

***Highly Engineered,  
Quality Locomotive Products***



***Ingenuity in Motion***



**WABCO<sup>®</sup>**  
LOCOMOTIVE PRODUCTS  
A **Wabtec** company



# World Class Manufacturing

WABCO Locomotive Products designs and manufactures highly engineered pneumatic components and related products. This product catalog features our product lines including compressors, pneumatics, truck mounted components, and ball valves. Our engineers utilize solid modeling, finite element analysis, and hands on testing to ensure that your product requirements are met.

WABCO Locomotive Products is a subsidiary of Wabtec Corporation. As a global leader of solutions for the freight rail and passenger transit industries, Wabtec is committed to helping our customers improve their safety, productivity, and efficiency by combining ingenuity and product innovation with the best in modern manufacturing and business practices.



WABCO

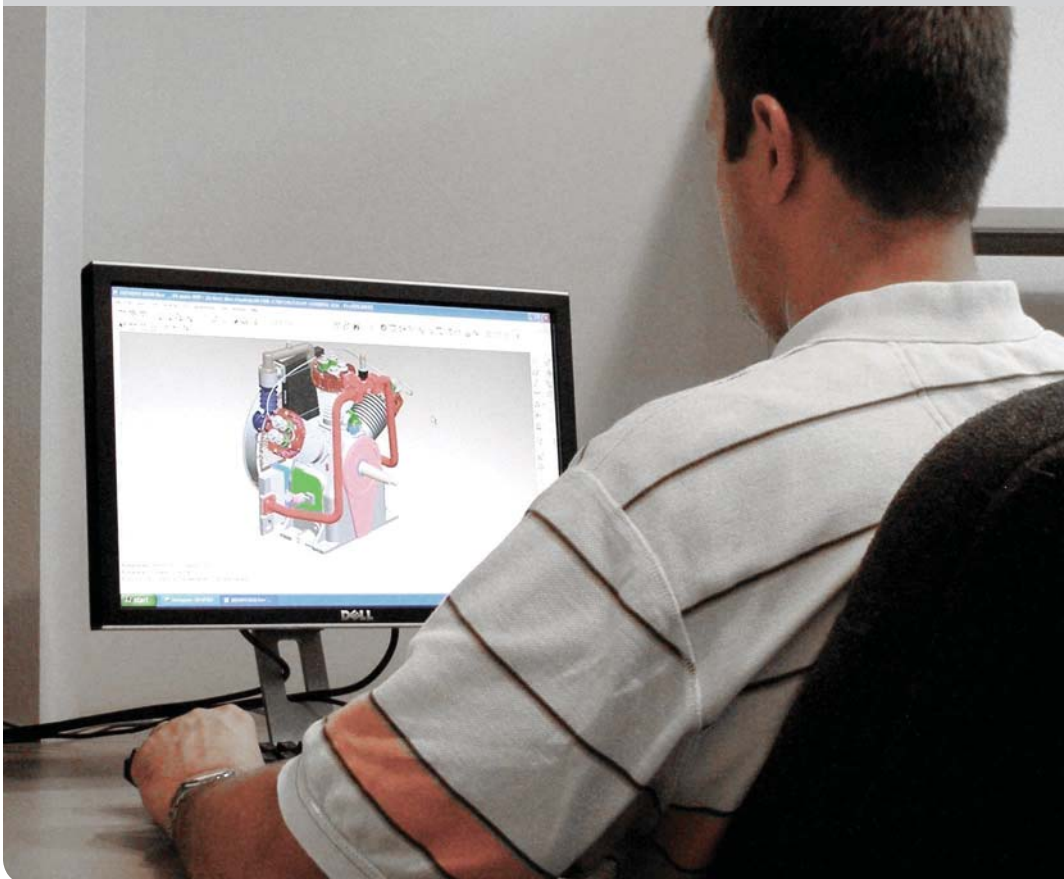
Locomotive

Products is an

ISO 9001:2000

certified quality

supplier.



# Ball Valves

Wabtec offers over 2000 types of ball valve configurations.



