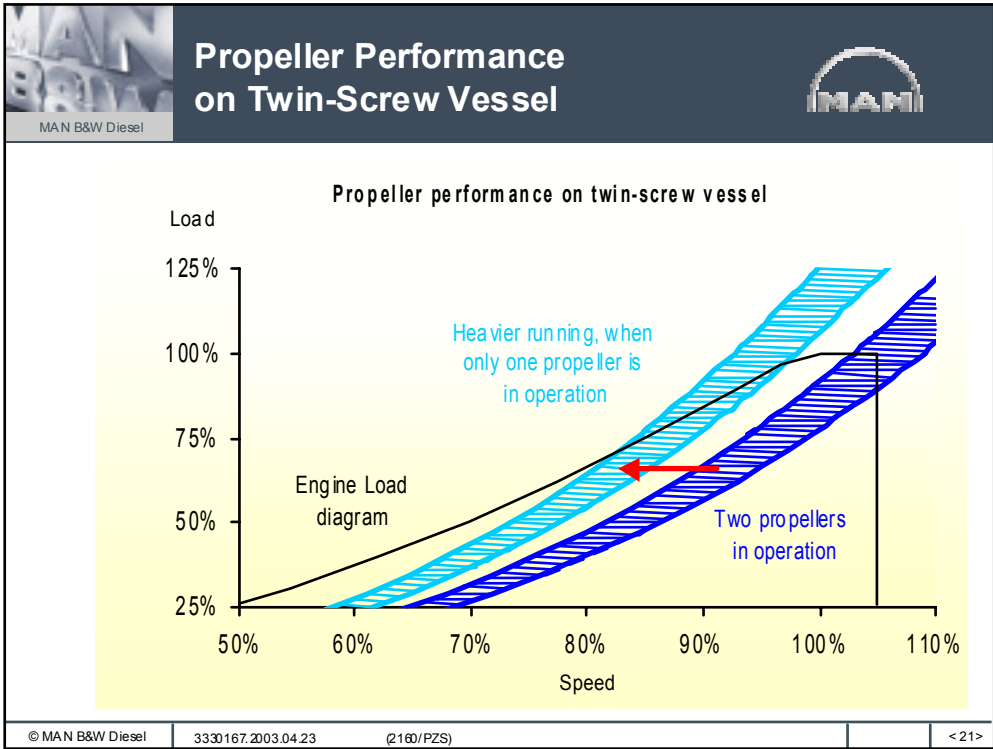


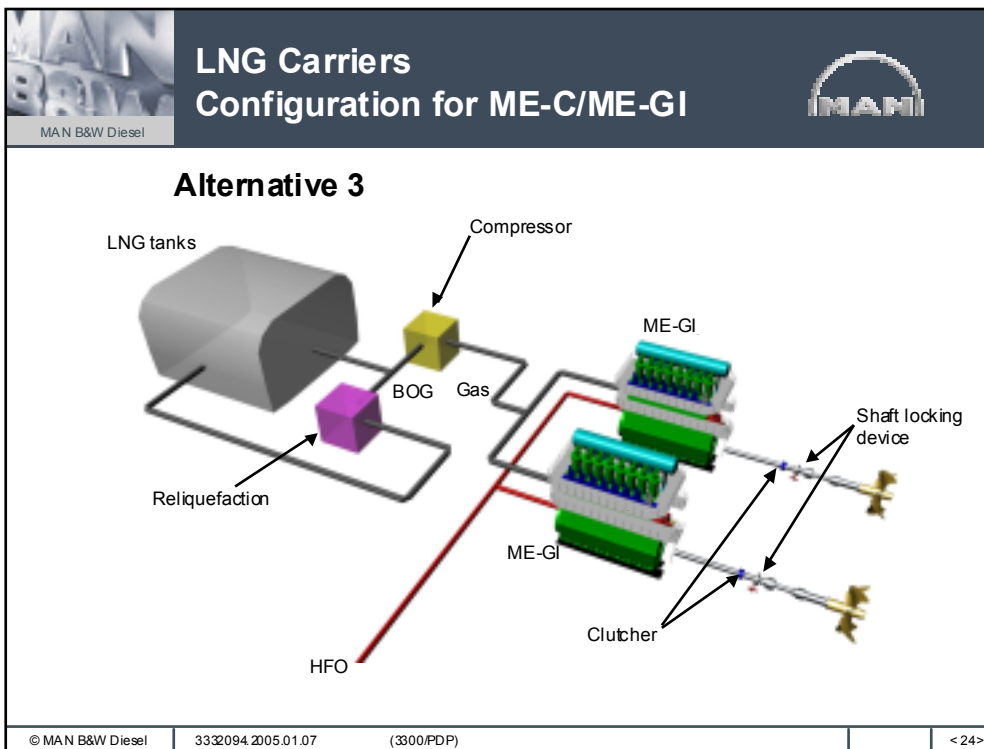
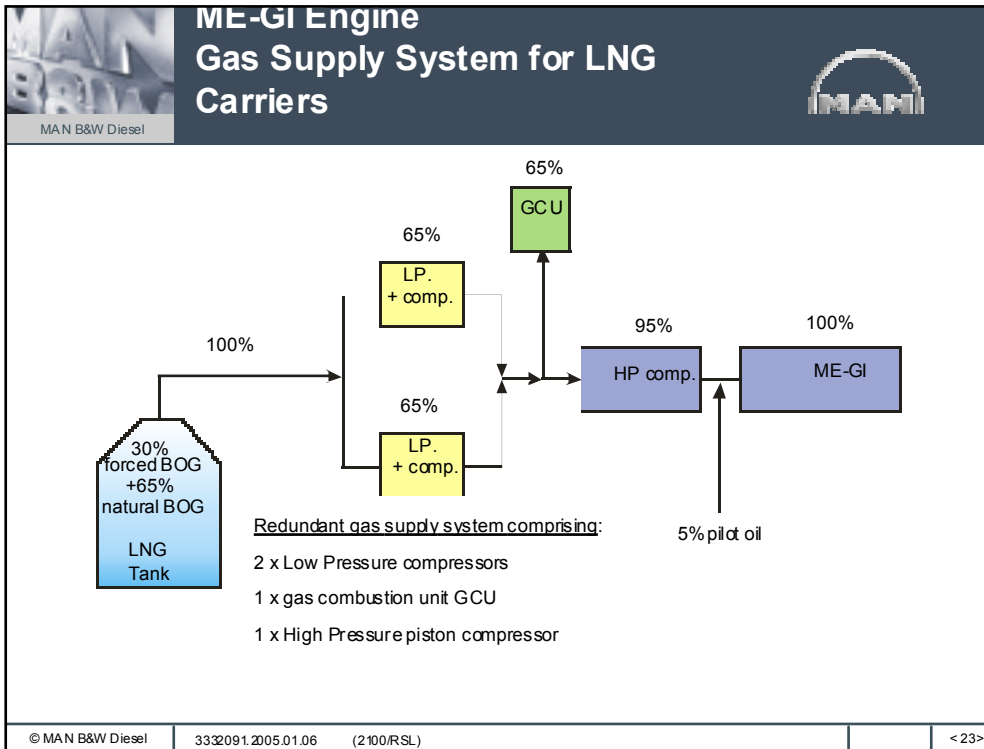
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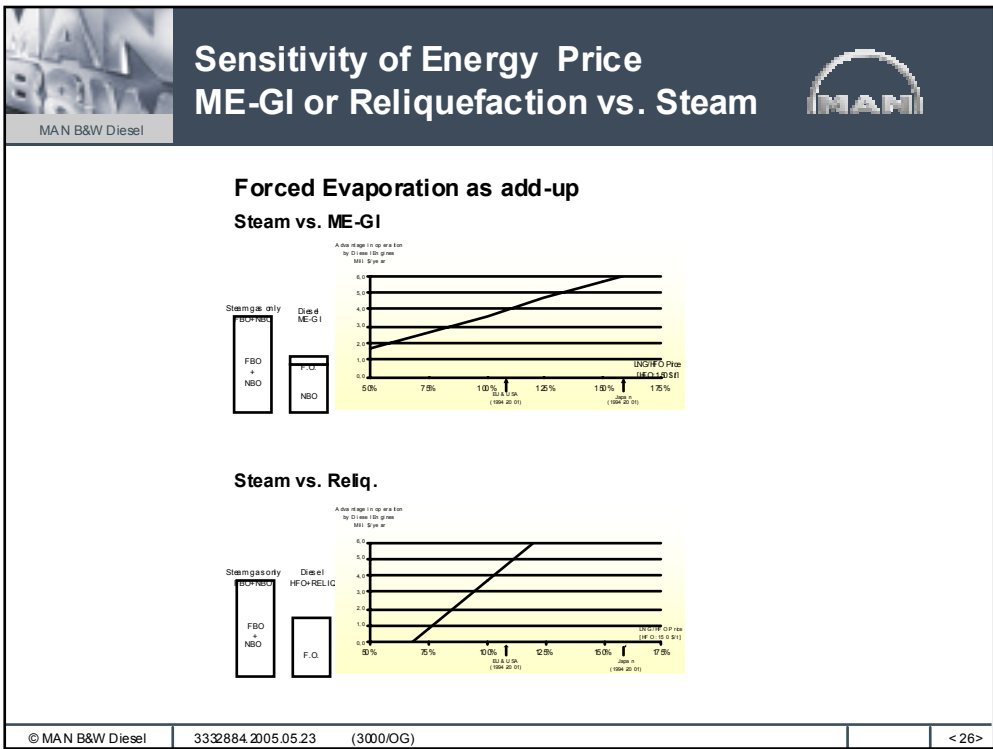
