



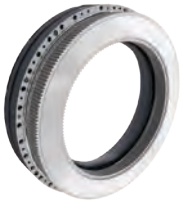
## ***BRAKE SYSTEMS FOR TELEHANDLER EQUIPMENT***

High-reach machines such as telehandler's require more stability than other types of equipment and with the increased usage and popularity of telehandlers, today's operators need a brake system solution that can provide wear-resistant performance, consistent stopping power and dependable control characteristics that are essential for both safety and productivity.

Carlisle Brake & Friction has been supplying braking systems including brake assemblies, hydraulic actuation technology and friction components to original equipment manufacturers in a diverse range of material handling markets for over 87 years. Our products can be found on industrial vehicles, oil rigs, telehandlers, cranes and forklift equipment applications.

At Carlisle, we provide our customers, including Eaton, Wichita Clutch, Twin Disc, ZF Sachs, SKF, Clark Hurth and many more, with "Best in Class" brake system solutions for dynamic and static motion control requirements. Carlisle customers rely on the quality, heat capacity, consistent performance and the exceptional durability characteristics of Carlisle products in order to meet the demands of today's industrial applications.

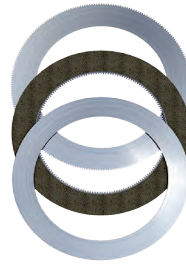
## WET FRICTION MATERIALS



### Brake Materials

Carlisle has developed a variety of friction materials with high energy absorption capability and smooth engagement characteristics.

- High heat capability
- Ability to withstand high unit loading
- Smooth engagement characteristics
- Resists glazing from oil abuse
- Comprehensive material technology coverage
- Manufactured in ISO certified facilities



### Power Transmission Materials

Carlisle has developed a wide range of friction materials for powershift and counter shaft transmission applications.

- Oil cooled friction materials with high energy capacity
- Tolerance to operate under very high unit loading
- High dynamic and static coefficients of friction
- Available in a range of thicknesses and oil groove patterns
- High power
- Minimizes "hot spotting" of opposing plates
- Smooth engagement characteristics

## HYDRAULIC ACTUATION



### Master Cylinder

Proven brake cylinder design for light construction vehicles where low cost and high reliability are required.

- Small compact form factor
- Mineral oil or Brake (DOT) fluid versions available
- Range of bore sizes available allowing for optimization of vehicle performance
- Available in step bore configurations for increased fluid volume
- Single, twin, tandem or custom designs available



### 1100 Series Power Valve

Single and tandem circuit, modulating hydraulic control valve.

- Smooth modulation at all output pressures for Automotive style pedal feedback
- Rugged construction and thorough testing ensure superior performance and endurance for even the most severe job applications
- Externally adjustable to provide precise pressure settings
- Custom pedal and mounting options for simplified cab installation



### SAHR Park Brake Valve

Designed around the unique needs of the end user to consolidate functions and simplify vehicle plumbing.

- Parking brake control valve
- Spotting option
- Slippery road option
- Brake circuit isolation



### Dual Accumulator Charge Valve

Accumulator charging solution, monitors the minimum pressure in the accumulators and charges as soon as the pressure drops below pre-defined values (cut-in pressure).

- Monitors and charges the accumulators automatically
- Gives priority to accumulator circuit
- Fast acting isolation valve allows brake system to continue to function during single brake system failure
- Pressure port for pressure sensing
- Hydraulic pressure sensing and charging, hence no electrical signal for charging

## PARK & EMERGENCY BRAKES



### DSH12525 Series Drum Brake

Hydraulically actuated, dual servo, self-energizing drum brake with floating brake shoes. A cable operated parking linkage is optional. Most commonly mounted on the axle bolt circle. This brake is ideal for low speed, heavy-duty service conditions.

- More braking capacity per pound
- Higher torque for your brake dollar
- Automatic adjustment
- Parking brake linkage
- Equipped with Carlisle premium asbestos-free linings, providing superior stopping performance and life
- Low release pressure options available



To learn more about Carlisle's industrial vehicle braking systems contact one of our sales offices or visit [www.carlislecbf.com](http://www.carlislecbf.com)

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