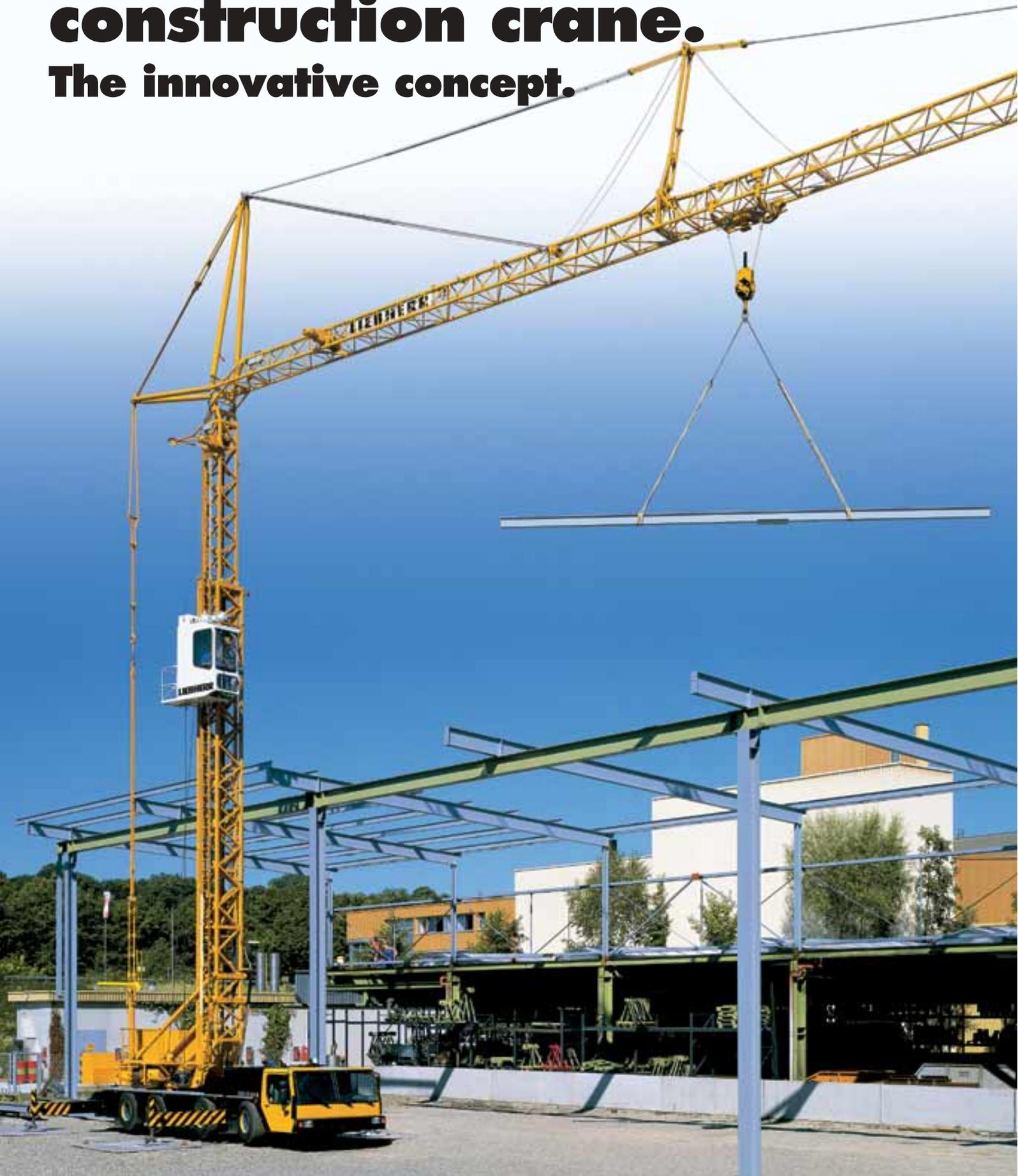


The MK 80 mobile construction crane. The innovative concept.



LIEBHERR

The MK 80 at a glance.

One-person assembly.

The MK 80 is designed for one-person assembly at the touch of a button, with pre-selection of the desired crane operating status – hook height or jib position. The entire subsequent crane erecting procedure is program-controlled and automatically monitored.

Compact transport.

When the MK 80 is moved from place to place the complete equipment – tower, jib, complete ballast, generator and height-adjustable elevating cabin – travels with the crane.

Powerful drive units.

The drive units of the MK 80 are all continuously variable: hoist gear, slewing gear and trolley travel gear.

High mobility.

