

# *Rolling stock*

Solutions for production  
and maintenance in the  
rolling stock industry.



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*Atlas Copco*

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## ***MEETING NEW DEMANDS***

*Ever since the first railway system appeared in 1820, progress has brought us reliable speed and endurance. From traditional horse power to pure machine power – taking it further than ever. The increasing focus on rail-bound transportation has resulted in higher production levels and new demands for everyone in the business. With a strong focus on improving operator ergonomics, safety and productivity.*

# MATERIAL REMOVAL

➔ *Atlas Copco can offer the right high quality solution for efficient and ergonomic grinding. Accessibility and outstanding power-to-weight ratio with operator comfort.*



## ANGLE GRINDERS

*Our Turbine and Vane grinders will always get a very high rate of material removal, even on the roughest surfaces. Sander version are also available.*



## ALUMINUM WORK

*Safe and precise cutting and deburring in aluminium. The dust extractor evacuates the aluminum chips*



## BEVELING TOOLS

*GTB25 and LSB38 are used for making perfect chamfers or radius for weld and paint preparation.*



## DIE GRINDERS

*For optimal productivity and operator comfort we offer our scatter damped die grinders.*



**WHEN BUILDING THE UNDERCARRIAGE, SUPERSTRUCTURE**, walls and roof of the train this involves a lot of weld preparation, cleaning castings and general work. This demands powerful grinders and sanders to do the manual job fast and easy but also with the best ergonomics in mind to safeguard workers health and minimize the risk for injury.

**BEVELING GIVES YOU** a sound welded joint with optimum amount of weld in place for maximum strength. Rounded edges of metal surfaces gives you proper thickness of coatings and avoids corrosion and protects edge from chipping. For a quick and perfect result you should use our GTB25 or LSB38.

## APPLICATION GUIDE – MATERIAL REMOVAL

Application	Product recommendation	Accessories
<b>Rough grinding and cutting off</b>	GTG40 Angle Turbine grinder GTR40 Turbine Straight grinder GTG25 Angle Turbine grinder LSV48/38 Angle grinders LSR48 Straight grinder LSF38 Die grinder	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings
<b>Medium rough grinding and rough sanding</b>	GTG25 Angle Turbine grinder LSV48/38 Angle grinders LSR48 Straight grinder LSF38 Die grinder	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings
<b>Heavy deburring</b>	LSF38 Die grinder LSV38 Angle grinders LSR38/48 Straight grinder GTB25 Turbine Beveling tool LSB38 Beveling tool	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings
<b>Medium &amp; light deburring</b>	LSF28 Die grinder LSR28 Straight grinder LSF12/19 Die grinder LSF07 High speed pencil grinder	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings
<b>Finish polishing, precision grinding</b>	LSV28 Angle grinders/sanders LSF28 Die grinder LST/LSO Orbital sanders LSV12/19 Angled Die grinders/sanders LSF12/19 Die grinders LSF07 High speed pencil grinder	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings
<b>Sanding and surface preparation</b>	LSV38 Angle sanders LSV28 Angle sanders LST/LSO Orbital sanders	Dust extraction, backing pads, air preparation unit, multiflex swivel connector, hoses, hose reels, couplings
<b>Aluminum working</b>	LSV38 Angle sanders with ALU-CUT LSF17 Die grinder	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings

# DRILLING

➔ For really tough applications you need a reliable drill that can be adjusted to your every need. Make heavy drilling easier with agile and flexible tools offering high power to weight ratio and excellent ergonomics.



## **MODULAR DRILL**

One powerful motor unit, completely interchangeable with different heads, giving you a total solution suited for any holemaking task.

