BRAKE SYSTEMS FOR ARTICULATED DUMP TRUCKS

Operating under harsh environmental conditions, articulated dump truck (ADT) applications require robust brake, friction and hydraulic actuation product solutions. With over seventy years of experience in developing products for the world's most advanced brake system solutions to the unique standards and specifications of global OEM's, Carlisle understands the complex requirements of mobile mining and construction equipment.

Today Carlisle remains recognized as an off-highway industry expert in the design and manufacture of premium quality, motion control products.
HYDRAULIC ACTUATION

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

Brake Control Manifold
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

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

PARK & EMERGENCY BRAKES

SA Series SAHR Brake
Spring-applied hydraulically released park brakes.
- Open caliper for easy access and serviceability
- Simple lining adjustment
- Lining retraction spring eliminates drag
- Organic or Sintered Metallic Linings Available
- Low release pressure options available

G Series
Spring-applied hydraulically released brake brakes.
- Ductile iron casting for high strength
- G1: manual or automatic slack adjusters, dynamic stop capabilities, and less fade in emergency than drum brakes
- G2: manual adjuster to compensate for lining wear, and uses mineral or brake fluid