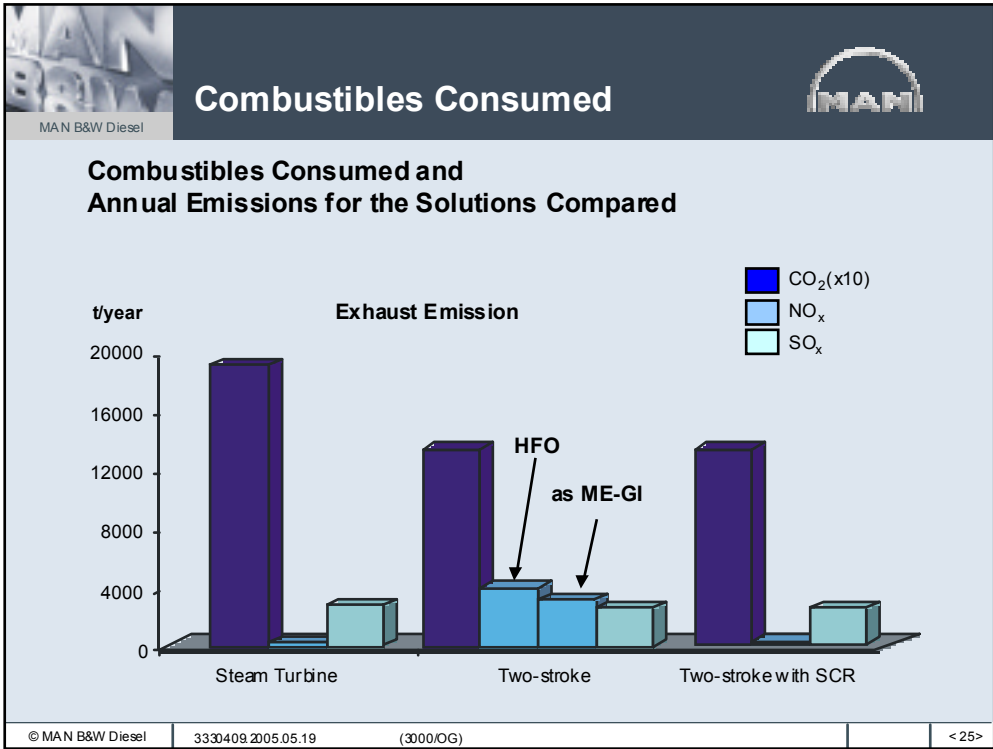
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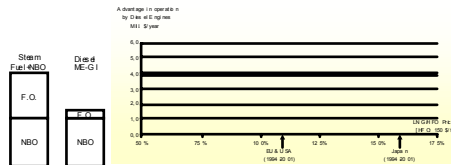




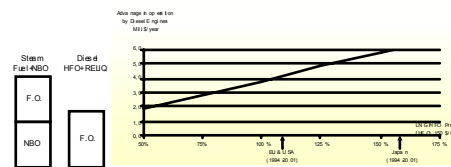
Sensitivity of Energy Price ME-GI or Reliquefaction vs. Steam



HFO as add-up Steam vs. ME-GI



Steam vs. Reliq.



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First 6K80MC-C on Testbed at HHM



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