## 2 Way

- 400 WOG
- Available with standard or locking handle
- Available with wire ties
- Vented or non-vented



## 3 Way

- 200 WOG
- Available with T or L Ports
- Available w/standard or locking handle
- Can be manufactured with various pipe threads



## Dual Valve

- 200 WOG
- Valves operate together with one handle motion
- Can be both open or one open and one closed

### Simple Maintenance

Seals are self lubricating, self cleaning, self adjusting, and can be replaced in a matter of minutes

### Brass Construction

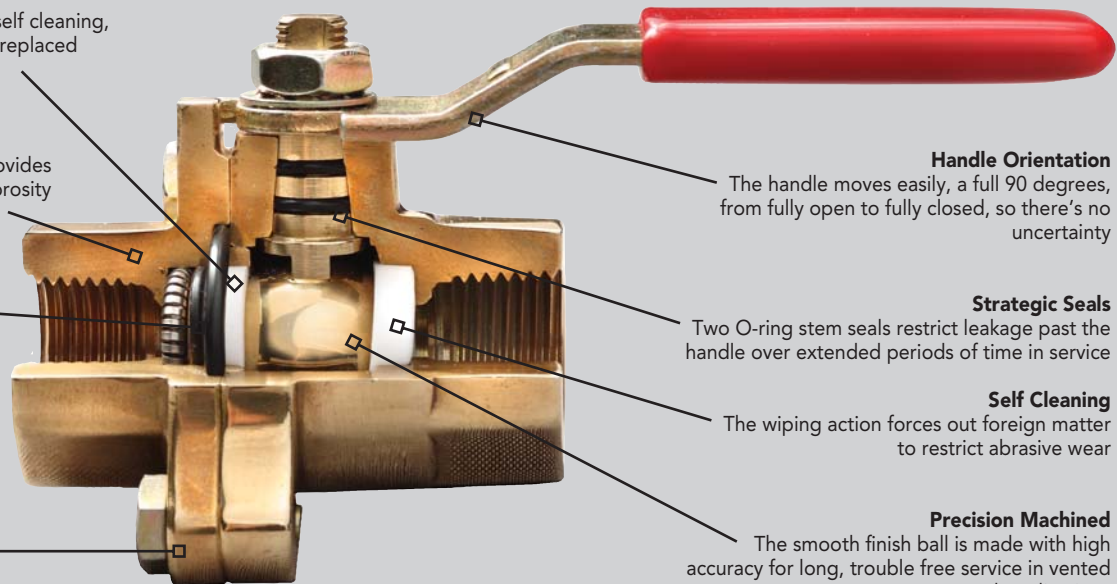
The forged brass body provides strength and minimizes porosity

### Self Adjusting

The compressed flexible seal compensates for normal wear to provide a positive seal

### Simple Construction

The bolted body and cap design incorporates O-ring seals, and provides the ability to be quickly disassembled for easy maintenance



### Handle Orientation

The handle moves easily, a full 90 degrees, from fully open to fully closed, so there's no uncertainty

### Strategic Seals

Two O-ring stem seals restrict leakage past the handle over extended periods of time in service

### Self Cleaning

The wiping action forces out foreign matter to restrict abrasive wear

### Precision Machined

The smooth finish ball is made with high accuracy for long, trouble free service in vented or non-vented applications

- Forged brass valves last longer and perform better due to Wabtec's innovative valve design
- All valves are available with Teflon or Buna seals depending on the material flowing through the valve
- Most sizes are available in full or standard port sizes
- Replacement kits are available for valves

- Special configurations can be produced based on need and usage
- See the Wabtec ball valve line catalogs for specific sizes available
- Valves are used in both the rail and industrial markets

# Compressors

The 3CD™ air compressor is a two stage, three cylinder “W” configuration, single acting air compressor. It is designed for application to locomotives for the purpose of providing compressed air. The 3CD™ air compressor may be driven directly off the locomotive’s diesel engine through a coupling or directly driven by a shaft mounted or coupled electric motor.

## 3 Cylinder Air Cooled Compressor (3CD™)

- Pulley shaft or motor drive
- Single or dual speed motor drive
- Various motor voltages available
- Stainless steel braided unloader tubing
- Rated for continuous or start/stop operation
- Stand alone or palletized
- Rated speed: 1100 RPM
- Rated pressure: 140 psi
- Displacement at rated speed: 247.5 CFM
- 60 HP at rated speed and pressure



## 3CD™ Compressor Upgrades



### Integral Aftercooler

- The Wabtec 3CD™ compressor aftercooler is an efficient, cost effective, maintenance-free way to precipitate moisture from compressed air braking systems
- Reduces the need for cooling piping or tubing between the discharge and the first main reservoir



