



# **ATLAS COPCO RAILWAY SOLUTIONS**

*Sustainable Productivity*

**Atlas Copco**



## ATLAS COPCO – KEEPING YOU ON TRACK SINCE 1873

For more than 140 years, Atlas Copco has been the world leader in high-quality compressed air equipment for the railway industry.

### APPLICATIONS WORLDWIDE

Atlas Copco compressors are used in railway vehicles throughout the world. From standard to custom-design, for every specification and application, we meet all of your compressed air requirements with top-quality, highly reliable equipment and service across the globe.

### RAILWAY COMPETENCE CENTER

Experience and expertise cannot be outsourced. That is why we develop our own, often patented, compressed air technologies specifically for the railway industry. At our IRIS-certified Railway Competence Center near Paris, specialists oversee every aspect of designing, building and marketing Atlas Copco's railway compressors and equipment

### AFTERMARKET SERVICES

**The purchase is just the start. Atlas Copco offers a wide range of services to keep your compressed air system performing optimally.**

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

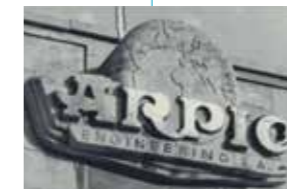
## 1873

AB Atlas was founded.



## 1950s

Arpic Engineering Belgium was acquired to start Atlas Copco's journey to global leadership in this railway solutions.



## 2015

Atlas Copco's Railway Competence Center receives ISO 9001 IRIS certification.



## 1900s

Production of steam locomotives, pneumatic equipment and compressors.



## 1976

First Atlas Copco railway screw compressors installed in Swiss locomotives.



## 1996

Atlas Copco's Railway Competence Center was established.



## A POWERFUL PRODUCT FOR EVERY RAILWAY NEED



### LOW WEIGHT

reduces  
operating costs



### SMALL FOOTPRINT

maximizes space for  
passengers and cargo



### LOW SOUND

ensures a comfortable  
travel environment



### HIGH RELIABILITY

creates peace  
of mind



### LOW LIFECYCLE COSTS

eliminate post-purchase  
expenses for low cost  
of ownership

ATLAS COPCO  
MEETS ALL  
THESE NEEDS,  
AND MORE!

### RELIABILITY YOU CAN TRUST

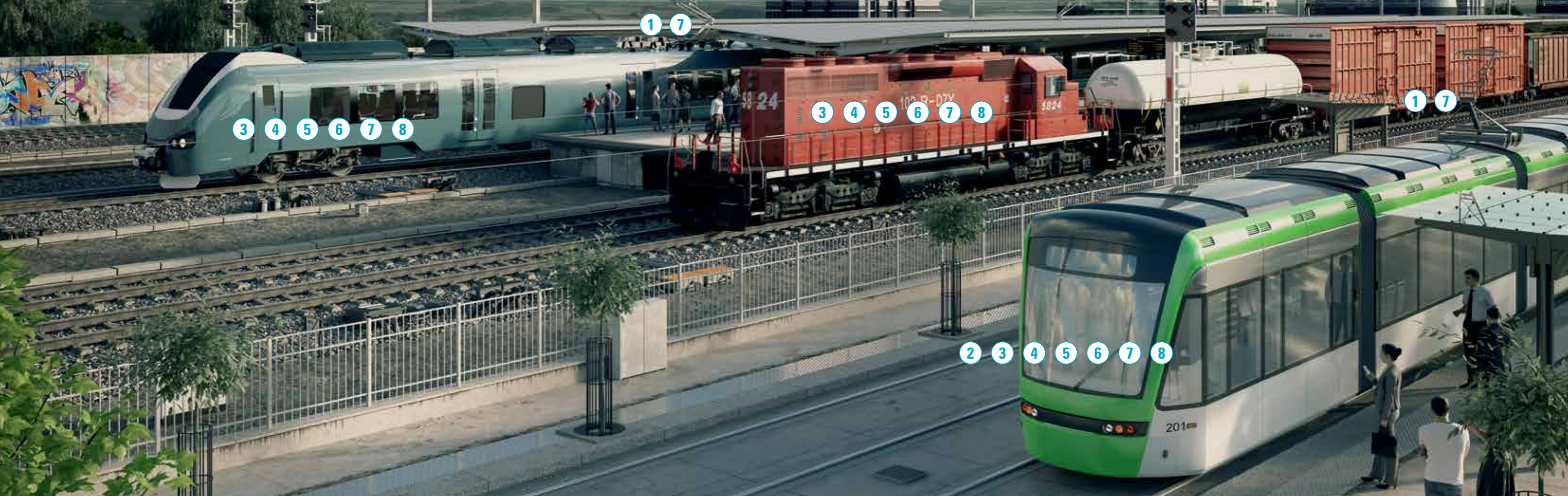
Using an absolute minimum of moving parts – all relevant ones corrosion resistant – our railway air systems are built to last. They are designed to withstand external vibrations, shock loads and extreme ambient conditions. Atlas Copco railway air compressors are designed and produced in accordance with all relevant international railway norms and standards, then fully tested and qualified one-by-one.

