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# Dürr Technik

### Oil-Free Compressor Solutions for the Railway

Dürr Technik: The oil-free compressor specialist for the important functions of a train.

As a specialist in oil-free piston compressors, Dürr Technik combines its long experience with an innovative spirit to meet the most extreme demands in the rail industry.

We offer a wide range of products and plan the ideal solution for manufacturers and operators of railway vehicles as well as with system suppliers.

From auxiliary air to main air, from raising the pantograph to brake systems, we customise solutions

to the train's individual characteristics. All our products are optimised for maximum performance under tough conditions, saving time, effort and maintenance costs with their robust, innovative technology.

#### Highest Quality Standards

Our oil-free compressors are manufactured in Germany and meet all industry certifications and standards.

#### Main Air

For railway vehicles the compressor is the core of the air supply. As the first oil-free railway main air





compressor manufacturer worldwide, Dürr Technik fulfils the highest requirements for reliability, precision and durability.

Each train has unique and individual requirements. Our oil-free main air compressors offer multiple options to meet your specific requirements. With quality design, reliable performance and German engineering, we offer proven main air compressor models. More than 200 customers from 35 countries worldwide rely on Dürr Technik.

#### Advantages

Our innovative compressors are economical to own and operate, while our oil-free technology makes them more environmentally friendly too. Consider all these important and relevant factors when deciding on your oil-free compressor choice for rail transport.

#### MC Series: Oil-Free Main Air Compressors for Rail

The MC series is specially developed for the railway sector. It is based on the know-how and experience of over 40 years of oil-free piston compressors. The MC series is particularly compact. With low vibration it offers an ideal solution for new railway projects that must withstand extreme conditions.

#### **Characteristics**

- Operating temperature from -40°C to +55°C
- Various installation positions of the units possible

- Closed protective housing with customised sound insulation
- IE3/E1 motors compatible with variable frequency drive
- Durable and easy to maintain
- Low life-cycle costs
- Optimum dust and stone chip protection due to robust housing
- Low noise emission thanks to special sound insulation
- Reliable start-up even at very low temperatures
- Developed and produced in Germany

#### **Customised Compressed Air Systems**

Main air compressors of the MC series are suitable for installation in a wide variety of vehicle types and can be custom configured according to the installation situation.

Both the dryer and the welding frame can be individually adapted to the respective vehicle type and installation situation.

#### VFD-Capable IE3 or IE1 Motors

The main air compressor is operated by a motor with continuous running capability.

The motor has been specifically developed for use in rail vehicles and is designed for operation with a frequency converter.

#### Withstands High Vibrations for a Lifetime

The main air compressors of the MC series are equipped with very robust wire rope vibration dampers. They protect the compressor and the vehicle from strong vibrations and ensure trouble-free operation. The vibration dampers are maintenance-free during the entire service life of the compressor. Alternatively, other types of vibration dampers can be used where the situation requires.

## E-Bull: Oil-Free Versatile and Compact Compressor

With the E-Bull, Dürr Technik has expanded its innovative range of oil-free piston compressors,



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which are specially designed for application in rail and commercial vehicles for use worldwide.

- Oil-free 2-cylinder air compressor aggregate with an AC-motor (IE3) suitable for frequency inverter operation and extended operating temperature range
- Extremely long operational lifetime
- Compact solution with variable mounting positions
- Big filter surface of the suction filter guarantees
- A long lifetime and optimal suction behaviour
- Well protected against dust and water with degree of protection IP 67
- High flow rate at low weight only 0.1kg/l/min
- Low energy consumption of just 12.1W/l/min
- Extremely quiet

The E-Bull compressor is ideal for integration into modern compressed air generation and treatment systems.

Based on one or more compressors and in combination with cooling units, drying systems and electrical and pneumatic control elements, main air stations can be designed exactly according to customer requirements and flexibly installed depending on vehicle consumption.

- · Modular, redundant and silent
- Easily adaptable electrical, mechanical and pneumatic interfaces
- Flexible control and monitoring
- No frequency converter necessary
- Designed and optimised to withstand tough environmental conditions

#### System Solutions

You can rely on our unique competence in the development and manufacturing of complete compressed air systems and installations as an



individual system solution in accordance with your specifications.

Receivers, dryers or control units can be integrated during installation depending on the spatial conditions.

To ensure an optimal compressed air supply, we plan your system solution down to the tiniest detail, using the latest technologies, tools, methods and expertise.

#### Customised Main Air Supply Units

Dürr Technik main air compressors can be individually adapted to customer requirements and supplemented, for example, with an adsorption dryer, vibration dampers or a welded frame according to railway standards.

Our main air supply units are also perfectly suited for installation under frame, in the machinery room or on the roof, as they are compact, light, and low in vibration. Depending on the air demand, an MC series or an E-Bull compressor is used.

Visit our website duerr-technik.eu.



Inspiring With Green Air