



MILITARY VEHICLE BRAKING SYSTEMS

Technical Expertise | Market Leadership
Application Customization | Preventative Maintenance



HEAVY VEHICLES REQUIRE HEAVY-DUTY BRAKE SYSTEMS

For more than seventy years Carlisle Brake & Friction has been a major supplier to the off-highway and military markets. Our hydraulic brake systems and friction components for transmission, brake and clutch applications provide superior performance and exceptional durability in the harshest environments and working conditions around the world.

Our products are utilized in virtually every form of military land vehicle including transports, tanks, assault vehicles and construction equipment. Carlisle is also a primary OEM supplier of brake friction materials for military jets, planes, helicopters and drones.

STRENGTH

The highest quality brakes in the industry

DURABILITY

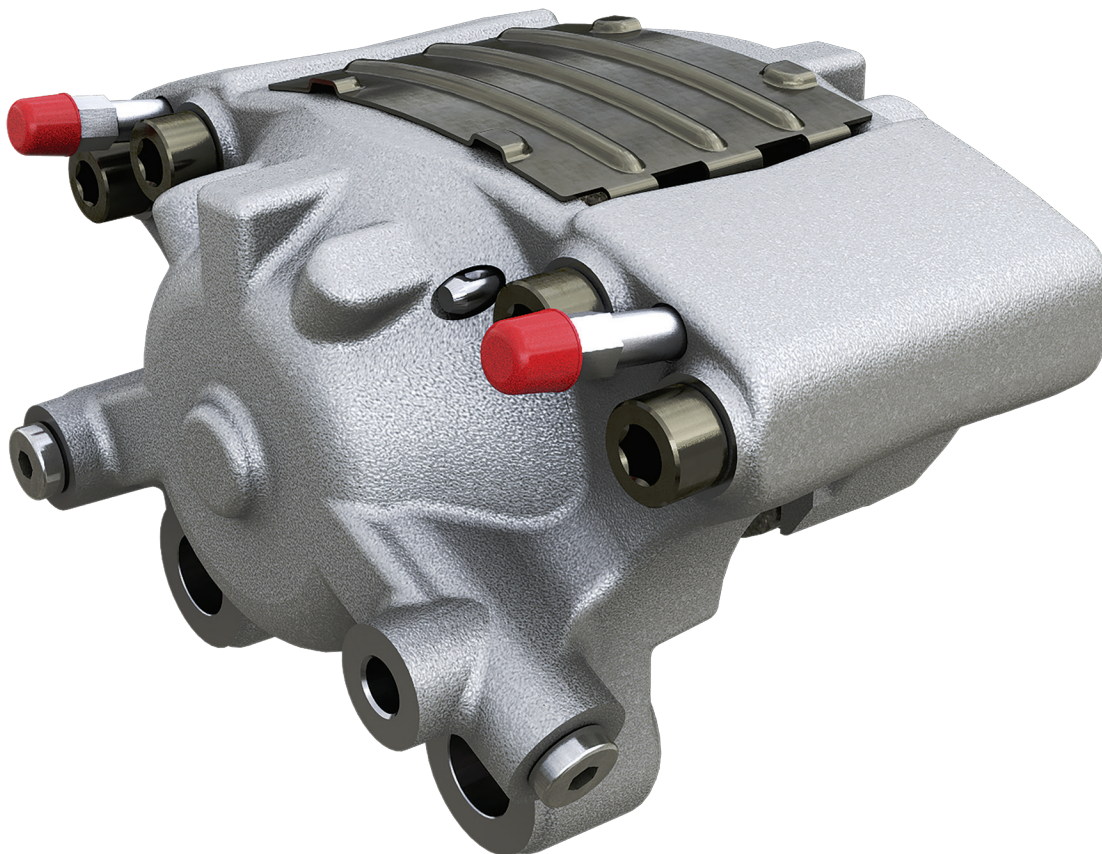
Made with long lasting, endurance-tested materials

