



SPICER® | **BREVINI®**

Drive and Motion Systems for **Wheeled and Tracked Earth Moving Vehicles**



Advanced Drive and Motion Systems for Your Earth Moving Vehicles



SPICER® | **BREVINI®**

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.



Wheel Loaders

Dana's solutions for wheel loaders cover the complete range of wheel loaders, from compact to heavy-duty.

Compact Track Loaders

Solutions include a two-speed drive design incorporating a low pressure 'soft shift' servo system, lessening shift harshness and providing greater operator comfort.

Mini Excavators

Dana's electric-driven mini excavator solutions power drive and motion functions across the machine.

Wheeled Excavators

Dana provides drive and motion solutions for wheeled excavators with a wide range of carrier weights.

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 continuously and infinitely 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



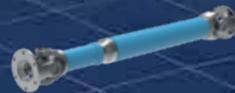
Spicer® Hydromechanical Variable Transmission

Stepless drive with no interrupted acceleration enhances comfort
Precise, dynamic, and adjustable tractive effort
Provide optimal handling and the highest possible throughput with maximum fuel savings



Spicer® Electronic Controls

Enables communication between driveline components
Best-in-class 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



Spicer® Driveshafts

A century of quality and innovation
Ideal for the rigorous demand of most off-highway applications
Multiple driveshaft 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/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



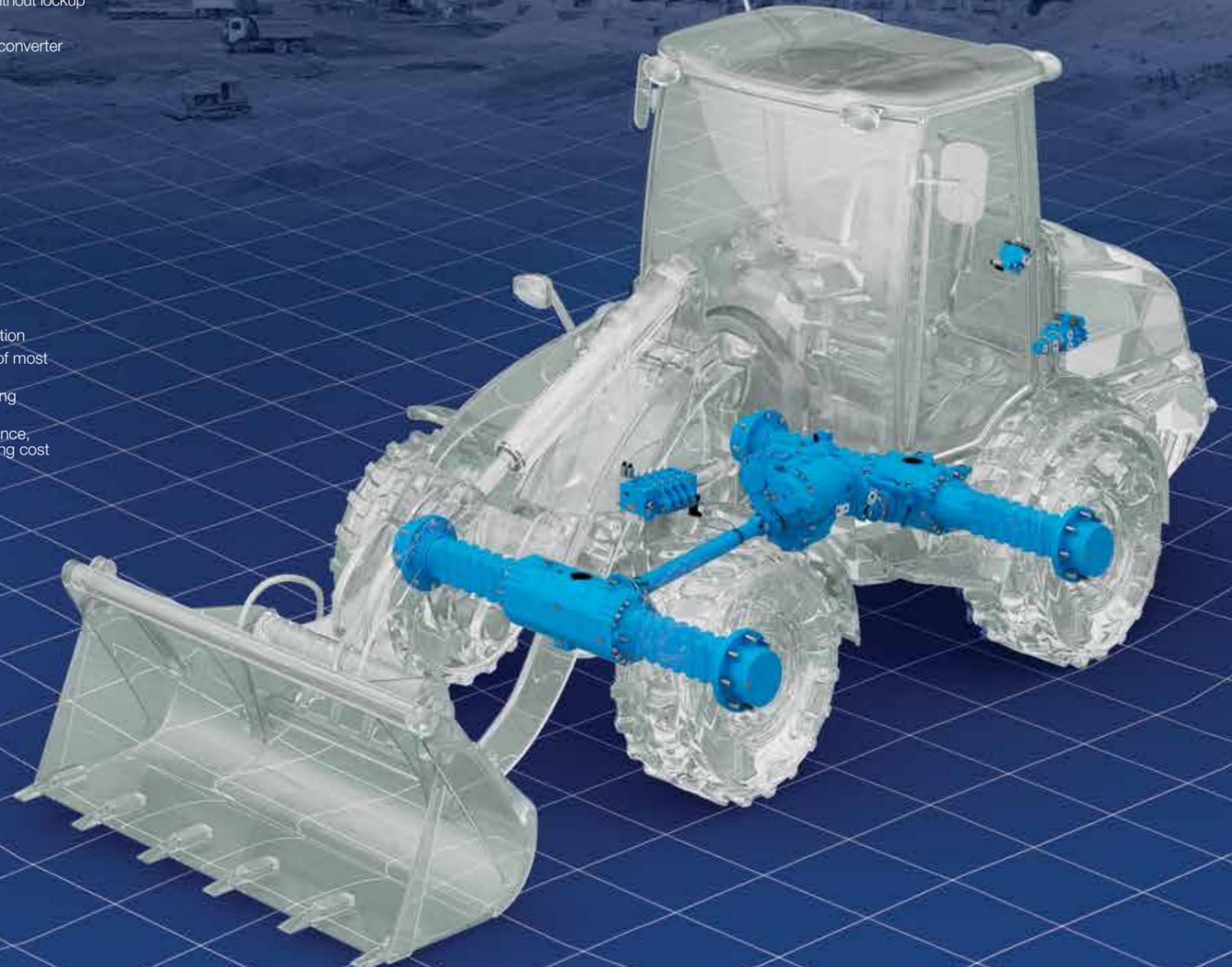
Brevini® Fan Drive Gear Motor

Cast iron body for improved efficiency especially at high oil temperature
High volumetric and mechanical efficiencies
Low noise level
Built-in 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 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

