

Two-Stroke X-DF & Diesel Engines

Training Courses



A valuable investment

WinGD training courses improve the technical and engine operational skills of marine engineers and technical personnel for Ship Owners, Operators and Charterers.

With a deeper understanding of the main engine and its applied technologies, operators and supervisors of various levels will be able to enhance the performance of the engine room by increasing its efficiency and reliability, while reducing maintenance costs and lowering emission levels. All with the highest respect to safety and regulations.

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WinGD Training – customized to suit your needs

WinGD Training Centres offer a variety of training courses covering the full portfolio of engine products, ranging from theoretical classroom courses through to advanced operational courses to specialised courses on dedicated topics.

Course curricula are structure based on STCW-95 guidelines. Courses are conducted by certified and experienced Technical Experts / Instructors.

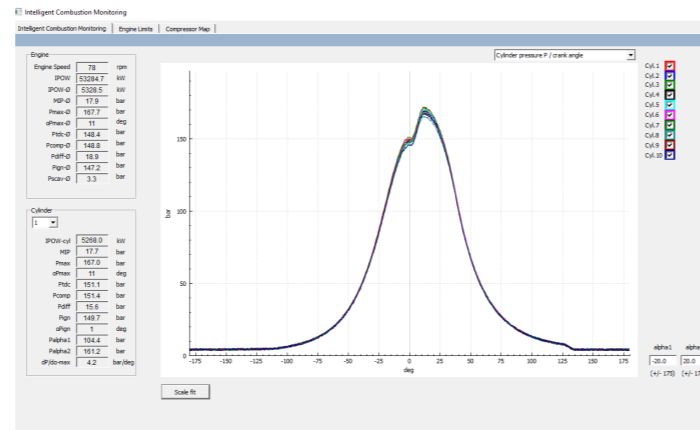
Instructors explain the theory and functionality of RT-flex, Generation X and the newest low-pressure dual-fuel X-DF engines using conventional training materials in the classroom, interactive 3D maintenance manuals and the modern W-Xpert engine simulation software.

During advanced operational training, with the help of W-Xpert Simulation Software and Full Mission Engine Room Simulators (FMS), trainers guide participants through operational aspects of the main engines as well as demonstrate certain procedures and troubleshooting routines.

Specialised courses offer a higher level of engine training. They are designed to improve the understanding of the engines and highlight specific topics, for example WinGD engine performance optimisation, piston running aspects or engine control systems used on WinGD engines.

In addition to the W-Xpert and the FMS, in certain locations, courses offer exercises on selected engine components and real hardware, including hardware control system simulators.

Training courses are offered at all WinGD Training Centres as well as alternate locations including: WinGD training partners, ship owners and/or crewing agency premises and even on board the ship. Demonstration of actual hardware parts may be limited depending on location, but the simulation software ensures that the course content is thorough and consistent, regardless of the course location.



