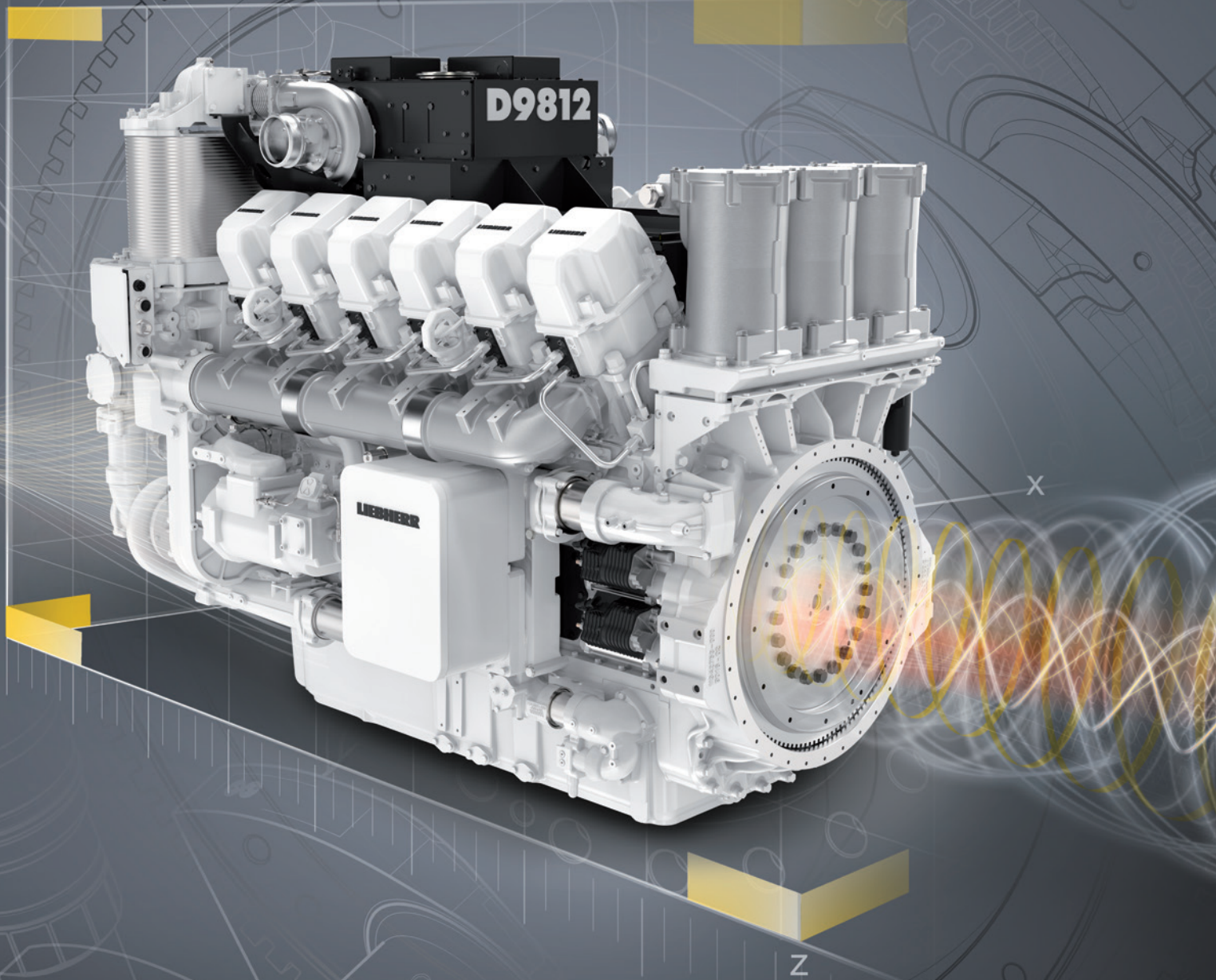


New D98 Diesel Engine Series

Empower your Business



LIEBHERR

Your new standard for power

The Liebherr DNA

Over sixty years of development experience and the innovative Liebherr spirit lead to the development of the new D98 engine series showcasing every element of the Liebherr DNA. With its pioneering product features, it resets the benchmark in the engine market.

Liebherr's entrepreneurial values and the challenging requirements of our customers encouraged us to reach new innovative levels. The D98 is proof of our motivation not only to provide engines as a component, but as the heart of the machine's performance.