### THE COST- EFFICIENCY YOU NEED

Railway operations are facing strong pressure from the public and government to increase operational performance and punctuality, while reducing costs. Atlas Copco helps achieve these goals. Our patented, efficient compressors reduce energy consumption to a minimum. Coupled with long lasting components, our solutions provide the lowest lifecycle costs, allowing you to keep costs in check.

### FULL FEATURE: EVERYTHING INTEGRATED

Atlas Copco pioneered the innovative Full Feature compressor concept. By selecting Full Feature, you get an all-in-one, customized compressed air system for your railway application, including mounting brackets, quick connectors, integrated dryers, filters and instant condensate treatment. The whole package is compact, simple to maintain, and easy to install on top of, inside or underneath the vehicle. Just plug in and enjoy the clean reliable compressed air: we take care of all the rest.



## YOUR TICKET TO TOP-QUALITY COMPRESSORS

Available in a number of variants to match your specific needs, Atlas Copco railway compressors are designed for reliable, continuous duty and minimum maintenance. A full range of auxiliary equipment is also available.

### ① LFP<sub>R</sub> AND LFX<sub>R</sub> PANTOGRAPH COMPRESSORS



For use on any electrically driven railway vehicle with a pneumatic pantograph, LFP<sub>R</sub> and LFX<sub>R</sub> oil-free piston pantograph compressors feature a space-saving design, easy installation and low maintenance.

Available from 40 to 83 l/min free air delivery.

### ② LER/LTR/LFR PISTON COMPRESSORS



Providing exceptional reliability at a low cost, LER/LTR oil-lubricated and LFR oil-free aluminum piston compressors are designed for high performance and extended lifetime even in the harshest ambient conditions.

Available from 140 to 1100 l/min free air delivery.



### ③ SFR OIL-FREE SCROLL COMPRESSORS

The SFR orbiting scroll compressor, validated for railway applications, is an oil-free, low maintenance compressed air solution. It is reliable, rated for a 100% duty cycle, and suited to the harshest environmental conditions. The SFR offers performance and flexibility with low noise levels, vibrations and life cycle costs, and installation on top of, inside or underneath the vehicle.

Available from 200 to 500 l/min free air delivery.

### ④ SFR OIL-FREE 2-STAGE SCROLL COMPRESSORS

The railway-approved oil-free SFR with 2-stage scroll elements delivers a patented super flow for high performance and extended lifetime. Its direct drive concept ensures lean dimensions, low weight, short service time and high reliability. Noise levels, vibrations and life cycle costs are reduced to a minimum.

Available from 600 to 1700 l/min free air delivery.



### ⑤ GAR 5-14 OIL-INJECTED SCREW COMPRESSORS

The oil-injected, air-cooled GAR 5-14 screw compressors are designed for dedicated railway applications in extreme ambient conditions. They are a reliable, compact, low-weight, low-noise solution that can be installed on top of, inside or underneath the vehicle.

