KAESER COMPRESSORS®

MOBILAIR® M 450

Portable Compressor

With the world-renowned SIGMA PROFILE

Flow rate 37.7 m³/min to 48.1 m³/min (1330 cfm – 1700 cfm)

www.kaeser.com

MOBILAIR® M 450

With the MOBILAIR M 450, KAESER brings the most powerful oil-injected portable compressor yet to the road. Powered by a quality Mercedes Benz engine, this portable powerhouse is exceptionally durable and efficient. In combination with the highly effective energy-saving fan, the premium performance Sigma Profile rotary screw airend delivers even greater efficiency.

The Mobilair M 450 is designed for continuous construction site operation even in the toughest of weather conditions, whilst its dynamic ‘pV control’ provides incredible flexibility, meaning that one and the same system can deliver pressures between 6 and 14 bar. This feature also helps save energy, since the operator always uses only the pressure that is actually required by the specific application at hand.

Flexible application

The construction site chassis with steerable axle and foldable tow bar, combined with the parking brake, ensures secure, space-saving positioning of the compressor and straightforward transportation. A recessed lifting eye and fork-lift pockets are also on board. The MOBILAIR M 450 can optionally be equipped with skids or machine feet for stationary installation.

Durable and resilient

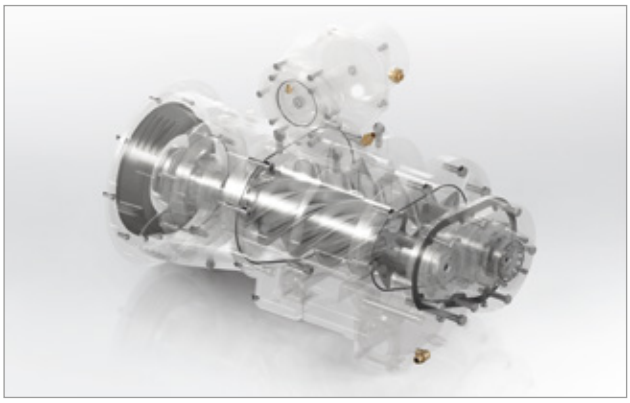
The MOBILAIR M 450 provides a dependable supply of quality compressed air at all times - even under the harshest of operating conditions. This resilient powerhouse operates flawlessly at ambient temperatures from -10 to +50 °C. Furthermore, the SIGMA CONTROL SMART compressor controller ensures a safe and smooth start even at high altitudes.

Service friendly

The MOBILAIR M 450 is particularly simple to service and maintain. All maintenance points are easily accessible, which makes changing the air filter with its safety elements quick and straightforward. Customised and individual maintenance contracts ensure that this high-performance compressor is always ready for construction site use.

Made in Germany

The various ranges of MOBILAIR portable compressors are all manufactured at KAESER’s headquarters in Coburg, Northern Bavaria. Equipped with the very latest technology, the recently modernised portable compressor plant boasts state-of-the-art equipment, including a TÜV-certified sound testing area for free-field sound level measurement, a facility for high-performance, high-quality powder coating and efficient manufacturing logistics.



SIGMA PROFILE airend

At the heart of every MOBILAIR system lies a premium-quality rotary screw airend featuring KAESER’s energy-saving SIGMA PROFILE rotors. The airend's optimised flow characteristics enable it to deliver more compressed air for less energy. Power is transmitted from the engine via a gear transmission, whilst the airend’s low operating speed contributes to increased efficiency and longer service life.