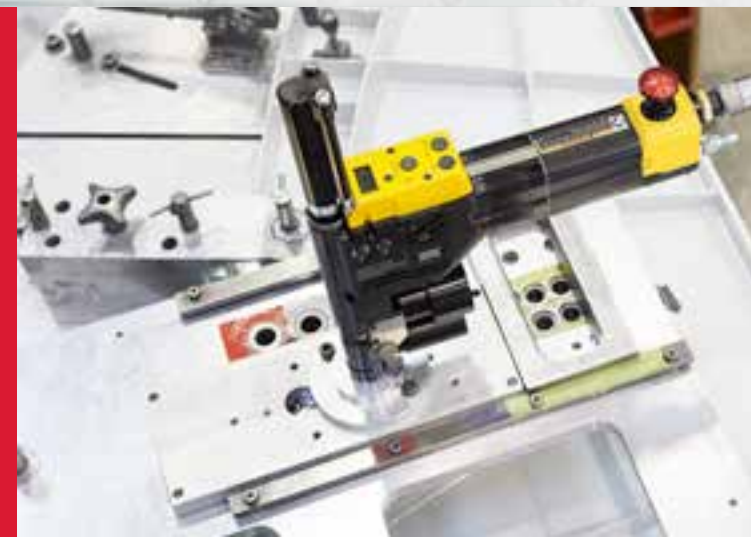
## **POSITIVE FEED DRILLS**

Right angle or in-line with twist-lock or concentric collet for small holes with countersink in one-shot or larger holes in all materials.

## **POWER FEED ARM**

## **MANUAL DRILLING**

LBB/LBV drills are of highest quality and are built to provide consistent reliability and performance in a wide range of applications.



**“BOGIE, STRUCTURE, RAIL TRACK, WAGON PREPARATION”** are the typical applications that need precise hole drilling. Automatic feeding from Atlas Copco Positive Feed Drills, PFD1100 and PFD1500, reduce the cycle time, prolong cutter life time and improves both productivity and quality. Drilling large holes in thick stacks is now a challenge in the past.

### **HOLE DRILLING MADE EASY.**

When using the “Power feed arm”, you can drill up to 19 mm holes using a hand-held drill (LBB36 H005 and LBB37 H007). A small and light weight solution or heavy duty drilling applications.

## **APPLICATION GUIDE – DRILLING**

Application	Hole size	Product recommendation	Accessories
Under construction	8 - 27.5 mm	PFD1100 PFD1500 LBB37+power feed arm RAB	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings
Bogie	4.5 - 11.9 mm	PFD1100 Modular drills LBB37 LBB26 LBV37	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings
Interior	2.8 - 12.5 mm	LBB16 LBV16 Modular drills PFD1100	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings, suction kit for LBB16
Over construction	6.3 - 14.7 mm	LBB16 LBV16 Modular drills PFD1100 PFD1500	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings, suction kit for LBB16
Rail	12.3 - 27.5 mm	PFD1100 PFD1500 RAB	Air preparation unit, multiflex swivel connector, hoses, hose reels, couplings

# ASSEMBLY



*Atlas Copco offers a wide selection of assembly solutions that match your every need. From fast impact wrenches to high precision electrical systems that enables full control of the whole assembly process.*



## **ELECTRIC TOOLS AND CONTROLLERS**

*The best solution for critical applications where accuracy, control and traceability are important for your business*



## **HIGH TORQUE ELECTRIC TOOLS**

*Tensor Revo is a flexible tool for precision high torque applications that also might be difficult to access.*



## **SUPER HIGH TORQUE SOLUTIONS**

*Hydraulic RT and pneumatic RTP series brings power, accuracy and safety to bolting applications.*



## **PNEUMATIC TOOLS**

*Wide selection of robust nutrunners, pulse tools and impact wrenches with high capacity-to-weight ratio.*





**WHEEL BOGIE ASSEMBLY** must run flawlessly in very harsh conditions. This puts high demands on the tools that every component is in the right place and is tightened at the right torque.

**CRITICAL FASTENING DUTIES** are among the most essential tightening operations. You need to be in control of production and quality assurance. We offer mechanical click wrenches as well as modular transducerized wrenches to meet your exact needs.