Available from 500 to 1600 l/min free air delivery.

### ⑥ GAR 11-37 OIL-INJECTED SCREW COMPRESSORS



The compact, space-saving GAR 11-37 oil-injected screw compressor was designed, built and tested to meet the toughest ambient conditions, such as extreme climate conditions, high humidity, shocks and vibrations.

Available from 1100 to 4500 l/min free air delivery.

### 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 in terms of frame, control system or power supply.

### ⑦ SDR MEMBRANE DRYERS

SDR membrane dryers with pre-filters remove oil, particles and moisture from compressed air, ensuring the lowest pressure drop and purge air loss for the highest efficiency.

Available for the whole product range of Atlas Copco's railway compressors.





## A DEDICATED COMPRESSOR FOR EVERY APPLICATION

Atlas Copco systems supply the high-quality compressed air that keeps railway and other vehicles running safely and smoothly. From light rail vehicles and buses to high-speed trains and heavy haul locomotives, our comprehensive range of compressors includes the right product for your application.

### RAILWAY VEHICLES

- Locomotives
- High-speed trains
- Multiple unit trains
- Light rail vehicles
- Subway vehicles

### OTHER VEHICLES

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






### OTHER HARSH ENVIRONMENT APPLICATIONS

- Outdoor port cranes, open pits, dusty plants
- Outdoor water locks with limited space
- Foundries with hot, dusty conditions

### TYPICAL RAILWAY APPLICATIONS

- Brake systems
- Pantograph devices
- Air suspension, curve tilting, station platform leveling
- Auxiliary systems: doors, toilets, air conditioning, sanding devices, entry steps/stairs, signal horns, screen wipers, greasing devices, etc.

## A COMPLETE PRODUCT RANGE

	0.5	1	2.5	5	10	20	30	40	60	80	l/s
	1.1	2.1	5.3	11	21	42	64	85	127	170	cfm
<b>LFpR, LfxR</b> 10 bar 	LFpR	LfxR									
<b>LER, LFR</b> 10 bar <b>LTR</b> 15-30 bar 			LER	LFR	LTR						
<b>SFR 2 - 14</b> 10 bar 				SFR							
<b>GAR 5 - 14</b> 10 bar 			Trams, Light rail vehicles, People movers, Buses	GAR 5-14							
<b>GAR 11 - 37</b> 10 bar 	All train types			Multiple units, Commuters	GAR 11-37						
						High speed trains					
							Locomotives				
								Heavy haul locomotives			



## CERTIFIED RAILWAY QUALITY

Each Atlas Copco railway air system is built to exacting standards, norms and directives to perform reliably in harsh vibration and ambient conditions.

### THE HIGHEST INDUSTRY STANDARDS

We work in compliance with the highest quality management and health and safety regulations. All Atlas Copco Business Areas have been approved by Lloyd's Register Quality Assurance in compliance with the following Management System Standards:

ISO 9001: 2008 / Quality Assurance  
 ISO 14001: 2004 / Environmental Management  
 OHSAS 18001 / Occupational Health & Safety

### IRIS CERTIFICATION

Atlas Copco has received the International Railway Industry Standard (IRIS) certification for its state-of-the-art Railway Competence Center in Chambly, France. The certification covers the center's design, development, manufacturing and aftermarket activities. The ISO 9001-based IRIS is the gold standard of the railway industry. Most companies in the sector will only work with suppliers that have earned the railway-specific quality certification.



## ALWAYS RIDE FIRST CLASS

Our commitment to you extends beyond supplying top-quality compressors and auxiliary products. With a presence in most countries – and support available 24/7 – we will always be there for you when you need us with expert customer service, skilled technicians and genuine spare parts.

 Presence in over 180 countries	 Dedicated customer service	 Skilled technicians available 24/7	 Fast delivery of genuine spare parts
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## ***COMMITTED TO SUSTAINABLE PRODUCTIVITY***

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call – Sustainable Productivity.



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Designs and specifications are subject to change without notice or obligation.  
Read all safety instructions in the manual before usage.

***Atlas Copco***