Meticulous design for perfect performance

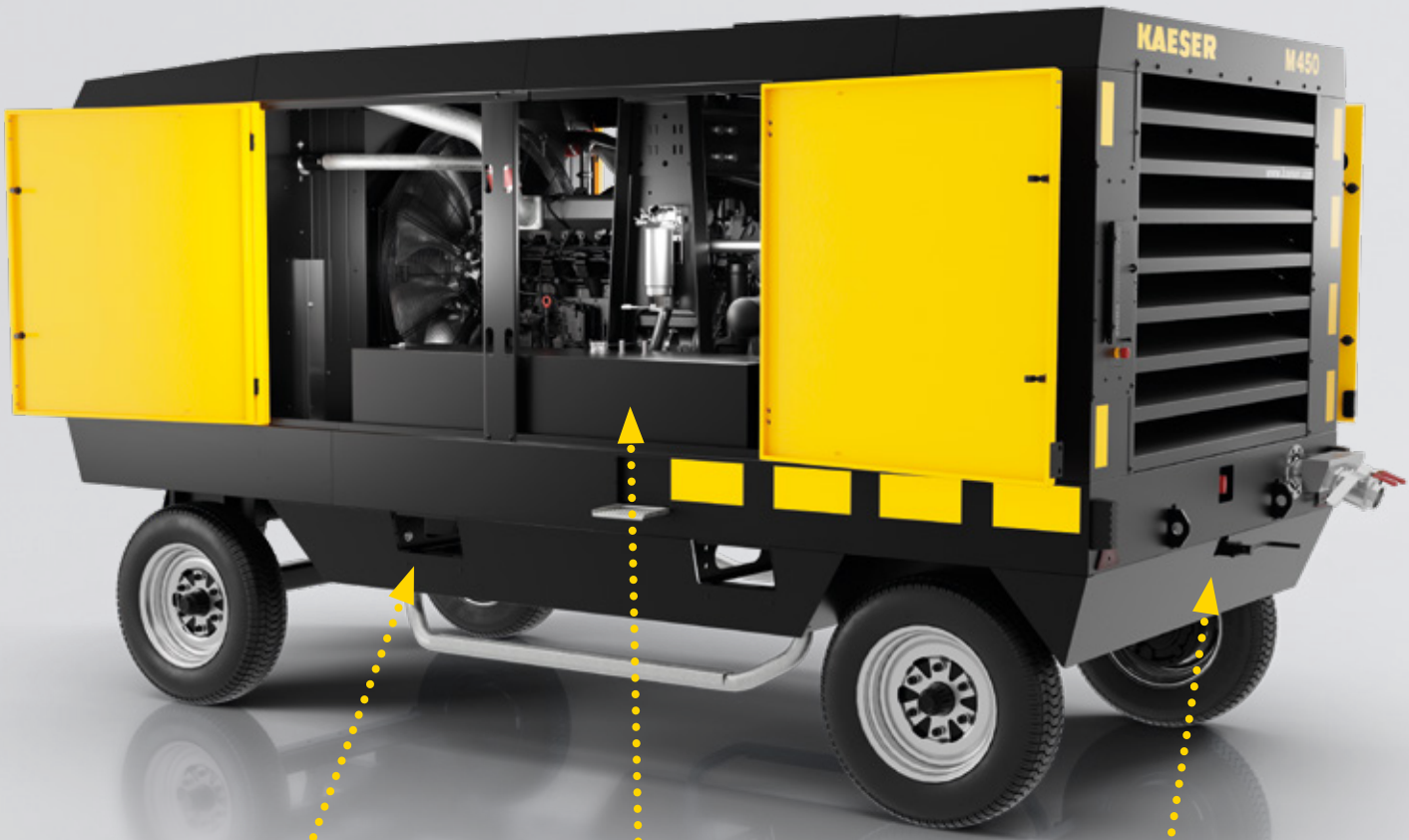
Industrie 4.0 @ MOBILAIR

With the TELEMATICS 24 option, Industrie 4.0 comes to the construction site. Optionally available for various countries and following approval of the data usage contract, KAESER can equip the M 450 ex-works - at no extra cost - with a modem and connects it to the telematics portal.

The best part: KAESER pays the portal fees for 24 months. You can therefore view operating data, current messages and system location online.

Through anonymous evaluation of the machine data by KAESER, you help to make system operation and usage even more efficient and reliable.

The M 450 in detail



Safe loading

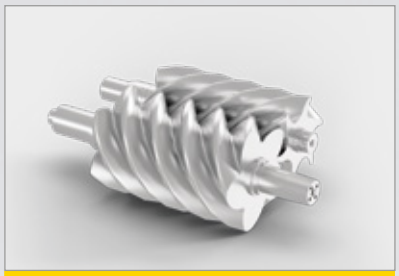
Regardless of the destination, safety takes priority when it comes to transportation of the M 450. The system is therefore fitted as standard with lashing eyes and climbing aids to enable easy access to the crane lifting gear.

Generous tank capacity

Construction site staying power: when full, the fuel tank has sufficient capacity to last an entire work shift without any problem. This saves costly downtime due to time-intensive refuelling.

Parking break

The M 450 is fitted with a parking brake as standard. This guarantees safe installation on all construction sites, no matter how rough the terrain, and assures secure storage.



SIGMA PROFILE rotary screw airend

At the heart of every MOBILAIR system lies an energy-saving SIGMA PROFILE rotary screw airend. Premium design, meticulous manufacturing and precision-aligned anti-friction bearings guarantee long service life and exceptional efficiency.

Air filter

When cleaning the air filter, additional safety elements prevent damage from occurring due to the ingress of contaminants. This enables maintenance to take place even under harsh environmental conditions.

SIGMA CONTROL SMART

Pressure is easily adjusted on the SIGMA CONTROL SMART compressor controller and can therefore be precisely adapted to suit the needs of the specific application. The easy-to-read display provides a clear overview of all operating data.

Powerful Mercedes / MTU engine

A quality Mercedes MTU engine with Tier 3 emissions provides the power for the compressor. In conjunction with the energy-saving fan, this makes the M 450 exceptionally efficient.

Steerable axle

Thanks to its superior running characteristics and manoeuvrability, the steerable axle assures safe on-road performance. It also provides excellent stability on the construction site.

Compressed air connection

The M 450 has all of your compressed air needs covered with its various available compressed air connections. Compressed air can be drawn off via a DN80 flange or a connection ramp with 2 x G1 and 1 x G2 ½ screw threads.

Refinery equipment (option)

In addition to the standard spark arrestor, the M 450 can optionally be equipped with an engine shut-off valve, which automatically switches the machine off upon intake of combustible gases.