The MK 80 runs on steered axles to ensure that it can be manoeuvred into even the most restricted spaces. Three of the four axles are powered by a Liebherr 270 kW/367 hp diesel engine and a power-shift gearbox with 16 forward and two reverse gears.

Spacious driver's cab.

For comfort and convenience, the cab has hydraulic damping and sound and heat insulation, as well as air-sprung seats with continuous height adjustment. The cab is noted for its ergonomically efficient control and instrument layout.

30° jib position.

The 30° raised jib position ensures outstanding performance data: 48.1 m hook height, and a maximum load capacity of 1,700 kg at a working radius of 36.6 m.

Elevating cabin.

The elevating cabin has its own drive unit and is continuously variable in height. The crane operator can move it to the desired operating position while sitting in the cabin. Optimum visibility is guaranteed.

Crane superstructure.

The crane superstructure consists of a three-section jib with 42.0 m working radius, the complete tower, switchgear cabinet, drive units, elevating cabin, complete ballast and generator.



The MK 80 in operation.

This new concept, the MK 80 mobile construction crane, has met with approval among building contractors and crane hire firms. High mobility and rapid availability are its strengths. Hook heights

of 19.6 m and 28.0 m at a working radius of 42.0 m are attractive selling points. The 30° steep-angle jib position yields in a hook height of 48.1 m and a working radius of 36.6 m.

The MK 80 used in the 30° jib position.
Hook height 48.1 m.



Positioning precast balcony elements in an inner courtyard. Working radius 42.0 m.



Restricted working space.
Hook height 28.0 m.

Crane moving large pre-fabricated elements. Load capacity 8.0 t.

MK 80 moving a Match-Race racing boat.



Crane operation with tower retracted.
Hook height 19.6 m.

Compact transport. High mobility.

Combining the mobility of a truck crane with the functions of an 80 mt tower crane: the MK 80 mobile construction crane incorporates the cumulative development know-how of Liebherr-Werk Ehingen GmbH and Liebherr-Werk Biberach GmbH.

When the MK 80 is transported, the complete equipment - tower, jib, complete ballast, generator and elevating cabin - travels with it. In the transport position the crane's dimensions are only 15.9 m in length, 2.75 m in width and 4.0 m in height.

The MK 80 has steered axles only, to ensure that it can be manoeuvred into the smallest gaps. Three of the four axles are driven by a Liebherr 270 kW/367 hp diesel engine and a power-shift gearbox with 16 forward and 2 reverse gears. The driven axles have planetary hubs and differential locks. All axles have hydro-pneumatic suspension using low-maintenance hydraulic cylinders.



The four steered axles ensure optimum manoeuvrability.



One-person assembly at the touch of a button.

The MK 80 is designed for one-person press-button assembly. The crane carrier is stabilised by four hydraulically extending support arms, hydraulic jacks and support pads.

The MK 80 offers automatic levelling as well as pre-selection of the desired crane operating status – hook height and jib position; the subsequent crane erecting process is program-controlled and automatically monitored. Hoist and trolley travel ropes are automatically tensioned during assembly and disassembly. All control functions for the erecting process are carried out at a central control lever on the radio-operated remote control. Assembly direction and speed are individually preselected, and the complete erecting process takes only 13 minutes.

The MK 80 has a telescopic tower and a three-section lattice jib made from tight-welded square-section tubes and diagonal struts. Since the three-section jib has a very compact in-the-air assembly envelope, the MK 80 requires very little erecting space.

Hook heights are 19.6 m and 28.0 m with the jib in horizontal position or 48.1 m in the 30° raised position. Maximum working radius is 42.0 m, maximum load capacity 8.0 t.



Top technology in detail.

The MK 80 has continuously variable trolley speeds, with all loads hoisted in the double-reeved operating mode.



The comfortable, well-equipped driver's cab is hydraulically damped with noise and heat insulation and air-sprung, fully adjustable seats. The standardized controls and instruments with their ergonomically efficient layout are another important feature.



The elevating crane cabin has continuous height adjustment to ensure optimum visibility. The Electronic Monitoring System (EMS) gives the crane operator a full view of all crane functions.



On the superstructure, all drives are integrated. They feature frequency converter control and thus provide continuously variable speeds. EDC slewing gear is fitted with an electronic control system and also offers continuously variable working speeds, with electronic wind-load compensation, automatic anti-swing load damping and safe counter-current capability. The MK 80 features complete ballast as standard equipment, and an integral generator.

The fully air-conditioned switchgear cabinet features state-of-the-art data-bus modules as well as electronic systems for the continuously variable drives.



The crane supports are controlled at two panels on the chassis, with automatic levelling.

