

POWER PROFILE

Caterpillar Marine Power Systems



SAVING LIVES

A balance of power, fuel consumption and exhaust emissions make the Cat® C32 ACERT™ the perfect choice to power German severe duty search and rescue vessels.

CHALLENGE

Founded in 1865, Deutsche Gesellschaft zur Rettung Schiffbrüchiger (DGzRS), the German maritime search and rescue service, operates 20 rescue cruisers and 41 lifeboats on the North Sea and Baltic Sea, logging more than 70,000 nautical miles per year.

To meet requirements of the different rescue districts, the DGzRS developed a new rescue cruiser to close the gap between its 10-meter lifeboats and its 23-meter cruisers. All DGzRS units must provide high degrees of safety in extremely adverse conditions on open sea, shallow areas, and close to shore. This poses particular technical challenges in newbuilding specifications, as the design must be lightweight while maintaining the structural strength of the hull.

SOLUTION

The striking solution is the new mid-size Search And Rescue vessel SK 30 powered by a single V-12, 32-liter, Cat® C32 ACERT™ marine engine, rated 1232 kW at 2300 rpm, providing a service speed of 22 knots. With the engine almost free of ancillary units, the bulk of the power is available for the propeller. This innovative propulsion concept further improves vessel reliability and maneuvering capabilities.

Drawing just 1.3 m, the craft can be deployed in areas where larger rescue cruisers rely on their tenders. The boat also features ergonomically designed workstations for first aid, and hydraulic auxiliary propulsion for rescue and towage operations. Like its predecessors, the cruiser is welded of saltwater-proof light alloy, built according to a proven grid frame system known for seaworthiness and self-righting capabilities.

The SK 30 is 19.90 meters long, with a molded breadth of 4.75 meters, a molded depth of 2.70 meters and a design draught of 1.30 meters, equaling a displacement of 38 tons. The second newbuilding, SK 31, entered service in early 2009. Repeat orders for other stations are under consideration.

SUCCESS

"The Cat C32 marine engines almost perfectly match the power requirements of the new rescue cruisers SK 30 and SK 31," said Holger Freese, project manager SK 30/31 at DGzRS headquarters in Bremen, Germany. "Engines aboard our ships have to operate under extreme conditions to save people from distress. Rugged, reliable, easy to maintain, and available 24/7 – that's an obligation we won't compromise on!"

"This order underlines our capabilities to expand into market segments once dominated by competing brands," commented Klaus Dammann, sales director marine division, Zeppelin Power Systems. With Caterpillar Marine Power Systems' advanced electronically controlled C-series marine engines, we have excellent sales arguments for power density, fuel efficiency, and total cost of ownership."

Holcroft also emphasized the improvements achieved because of electronic engine control and performance monitoring. "We are able to spot potential problems at an early stage by checking engine data on the control displays. And by having 100 percent Cat power on board, we only need to stock one brand of spare parts."

CUSTOMER

Deutsche Gesellschaft zur Rettung Schiffbrüchiger (DGzRS)

LOCATION

Bremen, Germany

SEGMENT

Military/Paramilitary

VESSEL TYPE

Search and Rescue Cruiser

POWER SOLUTION

1x Cat C32 ACERT™ Main Engine
1,232 kW / 1675 hp @ 2300 rpm

CAT® DEALER

Zeppelin Power Systems



Cat® C32 ACERT™

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MAK

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POWER PROFILE

C32 ACERT™ for German Severe Duty Search and Rescue Vessels



Caterpillar Marine Power Systems

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