Drive and Motion Systems for Wheeled and Tracked Earth Moving Vehicles
Dana’s comprehensive line of Spicer® drive systems and Brevini® motion systems include some of the industry’s most innovative and flexible solutions. You can rely on our products to work continuously in challenging environments where vehicle performance, efficiency, and reliability are critically important.
Full-System Solutions for Wheel Loader

With a comprehensive line of Spicer® and Brevini® products designed specifically for wheel loader Dana provides you with the most innovative and flexible drive and motion solutions in the industry. Whatever your requirements are you can rely on our products that works continuously and efficiently in challenging environments where vehicle performance, efficiency, reliability and operating costs are key factors.

**Spicer® Planetary Non-Steering Axle**
- Suited to a variety of off-highway applications
- Wide range of ratio available
- Suitable for hydrostatic and hydrodynamic drivelines
- Multiple configurations available

**Spicer® Hydrostatic Transmissions**
- Available in continuous and interrupted variable options
- Allows forward, reverse, and braking with hydrostatic motor
- Delivers high torque at low speeds

**Spicer® Hydrodynamic Transmissions**
- Full powershift options with or without lockup
- Advanced electronic controls
- Highly efficient aluminum-cast converter

**Spicer® Hydromechanical Variable Transmission**
- Stepless drive with no interrupted acceleration
- Smooth, dynamic, and adjustabletractive effort
- Propels optimum loadling and the highest possible throughput with maximum fuel savings

**Spicer® Electronic Controls**
- Enables communication between driveline components
- Brakes, clutches, and flow controls optimize productivity, maximize lift, and reduce maintenance
- Support for OEM movement in digitalization and automation
- Individual functional controls
- Capability to combine drive and motion on one platform

**Spicer® Driveshafts**
- A century of quality and innovation ideal for the rigorous demands of most off-highway applications
- Multi-piece shaft and end fitting combinations
- Designed for minimal maintenance, longer life and reduced operating cost

**Brevini® Proportional Directional Valve - HPV Series**
- Wide range regulated flow up to 600l/min – 370 bar working pressure
- High flexibility with valve and block combinations
- Remote, electronic operation
- Smooth control to improve work function performance
- Available with MSB CANbus module

**Brevini® Fan Drive Gear Motor**
- Cast iron body for improved efficiency especially at high oil temperature
- High volumetric and mechanical efficiencies
- Low noise level
- Built-in proportional relief valve for fan speed control
- Built-in anti-cavitation valve

**Brevini® Piston Pump and Gear Pumps**
- Wide range of swashplate controls available
- Two built-in pressure relief valves protect the system from pressure overloads
- Swashplate design
- Integrated electro proportional and on-off valves
Full-System Solutions for Compact Track Loader

Torque for the Traction You Need with our CT series specifically designed for today’s high-performance hydraulically driven Compact Track Loaders. Our drive system features a two-stage Spicer® Torque-Hub® track drive and two-speed hydraulic motor packaged together to provide superior torque, maneuverability, and travel speeds. A robust design, with thousands in daily operation and proven under the most demanding conditions.

Spicer® Torque-Hub® Track Drive CT Series
- Product range specifically designed for modern high-efficiency Compact Track Loaders
- Torque ratings up to 17,000 Nm
- 2-speed design enhancing vehicle performance
- Small package size with improved start-up torques
- Engineered for low maintenance requirements and easy to service
- Enhanced Operator Comfort
- Suitable for hydraulic and electric vehicles, with Dana’s hydraulic and electric motors

Brevini® Fan Drive Gear Motor
- Cast iron body for improved efficiency especially at high oil temperature
- High volumetric and mechanical efficiencies
- Low noise level
- Built-in proportional relief valve for fan speed control
- Built-in anti-cavitation valves

Brevini® Piston Pump and Gear Pumps
- Wide range of swashplate controls available
- Two built-in pressure relief valves protect the system from pressure overloads
- Swashplate design
- Integrated electro proportional and on-off valves
Full-System Solutions for Wheeled Excavator

Rely on more than 100 years of Dana innovation with products designed specifically for construction vehicles to meet any need. Our full line of drive and motion systems provide solutions for wheeled excavators with a wide range of carrier weights. Our driveline, designed with a Low-speed hub brakes provide smoother operation and prevent a jerking effect on wheels, while the unique brake design reduces parasitic power loss.