### Thermostatically Controlled Intercooler (TCIST™)

- Evolution of the “covered intercooler”
- Designed for motor driven compressors that operate start/stop
- Eliminates water condensate in oil by maintaining a stable intercooler temperature



### Rapid Unloader

- Vents intercooler pressure in under 2 seconds
- Prevents motor stalls from starting under load
- Eliminates manual intercooler draining procedure
- 75 watt heater to protect against freeze-ups



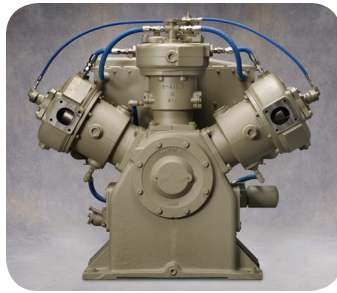
### One Piece Molded Fan

- Simplified design
- Higher cooling efficiency
- Virtually indestructible



### 2 Cylinder Air Cooled Compressor (2CD™)

- Temperature Management System (TMS) to control internal temperature
- Pulley, shaft, or motor drive
- Integral cooling fans
- High efficiency inlet filter
- Oil sight gage
- Oil pressure indicator
- Rated for continuous or start/stop operation
- Rated speed: 1000 RPM
- Rated pressure 140 psi
- Displacement at rated speed: 153.5 CFM
- 40 HP at rated speed and pressure



### 3 Cylinder Water Cooled Compressor (3CW™)

- Directly interchangeable with WLN/WBO type compressors
- Various crankshaft centerline heights available
- Available as either shaft or motor drive
- Oil sight gage or dipstick available
- Double pass intercooler
- Wabtec safety valve and breather
- Rated for continuous or start/stop operation
- Rated speed: 1050 RPM
- Rated pressure: 140 psi
- Displacement at rated speed 296 CFM
- 68 HP at rated speed and pressure



### 6 Cylinder/4 Cylinder Air Cooled Compressor Exhauster (6CD™/4CD™)

- Combination compressor exhauster:
  - 2 or 3 compression cylinders
  - 2, 3 or 4 exhauster cylinders
- Oil sight gage
- Oil pressure indicator
- Optional oil cooler kit
- Rated for continuous operation

#### 6CD3UC™

- Rated speed: 1050 RPM
- Rated pressure: 140 psi
- Displacement at rated speed:
  - Compression: 323 CFM
  - Vacuum: 484 CFM
- 120 HP at rated speed, pressure and 0 vacuum

#### 6CD4UC™

- Rated speed: 1050 RPM
- Rated pressure: 140 psi
- Displacement at rated speed:
  - Compression: 161 CFM
  - Vacuum: 645 CFM
- 105 HP at rated speed, pressure and 0 vacuum

#### 4CD2UC™

- Rated speed: 1050 RPM
- Rated pressure: 140 psi
- Displacement at rated speed:
  - Compression: 161 CFM
  - Vacuum: 323 CFM
- 65 HP at rated speed, pressure and 0 vacuum



### Rotary Screw Air Cooled Compressor

- Compact unit
- Various motor voltages
- Spin-on oil filter and separator cartridge
- High temperature protection
- Start/stop or continuous operation
- Encapsulated air end
- High efficiency inlet filter
- Combination oil/aftercooler with integrated blower
- Optional oil sump heater

#### WRS-100™

- Rated speed 2940 RPM
- Rated pressure: 145 psi
- Displacement at rated speed: 91.8 CFM
- 40 HP at rated speed and pressure

#### WRS-160™

- Rated speed: 1770 RPM
- Rated pressure: 145 psi
- Displacement at rated speed and pressure: 176.6 CFM
- 60 HP at rated speed and pressure

Our robust compressors are specifically designed for locomotive railway applications.

# Truck Mounted Components



## VAPORID® Air Dryer

- Provides an effective, reliable method to remove water, oil, aerosols, and line debris from train-line air
- Clean, dry air is essential to achieve long life for air brake systems and all related pneumatic equipment on locomotives and cars
- Twin tower design provides continuous drying
- Borosilicate coalescing filter reduces debris and oil aerosols (that can clog the desiccant) for increased dryer life
- Pre-measured easy-change desiccant bags mean less downtime
- Potted sealed solid state electronics are weather resistant for reliable operation
- Electronics Control Package is equipped with a memory function, allowing the dryer to operate when the compressor is loaded thereby conserving air
- Electrical options include 24, 37.5, 74, and 110 VDC, with other voltages available
- Humidity indicators are located on both towers to ensure that each is functioning properly
- Thermostatically controlled high power heaters for drain and purge valves are standard equipment to guard against freeze-ups
- Max flow rate of 236 SCFM with adjustments for specific flow rates available
- Compact size: 24" H x 13.75", W x 15.5" D
- Light weight: 92.5 lbs.