There is a single operating panel for the entire erecting process, with position and scale displays for the crane sensors.

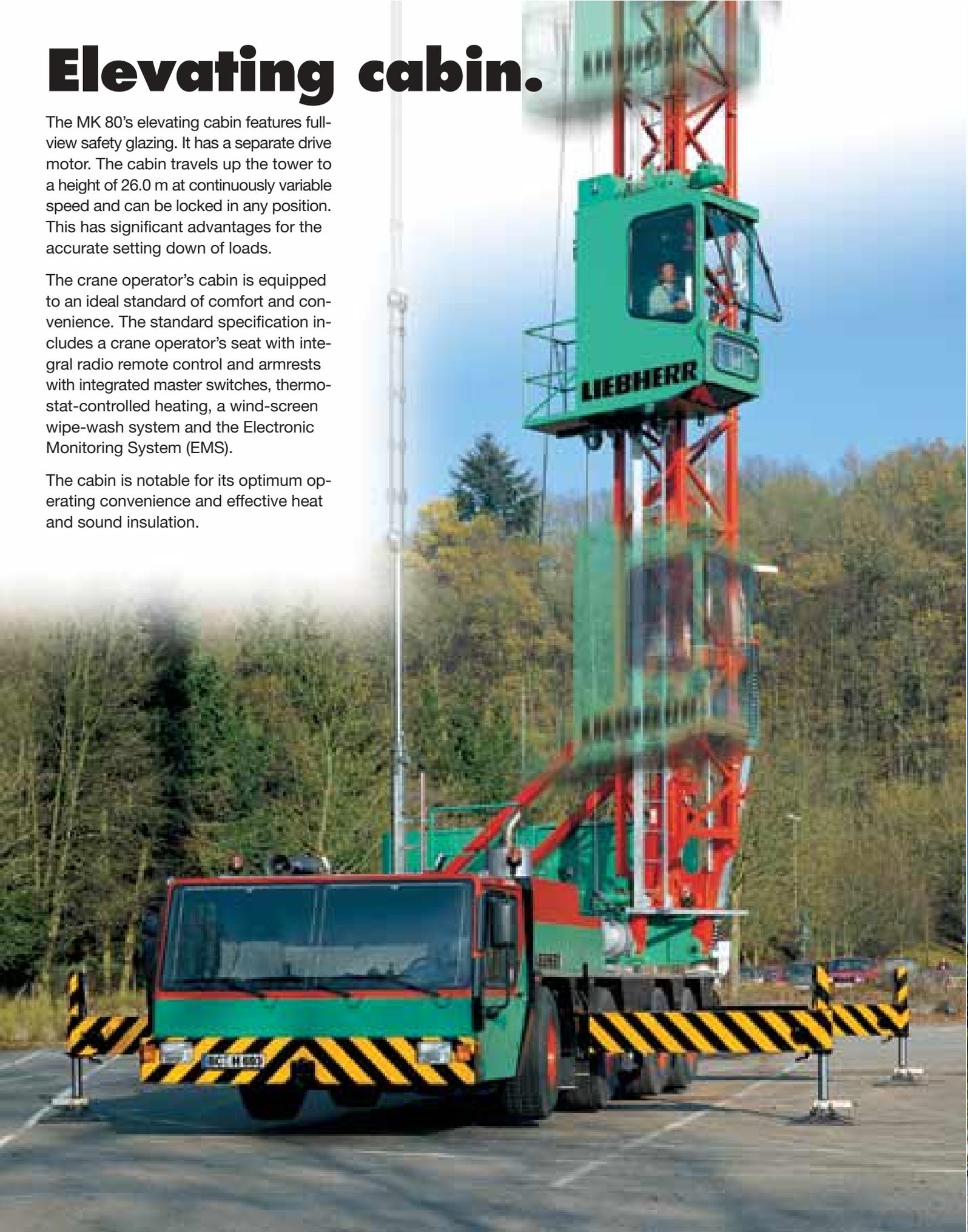


Elevating cabin.

The MK 80's elevating cabin features full-view safety glazing. It has a separate drive motor. The cabin travels up the tower to a height of 26.0 m at continuously variable speed and can be locked in any position. This has significant advantages for the accurate setting down of loads.

The crane operator's cabin is equipped to an ideal standard of comfort and convenience. The standard specification includes a crane operator's seat with integral radio remote control and armrests with integrated master switches, thermostat-controlled heating, a wind-screen wipe-wash system and the Electronic Monitoring System (EMS).

The cabin is notable for its optimum operating convenience and effective heat and sound insulation.



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