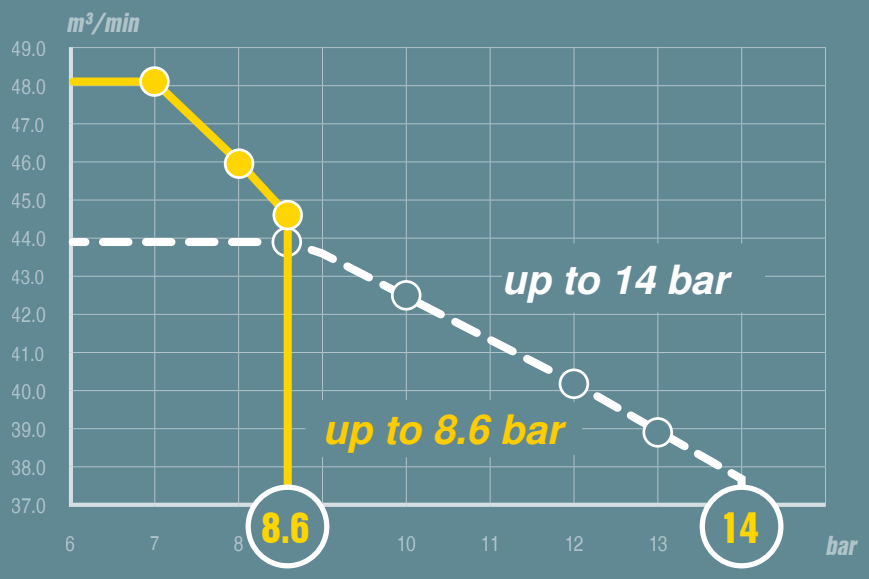
Compressed air aftercooler (option)

With the optional aftercooler, the compressed air is cooled to 7 °C above ambient temperature. Its angled installation ensures frost-proof drainage of the condensate, which is evaporated by the hot exhaust gases.

Technically oil-free compressed air (option)

Depending on the application, the M 450 can also be equipped with a microfilter combination for technically oil-free compressed air. This option delivers air with an oil aerosol content of < 0.01 mg/m³, as per the requirements of ISO 8573-1.

Choice of 2 pressure variants

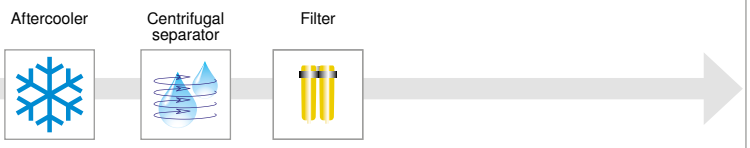


pV control

Thanks to pV control, maximum pressure (p) – adjustable in steps of 0.1 bar between 6 and 14 bar – directly influences the maximum possible flow rate (V), thereby providing even greater flexibility in terms of both pressure and flow rate. This feature is particularly beneficial when working with longer hose lines.

Models are available in two pressure variants – 8.6 and 14 bar.

Compressed air treatment variants

System A - Cool - Condensate-free		Cool, condensate-free compressed air (100% saturated), **for compressed air tools and temporary replacement of stationary compressors**
System F - Cool - Condensate-free - Filtered		Cool, condensate-free compressed air (100% saturated), **free from contaminants and technically oil-free in accordance with applicable regulations (ZTV-ING)**

Technical specifications

Model	Flow rate at working pressure								Engine type	Rated engine power	Fuel / AdBlue tank capacity	Operating weight	Compressed air treatment
	Pressure range to		7 bar 100 psi		8.6 bar 125 psi	10 bar 145 psi	12 bar 175 psi	14 bar 200 psi		kW	l	kg	
M 450	8.6 bar 125 psi	m³/min	48.1	*pV*	44.6	-	-	-	Mercedes Benz OM 406 LA	360	900	6177	A / F
		cfm	1700		1575								
	14 bar 200 psi	m³/min	43.9	*pV*				37.7					
		cfm	1550					1330					

Dimensions

Unit with height-adjustable tow bar		
Skid-mounted unit		
Stationary unit		

The world is our home

As one of the world's largest manufacturers of compressors, blowers and compressed air systems, KAESER KOMPRESSOREN is represented throughout the world by a comprehensive network of wholly owned subsidiaries and authorised distribution partners in over 140 countries.

By offering innovative, efficient and reliable products and services, KAESER KOMPRESSOREN's experienced consultants and engineers work in close partnership with customers to enhance their competitive edge and to develop progressive system concepts that continuously push the boundaries of performance and technology. Moreover, decades of knowledge and expertise from this industry-leading systems provider are made available to each and every customer via the KAESER group's advanced global IT network.

These advantages, coupled with KAESER's worldwide service organisation, ensure that every product operates at the peak of its performance at all times, providing optimal efficiency and maximum availability.

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018
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KAESER COMPRESSORS Australia Pty. Ltd.
Locked Bag 1406 – Dandenong South – Vic. 3164
45 Zenith Road – Dandenong – Vic. 3175
Phone: +61 39791 5999 – Fax: +61 39791 5733
www.kaeser.com – E-mail: info.australia@kaeser.com

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