Concentrated power

From the V12 to the V20 version, the D98 diesel engine range offers the best specific power ever. We can reach up to 43.5 kW per liter displacement (0.44 hp/cu in), which establishes a new market standard in terms of power. Furthermore, the engine series also sets a new standard in terms of efficiency.

The D98 series at a glance

Diesel Engine	12, 16, 20 cylinders
V-Angle	60°
Bore	175 mm (6.89 in)
Stroke	215 mm (8.46 in)
Displacement per cylinder	5.17 l (315 cu in)
Ignition pressure	max 240 bar
Injection pressure	up to 2,200 bar
Rated speed	1,200 – 1,900 rpm
Emission level	Fuel consumption optimized, EPA Tier 2, EPA Tier 4 final
Mechanical efficiency in %	up to 45%*

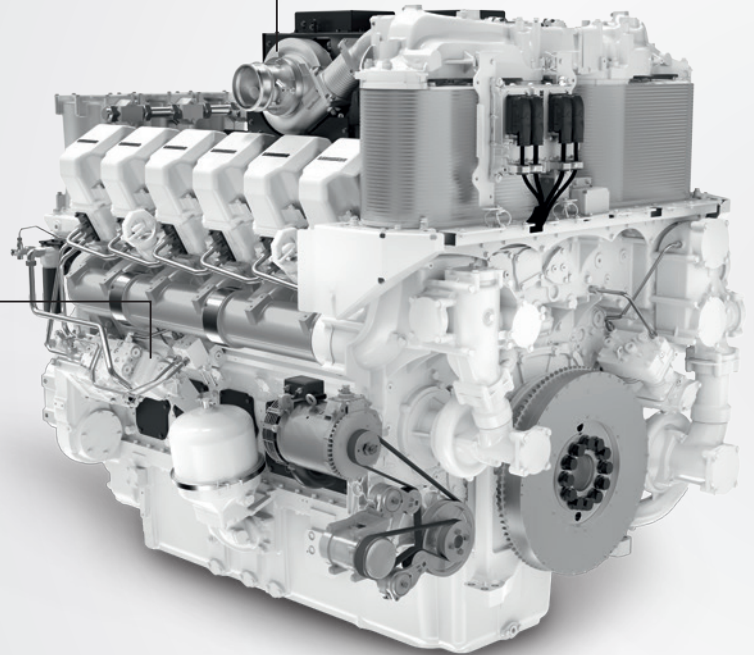
* depending on operating conditions and emissions limits

Turbocharged After-Cooled

New modular turbocharged system to provide the optimal quantity of air to reach the maximum power and reduce fuel consumption.

Liebherr Common Rail Injection System

The high pressure fuel pump of the common rail system and the injectors are Liebherr in-house developments and reach 2,200 bar injection pressure. It perfectly matches with all other engine components for optimized performance and best in class fuel efficiency.



The D98 engine series empowers your business

With outstanding power density and best-in-class fuel efficiency, the D98 powers your equipment with higher performances at lower operating costs.

Operates wherever you need with reduced footprint

The D98 series is not only capable of operations under current and upcoming emission regulations. It also takes care of your global environmental footprint. It operates wherever and whenever you need it, even under arctic or in harsh conditions. In a nutshell, the D98 series has been designed to fulfil all your needs.