- **Spicer® Planetary Steering Axle**
  - Designed for wheeled excavators
  - Low-speed hub brakes provide smoother operation
  - Unique brake design reduces parasitic power loss
  - Lower parasitic power losses

- **Spicer® Planetary Non-Steering Axle**
  - Designed for wheeled excavators
  - Low-speed hub brakes provide smoother operation
  - Unique brake design reduces parasitic power loss
  - Lower parasitic power losses

- **Spicer® Driveshafts**
  - A century of quality and innovation
  - Ideal for the rigorous demands of most off-highway applications
  - Multiple driveshaft and end-fitting combinations
  - Designed for minimal maintenance, longer life, and reduced operating cost

- **Spicer® 2-Speed Powershift Transmission**
  - Delivers smooth operation in wheeled excavators and other earth-moving applications
  - Two gear ratios engaged by two independent clutch cables
  - Enables the engine to run at its most efficient speed for better fuel economy engineered to ensure traction continuity

- **Spicer® Electronic Controls**
  - Enables communication between driveline components
  - Built-in logic controls optimize productivity, maximize life, and reduce maintenance
  - Support for OEM movement in digitalization and automation
  - Individual functional controls
  - Capability to combine drive and motion on one platform

- **Brevini® Proportional Directional Valve - HPV Series**
  - Wide range, regulated flow up to 600 l/m – 370 bar working pressure
  - High flexibility with valve and block combinations
  - Remote, electronic operation
  - Smooth control to improve work function performance
  - Available with MSB CANbus module

- **Brevini® Fan Drive Gear Motor**
  - Cast iron body for improved efficiency especially at high oil temperature
  - High volumetric and mechanical efficiencies
  - Low noise level
  - Built-in proportion relief valve for fan speed control
  - Built-in anti-cavitation valves

- **Brevini® Piston Pump and Gear Pumps**
  - Wide range of swashplate controls available
  - Two built-in pressure relief valves protect the system from pressure overloads
  - Swashplate design
  - Integrated electric proportional and on-off valves
The Only Supplier Delivering Complete Fully Integrated e-Drive and e-Motion Systems

We help manufacturers bring electric-driven vehicles to market through our collaborative, system-oriented approach and decades of expertise. Dana offers a full product portfolio and multiple technologies for electrification needs. Through our market-proven brands, we can provide motors, inverters and controllers for low- and high-voltage applications ranging from 24 to 800 V. Our product offering includes solutions for both drive and motion systems.

Dana Technology Demonstrators

Technologies Customized to Every Part of the Globe

With a presence in 33 countries, Dana Incorporated boasts more than 145 engineering, manufacturing, and distribution facilities. Our worldwide network of local service centers provides assurance that each customer will benefit from our proximity and responsiveness.

About Dana Incorporated

Dana is an integral partner for virtually every major vehicle and engine manufacturer worldwide. We are a leading supplier of drivetrain, sealing, and thermal technologies to the global automotive, commercial-vehicle, and off-highway markets. Founded in 1904, we employ thousands of people across six continents.

About Dana Off-Highway Drive and Motion Systems

Dana delivers fully optimized Spicer® drivetrain and Brevini® motion systems to customers in construction, agriculture, material handling, mining, and industrial markets. We bring our global expertise to the local level with technologies customized to individual requirements through a network of strategically located technology centers, manufacturing locations, and distribution facilities.

Learn more about Dana’s drivetrain and motion systems at dana.com/offhighway.