

Atlas Copco

Railway Air Compressor Systems



Sustainable Productivity

Atlas Copco

Keep on track with Atlas Copco

Atlas Copco is an independent air compressor manufacturer and worldwide market leader in compressed air and air treatment technologies. For more than 135 years Atlas Copco has been recognized as a system technology leader in the manufacture and service of high-quality compressed air equipment for the railway industry.

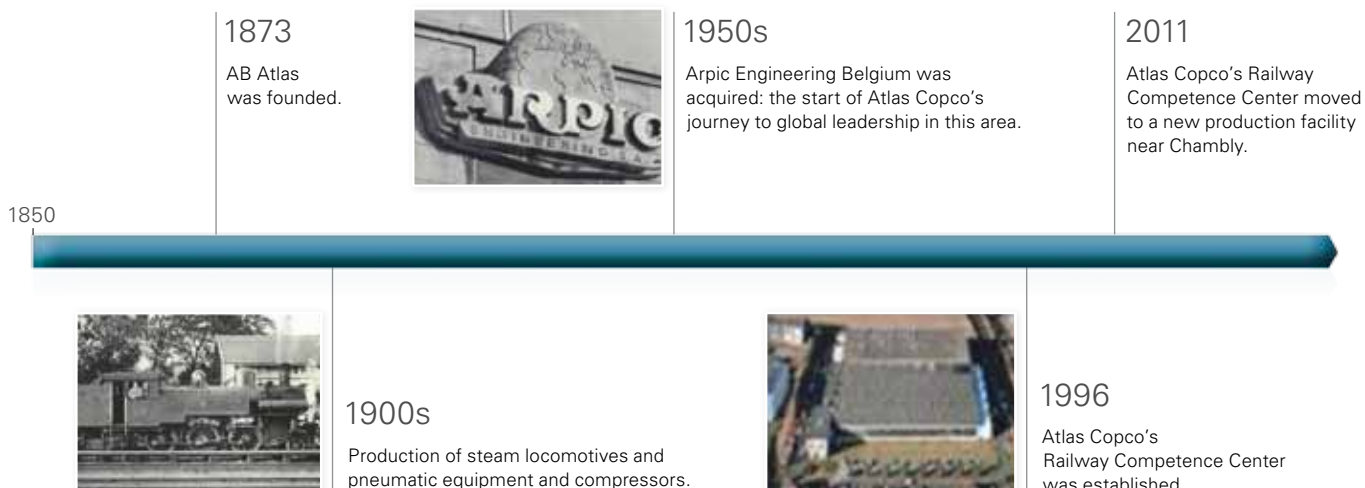
Applications worldwide

You can find Atlas Copco railway compressors in use in hundreds of railways worldwide. From standard to custom-design, for every specification and application, Atlas Copco offers highly reliable equipment and service anywhere in the world, for all your compressed air requirements for railways and other moving vehicles.



Railway Competence Center

Rather than relying on third parties or suppliers, Atlas Copco develops its own compressed air technologies. Located in a state-of-the-art production facility near Chambly, France, Atlas Copco's Railway Competence Center focuses entirely on railway products. Dedicated specialists oversee product development, project engineering, purchasing, production and marketing of Atlas Copco's railway compressors and equipment.





What are you looking for?

- Reliable compressors and equipment which you can trust
- Maintainable compressors to keep costs low and availability high
- Small compressors to maximize the space available for passengers
- Quiet compressors for a comfortable travelling environment
- Energy-saving compressors to cut costs
- Light compressors to reduce operating costs
- Fast and worldwide availability of support, service and spare parts

Atlas Copco can meet all these needs, and more!

► Reliability you can trust

Our railway air systems are built to last and contain an absolute minimum of moving parts, many of which are constructed from corrosion-resistant materials. Their rigid and sturdy construction is designed to withstand external vibrations, shock loads and extreme ambient conditions. Atlas Copco railway air compressors are built for changing duty cycles (10%-100%) and offer long service intervals. They are fully tested and qualified one-by-one, and are built in accordance with all relevant international norms and standards for railway applications.

► The cost-efficiency you need

Railway operators are facing strong public and governmental pressure to increase their operational performance and punctuality, while reducing their costs. Atlas Copco can help achieve these goals. Atlas Copco's efficient and patented compressors reduce energy consumption to a minimum. Coupled with long lifetime components, our solutions provide the lowest lifecycle costs, allowing you to conduct a truly efficient cost reduction strategy.

► Full Feature: Everything integrated

Atlas Copco pioneered the innovative Full Feature concept of compressor packages. By selecting Full Feature you get an engineered, pre-packaged, customized compressed air system for your railway application, including mounting brackets, quick connectors, mounted dryers and filters. The whole package is compact, easy to install and simple to maintain.

A wide portfolio of specialized railway products

Atlas Copco offers a variety of compressors for the generation of economical and high-quality compressed air. Available in a number of variants to match your specific needs, they are designed for reliable, continuous duty and minimum maintenance. A full range of auxiliary equipment is also available.



1 SFR oil-free scroll compressors

The SFR orbiting scroll compressor, validated for railway applications, is an oil-free, low maintenance compressed air solution that is reliable, rated for a 100% duty cycle, and suited to the harshest environmental conditions. Flexibility is key: the SFR can be installed on top of, inside or underneath the vehicle. Available from 200 to 900 l/min free air delivery.



2 LFXR pantograph compressors

Designed for use on any electrically driven railway vehicle with a pneumatic pantograph, LFXR oil-free piston pantograph compressors feature a space-saving design, easy installation and low maintenance. Available from 50 to 80 l/min free air delivery.