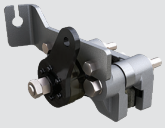
VERSATILITY

Brakes that work off-highway, in sand, snow, water or mud

RANGE

Air, hydraulic and mechanical brakes to meet all your needs

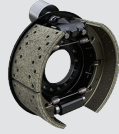




RT Park Brake



SA7 Park Brake



Drum Brakes



Wear Sensors



Electric Park Brake



CBA60 Brake



Brake Pads

PARK BRAKES

Model	Description	Application	Static (N)	Release Pressure	Features
RT Series	Lever-actuated mechanical parking brake	Medium duty vehicles	24,434 N (5,493 lb)	n/a	<ul style="list-style-type: none"> Rugged ductile iron construction Long lasting corrosion protection High temperature linings
SA7000 Series	Spring-applied, hydraulically released parking brake	Heavy duty vehicles	23,575 (new) 17,793 (worn)	1150-3000 psi (79.3-206.8 bar)	<ul style="list-style-type: none"> Quick change linings Open caliper for easy access and serviceability Simple lining adjustment
Electric Park Brake	Electrically actuated parking brake				<ul style="list-style-type: none"> Electrically actuated Lightweight design Carlisle friction technology Maximizes service life and performance

SERVICE BRAKES

Model	Description	Application	Average Torque	Maximum Pressure	Features
FCH Series	Hydraulic drum brake service	Land attack vehicles	5,5000 in lb for 4,000 lb wheel and weight at 60 mph and 1,800 psi brake pressure	1,895 psi (130.6 bar)	<ul style="list-style-type: none"> Floating wheel cylinder design Scalable design for heavier vehicles Self-energizing
17.25 x 5 Drum Brake	Air wedge drum service brake	Land attack vehicles	9,100 in lb for 8,000 lb wheel and weight at 60 mph and 100 psi brake pressure	135 psi (9.31 bar)	<ul style="list-style-type: none"> Compact design Lighter weight Auto adjustment
CBA60 Series	Hydraulic Applied, Fixed Dry Caliper Service Brake	Multiple including agriculture, small construction, and light tactical wheeled defense vehicles	6870 N-m (using a 0.6 CoF material on a 380mm OD rotor)	130bar (1885psi)	<ul style="list-style-type: none"> Works with rotor OD: 250mm to 380mm Multiple levels (Bronze, Silver, and Gold) available for corrosion resistance of the mounting hardware, hydraulic fittings, caliper housing, brake pad backing plate, and pistons Various options (wear sensors, anti-rattle clip, etc.) Friction materials available for use in either wheel speed or driveline speed applications

COMBINATION BRAKES

Model	Description	Application	Max Service Brake Torque	Release Pressure	Features
226P Combo Brake	Combination service & park brake	Heavy duty vehicles	25,2000 in lb for 7,333 lb wheel and weight at 1,687 psi brake pressure	1,595 psi (110 bar)	<ul style="list-style-type: none"> Park brake torque 7,144 ft Ductile iron construction High torque range Auto Adjustment

HYDRAULIC BRAKES

Model	Description	Application	Release Pressure	Features
1100 Valve Series	Modulating hydraulic control valve	Medium duty vehicles	3,500 psi	<ul style="list-style-type: none"> Rugged construction Dampened pool design Externally adjustable High flow capacity

BRAKE & TRANSMISSION FRICTION MATERIALS

Brake, Clutch & Transmission Applications

- Disc brake pads, brake block friction and wet brake friction technology
- Power shift and counter shaft transmissions, steer clutches, clutch buttons, PTO clutches
- Custom designs specifically tailored to your unique military application
- Over 100 non-asbestos formulas
- Multiple friction coefficients

