Three parts, 1560 pages.

Contents

Gas-and dual-fuel engines for ship propulsion, powerplants and cogeneration.

Part I-Theoretical principles and construction.

1+ Gas-and dual-fuel engines for ship propulsion, powerplants and cogeneration.
2+ Classification of gas- and dual-fuel engines.
3+ Working principles of gas-, dual-fuel and diesel engines.
4+ Efficiencies and losses in gas- and dual-fuel engines.
5+ Parameters of gas- and dual-fuel engines.
6+ Construction of various types of gas-, dual-fuel and diesel engines.
7+ Gaseous and liquid fuels for gas- and dual-fuel engines.
8+ Fuel-injection systems for gas-, dual-fuel and diesel engines.
9+ Ignition systems for gas- and dual-fuel engines.
10+ New technologies for gas- and dual-fuel engines.
11+ Speed control of gas-, dual-fuel and diesel engines.

Part II-Engine systems and environment.

12+ Air supply for gas-, dual-fuel and diesel engines.
13+ Cooling of gas-, dual-fuel and diesel engines.
14+ Lubrication of gas-, dual-fuel and diesel engines.
15+ Starting systems for gas-, dual-fuel and diesel engines.
16+ Vibration and balancing of gas-, dual-fuel and diesel engines.
17+ Engine noise: origin and damping.
18+ Gas- and dual-fuel manufacturers.
19+ Emissions of gas-, dual-fuel and diesel engines.
20+ Endoscopy and measurements.

Part III-Operation and maintenance.

21+ Use of materials for gas-, dual-fuel and diesel engines.
22+ Casting, forging and welding engine parts.
23+ Reconditioning and their parts.
24+ Maintenance and repair of gas-, dual-fuel and diesel engines.
25+ Calculation fuel- and lubricating-oil consumption.
26+ Operational management and automation.
27+ Cogeneration.
28+ Transmission gears, flexible couplings, vibration dampers, shifting and shaft generator drives.
29+ Bedplates and engine alignments, gearboxes, shafts, propeller shafts and generators.
30+ Regulations for propulsion engines, classification, repair and damage.
31+ Ship propulsion.