3 SDR membrane dryers

SDR membrane dryers with pre-filters remove oil, particles and moisture from compressed air in the most demanding conditions, ensuring the lowest pressure drop and purge air loss for the highest possible efficiency. Available for the whole product range of Atlas Copco's railway compressors, features include:

- Special solenoids
- Fire- and smoke-resistant shells
- Optimized nozzle for high performance and customized pressure dewpoint



8 Customized products

Every Atlas Copco railway compressed air system is built to exacting standards, norms and directives. Customized products are available to meet different installation conditions and specific requirements. Atlas Copco can provide the solution you need for your frame, control system or power supply.



7 GAR 11-37 oil-injected screw compressors

These compact, space-saving oil-injected screw compressors are designed, built and tested to meet the toughest conditions in railway applications, such as extreme climatic conditions, high humidity, shocks and vibrations. Available from 1200 to 4200 l/min free air delivery.



6 GAR 5-14 oil-injected screw compressors

These oil-injected, air-cooled screw compressors are designed for dedicated railway applications. They are proven, reliable, compact, low weight, low noise machines. For optimum flexibility they can be installed on top of, inside or underneath the vehicle. Available from 600 to 1600 l/min free air delivery.



4 DDR/PDR compressed air filters

Compressed air filters remove oil particles, water and dust, keeping them from damaging your railway air system. The railway compressed air filters are optimized for use in the demanding conditions on board railway vehicles. Available for the whole product range of Atlas Copco's railway compressors, features include:

- Robust design to ensure filters are resistant to shock, dust and vibration
- Special pressure difference measurements
- Electrical railway approved drain
- Heater



5 LER/LTR/LFR piston compressors

Providing exceptional reliability at a low operating cost, LER/LTR oil-lubricated and LFR oil-free aluminum piston compressors deliver the lowest operating temperatures in the industry. Available from 250 to 1200 l/min free air delivery.

A compressor for every application

Compressed air is critical to the smooth and safe operation of railway vehicles, from central brake systems to pneumatic door operation and vehicle suspension. Atlas Copco's railway air systems are developed to supply high-quality compressed air for all kinds of applications on a wide variety of trains – locomotives, high-speed trains (HST), multiple unit (MU) trains, light rail vehicles (LRV), subway vehicles, and more. In addition, Atlas Copco offers state-of-the-art compressor solutions for other road transportation and mining and construction vehicles for which the same tough environmental conditions apply.



Typical railway applications:

- Brake systems
- Pantograph device
- Air suspension
- Auxiliary systems: doors, toilets, sanding devices, seats, horns, screen wipers, greasing devices etc.

Additional vehicles which might need railway compressors:

- Mobile service trucks
- Mining vehicles
- Fire trucks
- Agricultural vehicles

Meeting the most stringent norms for railway air systems

Each Atlas Copco railway compressed air system is built to exacting standards, norms and directives to meet the harsh vibration and ambient conditions found in many of these applications. The table displays the most relevant of these norms.

Standards	Description
ISO 1217 C	Displacement compressors – Acceptance tests
ISO 8573-1	Compressed air for general use
ISO 2151	Acoustics – Noise test code for compressors and vacuum pumps
IEC 61373	Railway applications – Rolling stock equipment; shock and vibration tests
EN-12663	Sections 4.5 and 4.7 – Standards for structural requirements of railway vehicle bodies
NF F 61-010	Railway rolling stock – General rules for cabling and apparatus mechanical fixing
EN 50264	Railway rolling stock power and control having special fire performance
EN 50306	Railway rolling stock thin wall having special fire performance
EN 287-1	Approval testing of welders – fusion welding
EN 288-3	Specification and approval of welding procedures for metallic materials
IEC 60077-1	Electric equipment for rolling stock
EN 60204-1	Safety of machinery – Electrical equipment of machines – Part 1
IEC 60349	Electric traction – Rotating electrical machines for rail and road vehicles
NF F 16-101	Rolling stock – fire behavior – Material selection

Supporting you at every destination

Atlas Copco provides quick, efficient parts and service support for every railway customer, everyday, anywhere around the world. Planned maintenance is minimal and often accomplished by customers themselves. When repairs are required, Atlas Copco's qualified service is just a phone call away. With factory-direct and distribution service on-call for any service requirement, in every country, it's no wonder that Atlas Copco is the preferred choice for thousands of railway applications.

Aftermarket services:

- Commissioning and start-up
- Field follow-up
- Maintenance parts and kits
- Maintenance jobs on site
- Overhaul parts and kits
- Overhauls
- Modifications
- Monitoring





Driven by innovation

With more than 135 years of innovation and experience, Atlas Copco will deliver the products and services to help maximize your company's efficiency and productivity. As an industry leader, we are dedicated to offering high air quality at the lowest possible cost of ownership. Through continuous innovation, we strive to safeguard your bottom line and bring you peace of mind.



Building on interaction

As part of our long-term relationship with our customers, we have accumulated extensive knowledge of a wide diversity of processes, needs and objectives. This gives us the flexibility to adapt and efficiently produce customized compressed air solutions that meet and exceed your expectations.



A committed business partner

With a presence in over 170 countries, we will deliver high-quality customer service anywhere, anytime. Our highly skilled technicians are available 24/7 and are supported by an efficient logistics organization, ensuring fast delivery of genuine spare parts when you need them. We are committed to providing the best possible know-how and technology to help your company produce, grow and succeed. With Atlas Copco you can rest assured that your superior productivity is our first concern!