## VAPORID®

provides the most convenient, cost effective and reliable method of removing contaminants.



## Angle Cock

- Designed for application to the ends of the brake pipe on each car
- Provides a means for closing the brake pipe as on the end of the last car of a train and for the attachment of the brake pipe hose which permits the brake pipe to be connected between coupled cars
- The handle is designed to lock in both open and closed positions



## Brake Cylinders

- Furnished to suit the space and leverage requirements of locomotives, these cylinders differ from freight car brake cylinders primarily in the wide variety of diameters available and shorter piston strokes.
- The push rod is pinned to the piston hollow rod for positive release of the shoe from the wheel when the piston retracts
- North American standard for diesel-electric locomotives
- Wide variety of sizes and push rod configurations available to suit varied application requirements



## Hose Manifolds

- Hose manifolds for locomotive multiple unit hose connections
- Main reservoir equalizing pipe (MR)
- Actuating pipe (ACT)
- Independent application and release pipe (IAR)

# Pneumatics



## 30ACDW Brake Valve

- Controls automatic and independent brake functions
- Compact and light weight
- Housing and handle contours optimized for use in "desktop" and vertical "console" installations
- Eliminates the need to run large capacity pipes directly into the cab area



## 26L Brake Equipment

- Developed and standardized as a compact, light weight, and full value locomotive air brake system compared to predicated equipment
- Wabtec's integrated panel mounted products combined with cab mounted controls provide reliable braking, which that has made Wabtec products preferred by the railway marketplace



## Emergency Valve

- Large capacity for fast venting of brake pipe to initiate emergency quick action
- Available with integral microswitch for direct interfacing with electronic air brake equipment, event recorders and other safety related devices
- Handle available from the factory pre-assembled in either left or right hand configurations; also field changeable
- Various handle and grip styles can be furnished



## VX Vent Valve

- Enhanced venting capacity results in increased emergency transmission speeds at lower brake pipe pressures
- Self purging exhaust valve and improved corrosion resistant design promotes more reliable operation long term

We offer additional pneumatic products including:

- Hoses & Fittings
- Feed Valves
- Check Valves
- Reducing Valves
- Reservoirs
- Strainers
- Safety Valves

## Engineering Services

As a worldwide resource for your locomotive needs, WABCO Locomotive Products offers design, development, and engineering services. Our engineers are available to assist you with any locomotive product application need.





A **Wabtec** company

412.825.1000

877.376.9016

[locomotiveproducts@wabtec.com](mailto:locomotiveproducts@wabtec.com)

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

# The Wabtec Difference

From WABCO Locomotive Products' pneumatic equipment to other Wabtec business unit offerings such as new commuter locomotives, low-emissions switchers, electronics, heat exchangers, and doors, Wabtec's vast array of products can be found on virtually every locomotive, freight car, transit car, and bus in North America and in more than 100 countries worldwide.

As a technology leader in electronic braking and positive train control, Wabtec coordinates infrastructure and rolling stock upgrades for the deployment of next generation technology. Our network of service centers offer OEM parts and reconditioning service to quickly restore factory performance. From systems to locomotive overhaul services, product installations, and enhancement services, maintenance, technical support, and training, Wabtec provides complete support.

Wabtec's strength lies in our ability to tap this wide spectrum of products, technologies and services, and direct them toward solving specific locomotive needs. This integrated, comprehensive approach to problem solving is unique in the industry. Wabtec's unmatched resources and technological depth result in highly productive, timely solutions.

## **WABCO Locomotive Products**

**1001 Air Brake Avenue  
Wilmerding, PA 15148**

**412.825.1000  
877.376.9016**

**[locomotiveproducts@wabtec.com](mailto:locomotiveproducts@wabtec.com)  
[www.wabtec.com](http://www.wabtec.com)**

*Wabtec, WABCO, and VAPORID  
are registered trademarks of Wabtec Holding Corp.*



*WLP-0908-1  
©2008 Wabtec Corporation*