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Green technology

www.liebherr.com

LIEBHERR

Maritime cranes



Green solutions for enhanced efficiency



Environmental concerns have always been an integral part of Liebherr's philosophy

As the cargo and container handling industry evolves, the need for efficient equipment increases. Liebherr Maritime Cranes are manufactured using sustainable and environmentally sensitive processes. The cranes deliver unrivaled productivity, yet maintain respect for our environment by reducing or eliminating pollution.

Sustainability right from the start

Recyclable components:

Corporate sustainability is firmly anchored in our business. All structural components used for our maritime cranes are recyclable.

Noise protection:

Two Liebherr mobile harbour cranes of the latest generation work more quietly than one single crane of the older generation. That equals a sound level reduction of 3.6 dB(A). Liebherr container cranes feature insulated machinery houses and shielded motor enclosures to reduce noise.

Liebherr biodegradable oil:

Developed for its own product lines, oil of this kind does not pose any threat to the environment and ensures clean recycling. Reduced operating costs and reduced fuel consumption are additional benefits.

Sustainable manufacturing:

Liebherr uses the latest technologies to ensure that our manufacturing facilities are in line with best available industry standards. We work with environmental protection agencies wherever we have a plant to maximise our green credentials and minimise our impact on the environment.

We are committed to protecting the environment

Cleaner power for every installation

Conventional diesel engines:

Liebherr engines use advanced drive control to reduce power consumption and emissions. All engine series for maritime cranes meet EU Stage IV and EPA Tier 4 final emission requirements.

Hybrid drive systems:

The Pactronic system is an impressive power booster. Both the lifting and lowering time are sped up significantly despite the primary power remaining unchanged. Less maintenance, less fuel consumption and less emissions are the result.

All-electric cranes:

Liebherr has supplied electric STS and RMG cranes since 1967 and for many years ERTG cranes have been supplied for mains operation. An ERTG solution can be retrofitted to existing diesel machines. Liebherr Maritime Cranes continues to expand its full electric range with the launches of the LPS 420 E, CBG 500 E and LS 800 E. The range of electric cranes within Liebherr's maritime portfolio continues to grow.

Liduro drives:

Liebherr Liduro drives feature an innovative liquid cooling system which greatly increases the power density and significantly raises the efficiency of the drives, resulting in extended component lifetime. Electric cranes incorporate active front end technology allowing for energy regeneration.

Zero emission LHM travelling by battery:

Thanks to the new battery-powered Liebherr mobile harbour crane, completely emission-free handling is now also possible for mobile equipment. By using a battery pack, distances can now be travelled purely electrically - up to 2 km. using a battery pack, distances can now be travelled purely electrically - up to 2 km.

Zero exhaust emissions for cleaner ports

Automation software for more efficiency

Intelligent grabbing:

State-of-the-art intelligent cranes from Liebherr make an important contribution towards the eco-friendliness of the maritime industry. An algorithm-based system detects the properties of bulk commodities and optimises the grab filling rates. Less cycles for the same turnover result in considerable energy savings.

Path finder / sway-free load:

A path finder system uses advanced computer algorithms and machine learning to anticipate and eliminate any deviations from the optimum flight path before they occur, resulting in reduced cycle times and energy consumption.

Synchronised lifting:

One system, two cranes and only one crane operator. This system combines two cranes into one functional unit. Any unnecessary crane movements are impossible. Such precision saves time and energy.

Active heave compensation:

The AHC system evaluates current wave movements that affect the crane and compensates them proactively and fully automatically by moving the winch. The AHC contributes to safety, efficiency and energy savings.

Our technology enables low-emission cargo handling

