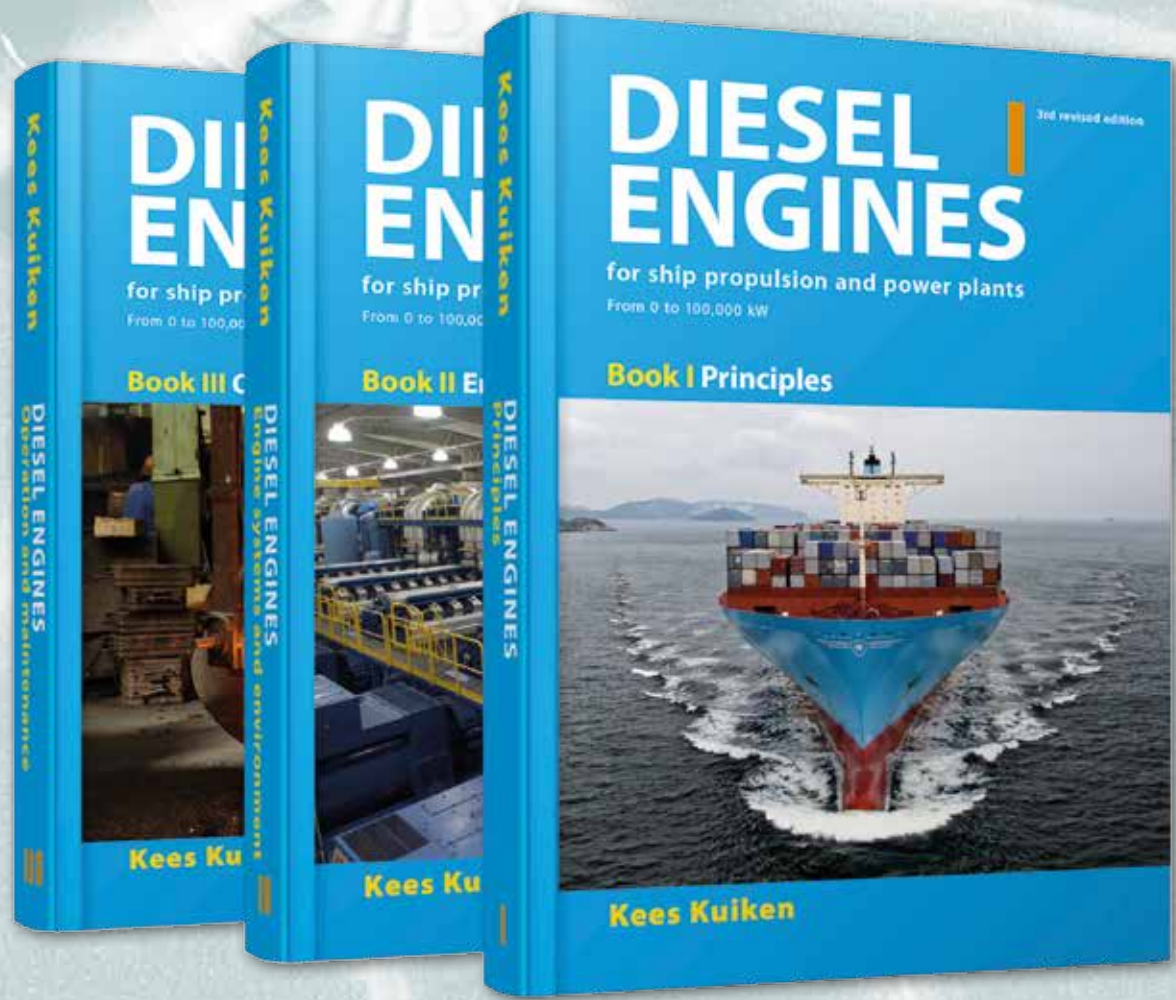


3<sup>rd</sup> completely revised edition!

# The new Diesel Engine Book



**Kees Kuiken**  
**Target Global Energy Training**

# DIESEL ENGINES

for ship propulsion and power plants

FROM 0 TO 100,000 kW

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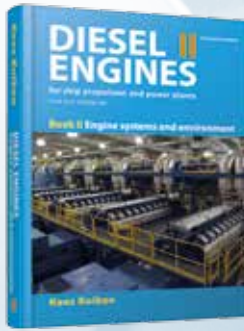
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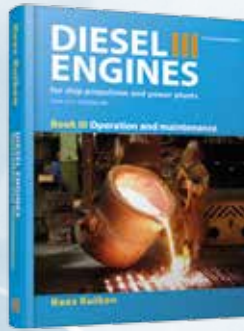




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**Preface to the third revised edition**

Based on feedback from various users of the second edition of this book, including companies in the diesel engine field, maritime institutes and shipping companies, we decided to add a number of topics to the third edition. It became apparent that many users had an interest in certain subjects, but were not in the position to visit these particular businesses to learn how certain components are manufactured or repaired. Therefore, the following topics have been added:

- A new chapter 'Endoscopy and measurements'
- Lubricating-oil analysis for gas, dual-fuel- and diesel engines.
- Two-stage turbocharging.
- Latest design development Wärtsilä X two-stroke crosshead engines 60-95 bore.
- MAN B&W new design Mk 10 two-stroke crosshead engines.
- Extension speed control.
- Slow steaming.
- New information about engine manufacturers.
- Emissions, current SECA and future NECA regulations.
- Scrubbers and selected catalytic reduction systems.
- Particulate matter.
- An improvement to both to the many images and the text.

Book I: Principles

Book II: Engine systems and environment

Book III: Operation and maintenance





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11.2.1.2 Ignition delay time (IDT) vs. pressure

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11.2.2.1 Fuel injection system components

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**11.3.1 Fuel injection system**

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**11.3.2 Fuel injection system**

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**11.3.3 Fuel injection system**

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## The author

Kees Kuiken started his career in 1963 by enrolling as a marine engineering student at the Hogere Zeevaartschool, Terschelling, The Netherlands.

After graduation he joined the United Dutch Shipping Company (Verenigde Nederlandse Scheepvaartmaatschappij, VNS).

In 1978, he went on to become a lecturer in marine engineering at the Hogere Zeevaartschool in Delfzijl and Groningen, and also worked in the mechanical engineering and operational technology departments. His was passionate about building a large and advanced practical lab for both intermediate and higher maritime education, as well as for trade and industry.

In 1995 he founded the European Training Centre for engine technology, the ETM, an educational foundation.

In 2000, he left regular teaching and established Target Global Energy Training. The company conducts training sessions worldwide in diesel- and gas-engine technologies, gas- and steam turbines, compressors and cogeneration. Furthermore, Target provides solutions for a myriad of technical problems and publishes books and manuals. All the training programs are tailor-made and given on location.

In 2008 *Diesel engines for ship propulsion and power plants* was published, followed in 2013 by a second revised edition and in 2017 by a third completely revised edition of this book. Also, in 2016 *Gas- and dual-fuel engines for ship propulsion, powerplants and cogeneration* entered the market.

Both books can be ordered directly from Target Global Energy Training via the web shop: [www.dieselenginebook.com](http://www.dieselenginebook.com)

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