Engine performance graph showing SFOC and NOx emissions



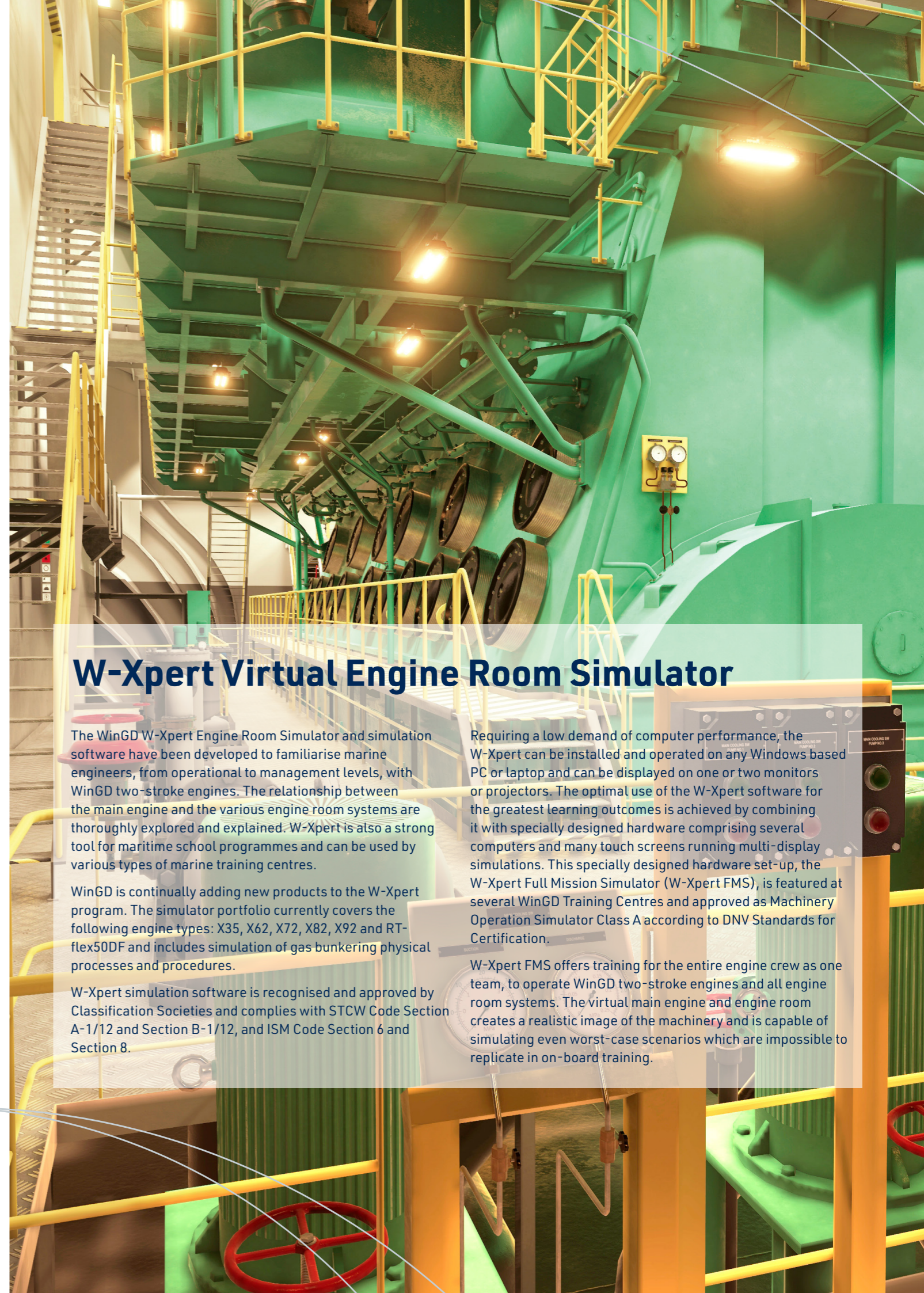
Example of control panel simulation.

Interactive 3D maintenance manuals

Fully interactive 3D manuals have been developed to assist instructors in explaining the best and most efficient overhauling procedures while discussing specific engine parts. This creates transparent steel structures to allow trainees to visualize the assembly aspects and service hints without getting into the crankcase of a real engine.



Contact the WinGD Training Team today to discuss your training needs.
training@wingd.com



W-Xpert Virtual Engine Room Simulator

The WinGD W-Xpert Engine Room Simulator and simulation software have been developed to familiarise marine engineers, from operational to management levels, with WinGD two-stroke engines. The relationship between the main engine and the various engine room systems are thoroughly explored and explained. W-Xpert is also a strong tool for maritime school programmes and can be used by various types of marine training centres.

WinGD is continually adding new products to the W-Xpert program. The simulator portfolio currently covers the following engine types: X35, X62, X72, X82, X92 and RT-flex50DF and includes simulation of gas bunkering physical processes and procedures.

W-Xpert simulation software is recognised and approved by Classification Societies and complies with STCW Code Section A-1/12 and Section B-1/12, and ISM Code Section 6 and Section 8.

Requiring a low demand of computer performance, the W-Xpert can be installed and operated on any Windows based PC or laptop and can be displayed on one or two monitors or projectors. The optimal use of the W-Xpert software for the greatest learning outcomes is achieved by combining it with specially designed hardware comprising several computers and many touch screens running multi-display simulations. This specially designed hardware set-up, the W-Xpert Full Mission Simulator (W-Xpert FMS), is featured at several WinGD Training Centres and approved as Machinery Operation Simulator Class A according to DNV Standards for Certification.

W-Xpert FMS offers training for the entire engine crew as one team, to operate WinGD two-stroke engines and all engine room systems. The virtual main engine and engine room creates a realistic image of the machinery and is capable of simulating even worst-case scenarios which are impossible to replicate in on-board training.



WinGD operates four Training Centres in key global locations:

- Winterthur, Switzerland
- Athens, Greece
- Busan, Korea
- Shanghai, China

WinGD has a number of authorised Training Partners located in:

- Odessa, Ukraine
- Subic Bay, Philippines
- Mumbai, India
- Dubai, UAE

Book your training through the registration platform at www.wingd.com

Winterthur Gas & Diesel Ltd. (WinGD) is a leading developer of two-stroke low-speed gas and diesel engines used for propulsion power in merchant shipping. WinGD's target is to set the industry standard for reliability, efficiency and environmental sustainability.

WinGD provides designs, licences and technical support to manufacturers, shipbuilders, ship operators and owners worldwide.

WinGD has its headquarters in Winterthur, Switzerland, where as one of the earliest developers of diesel technology, it began the design of large internal combustion engines in 1893 under the "Sulzer" name.

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