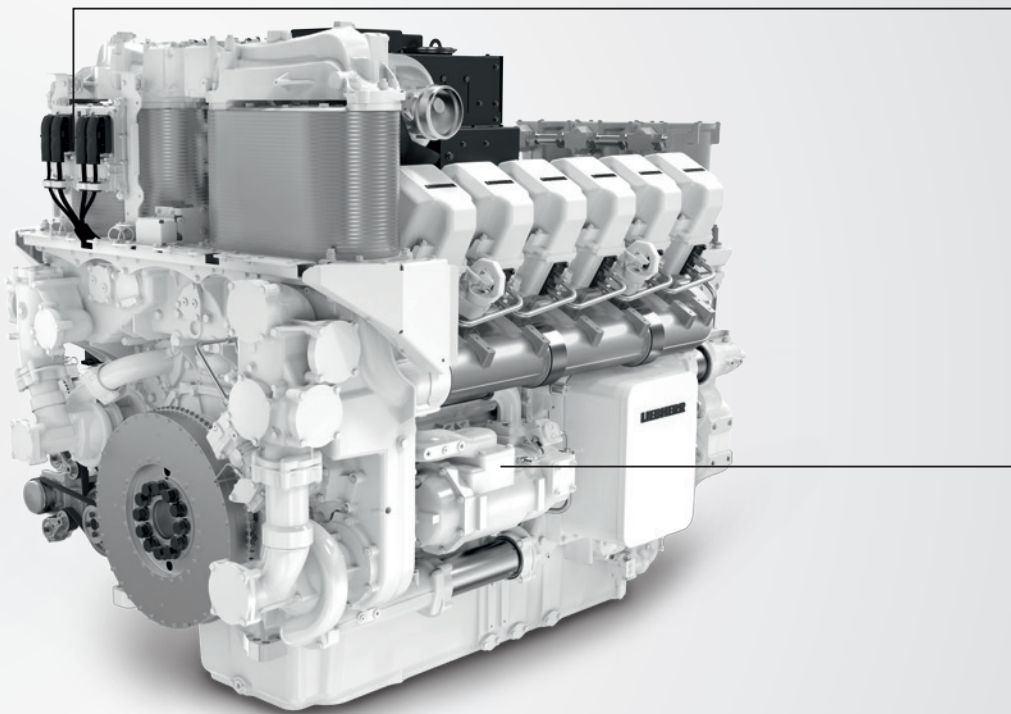
Serviceability

In order to bring the highest availability for your machine, we optimized the maintenance operations. Components are accessible, checks are quick, exchanging parts is easy and your engine keeps running.

Tailored to your requirements

The modular concept of the engine allows us to build the engine exactly to your requirements. Depending on the application, the engine consists of scaled components to provide the machine with the optimized power at the right time.

	V12		V16		V20	
Displacement	62 l	3,787 cu in	83 l	5,049 cu in	103 l	6,312 cu in
Power rating	1,250 – 2,700 kW	1,676 – 3,621 hp	2,000 – 3,600 kW	2,682 – 4,828 hp	2,700 – 4,500 kW	3,621 – 6,035 hp
Peak torque	15,000 Nm	11,063 lb-ft	20,000 Nm	14,751 lb-ft	25,000 Nm	18,439 lb-ft
Length	2,640 mm	103.9 in	3,160 mm	124.4 in	3,680 mm	144.9 in
Width	1,599 mm	63.0 in	1,599 mm	63.0 in	1,599 mm	63.0 in
Height	2,075 mm	81.7 in	2,075 mm	81.7 in	2,075 mm	81.7 in
Dry weight	8,650 – 9,300 kg	19,070 – 20,503 lb	11,700 – 12,400 kg	25,794 – 27,337 lb	14,700 – 15,500 kg	32,408 – 34,172 lb
Oil system capacity	170 – 240 l	180 – 254 U.S. qt	240 – 300 l	254 – 317 U.S. qt	320 – 390 l	338 – 412 U.S. qt



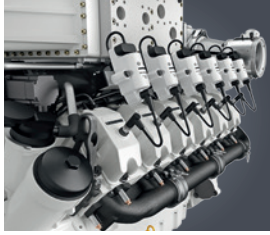
Liebherr Engine Control Unit (ECU)

All functions of the engine are controlled by the Liebherr engine control unit granting a perfect match of hardware and software. The ECU includes diagnostic software and supports extended engine lifetime.

Oil Filtration

Liebherr engines operate under the highest temperature fluctuations and do not affect productivity levels.

Liebherr Components



Gas engines



Diesel engines



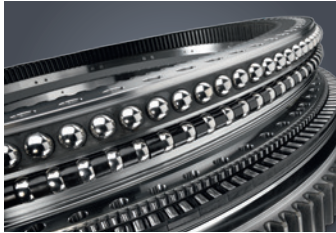
Fuel injection systems



Axial piston hydraulics



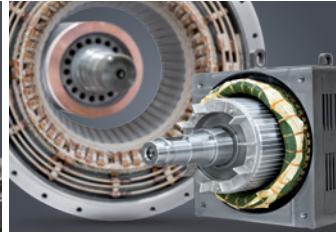
Hydraulic cylinders



Large diameter bearings



Gearboxes and winches



Electric machines



Remanufacturing



Human machine interfaces



Control electronics



Power electronics



Switchgear



Software

From A to Z, the components monitoring of the Liebherr Group offers a broad spectrum of solutions in the area of mechanical, hydraulic, electric and electronic drive system and control technology. The efficient components and systems are produced at a total of ten production sites around the world to the highest standards of quality. Central contact persons for all product lines are available

to customers outside the Liebherr Group at Liebherr-Components AG and the regional sales and distribution branches.

Liebherr is your partner for joint success: from the product idea to development, manufacture and commissioning right through to series production and remanufacturing.

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