## APPLICATION GUIDE – ASSEMBLY

Application	Common needs	Recommended product	Accessories
Ground connector, bearing housing	High torque accuracy, traceability, multiple torque levels	Tensor ST - electric nutrunner	Controller, cable, reaction bar, torque arm and sockets
Wheel Grease Box	High torque accuracy, traceability, multiple torque levels	Tensor ST - electric nutrunner	Controller, cable, custom made attachment for torque absorbment and reaching bolts in cramped spaces and sockets
Interior, armrests at seats	High torque accuracy, tracability, accessibility	Tensor SL - electric screwdriver	Controller, cable, stacklight, Tool Positioning System (TPS), Torque arms/Balancer and bits
Bumpers, within wagons	High torque levels and medium torque accuracy	LTP - Shut-off Pistol grip nutrunner ST Wrench - transducerized quality assurance Saltus click wrenches - mehanical click wrenches	Reaction bar, air preparation unit, multiflex swivel connector, hoses, hose reels, couplings and sockets
Loosening of bolts	Fast and robust products	LMS - Non shut-off Impact wrench	Air preparation unit, hoses, hose reels, couplings and sockets
Quality control	Quality assurance, repeatability, easy calibration	ST wrench - transducerized quality assurance Saltus click wrenches - mechanical click wrenches	Saltus sockets
High torque applications	High torque applications for tightening with great accuracy and flexibility	Tensor Revo	The Power Focus 6000 controller, reaction bar
High torque applications	High torque applications for tightening in difficult to access areas	RTP pneumatic nutrunners	Hoses, air preparation units, reaction bar
Super high torque applications	Very high torques (>5000 Nm), flexible and accurate	RapidTorc wrenches	Electric pump, hand pump, backup wrench, ratchet link, hoses

# ASSEMBLY

➔ *To optimize your assembly operations and increase your productivity we offer a wide selection of heads and sockets. We develop the optimal solutions in close cooperation with you and your needs.*



## **SOCKETS**

*We offer more than 1.400 different high-quality Saltus sockets in various versions and lengths.*

## **SOCKETS**

*We produce standard and customized sockets.*

## **STWRENCH**

*Use the STwrench for production to get full traceability of the entire tightening operation.*



## **MECHANICAL CLICK WRENCHES**

*Our different wrench types offer the right strategy for nearly any application. The easy handling has earned wide acceptance among operators.*

# ATLAS COPCO SERVICE

*From a wide range of service products to tailor made solutions. Consistently high-quality service and support, locally. For us, service is a global commitment.*

**Today's changing environment** is constantly increasing the pressure on the performance of companies in the industry. Consequently, operational excellence at its lowest cost has never been as important as today. Atlas Copco is a strategic partner for many industry companies and has been so for many years. We have gathered experience

in how to best support our customers with highest availability, accuracy and the longest life time of their equipment. Furthermore, we are enabling our customers to focus on their core business while knowing we support them to secure highest quality of their products at the highest level of cost efficiency.

## YOUR BENEFITS

- ◆ Fast and high quality repairs.
- ◆ A fixed repair, calibration and preventive maintenance budget.
- ◆ Identification of cost drivers related to tool failures.
- ◆ Optimized life time and performance of your tool.
- ◆ Overview of savings and efficiency improvements in you production through KPI reports.
- ◆ Safe and efficient installation of your new equipment and/or moving your old one.
- ◆ Safe and effective support when building new plants.
- ◆ Making sure your new equipment is up and running with highest quality, as fast as possible.
- ◆ Cost savings due to increased efficiency and quality of your production.
- ◆ Decreased warranty costs as a result of fewer call backs.
- ◆ Making sure your employees work in the most ergonomic and efficient way.

## OUR SERVICE PRODUCTS

	Fixed price repair, calibration and preventive maintenance on Atlas Copco tools, other companies' tools non tool equipment
	Service programs covering your tools
	On-site contract – Tools Management Center
	EasyStart and installation packages
	Friction and Joint analysis
	Production Optimization
	Software management
	Training and consulting

## ***COMMITTED TO SUSTAINABLE PRODUCTIVITY***

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

[www.atlascopco.com](http://www.atlascopco.com)

*Atlas Copco*