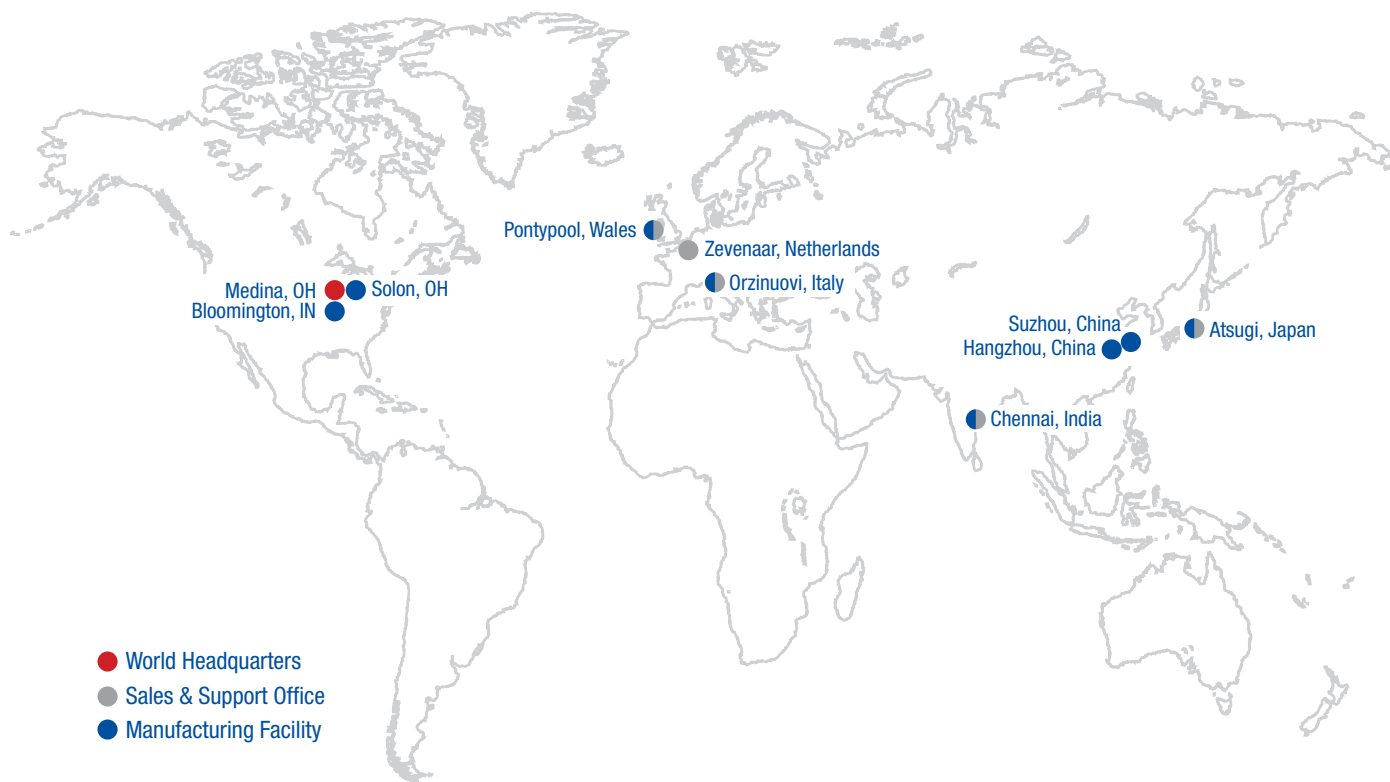
Wear Sensors for Preventative Maintenance

- Acts as brake wear indicator to warn driver when pad life has become too low
- Can trigger a light on dashboard alerting driver to change brake pads
- Can be used on a single brake or every brake on vehicle
- Modern technology utilizing electrical circuits rather than a metal tab to create "squealing" sound

Carlisle Brake & Friction is a leading solutions provider of high performance and severe duty brake, clutch and transmission applications to OEM and aftermarket customers in the military, mining, construction, agricultural, motorsports, industrial and aerospace markets.

The strength of Carlisle's brands, including Wellman Products Group, Carlisle Industrial Brake & Friction, Hawk Performance, Japan Power Brake, and VelveTouch, gives our customers access to a diverse range of the most highly engineered braking, friction, clutch, and transmission products available to the market today.

With over 1,000 employees and 10 manufacturing facilities globally located in the U.S., U.K., Italy, India, China and Japan, Carlisle serves over 100 leading original equipment manufacturers in 50 countries, making Carlisle the right choice for your new brake or friction design, no matter where you are in the world or what you want to be.



To learn more about Carlisle's military vehicle brake systems contact one of our sales offices or visit www.carlislecbf.com

United States

R&D Headquarters
6180 Cochran Road
Solon, OH 44139
440 528 4000
440 528 4099 fax

Europe

Omega 500 Unit
Mamhilad Technology Park
Pontypool – NP4 0JJ UK
+44 (0) 1495 767304
+44 (0) 1495 767330 fax

Asia-Pacific

65 Huoju Road
Suzhou New District
Suzhou, 215009
P.R. of China
05 126 8081808



INNOVATING SOLUTIONS
FOR A WORLD IN MOTION

855-403-9083 | Global Headquarters | 920 Lake Road | Medina, OH 44256

© 2022 Carlisle. Carlisle is a trademark of Carlisle Brake & Friction
Carlisle Solutions for Military Vehicle Applications Version: MVA22/001

www.carlislecbf.com