1 Product range specifically designed for modern high-efficiency Compact Track Loader

Torque ratings up to 17.000 Nm
2 speed design enhancing vehicle performances

Small package size with improved start up torque

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



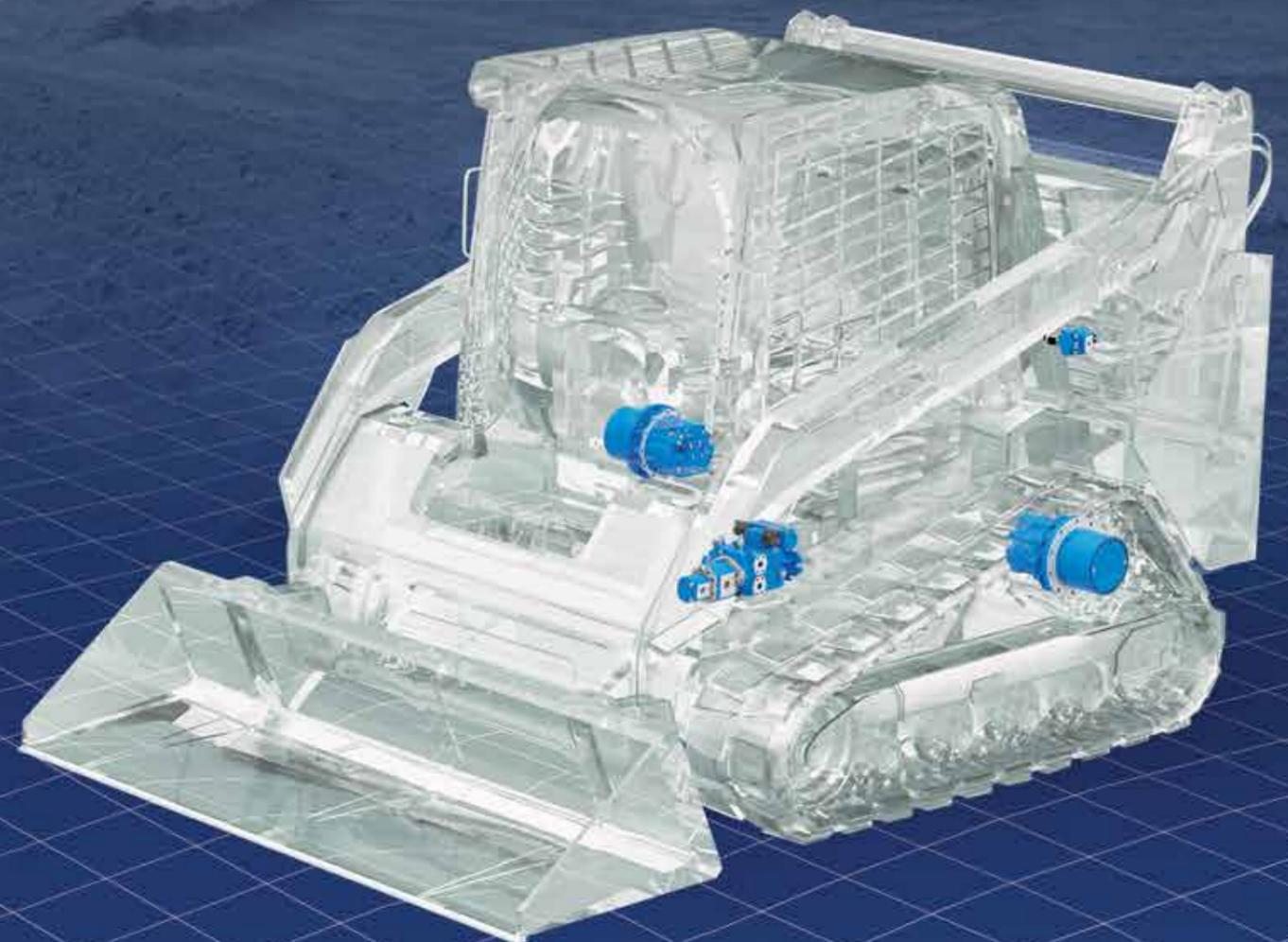
Brevini® Piston Pump and Gear Pumps

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 demand 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 packs
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
Best-in-class 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 600l/m – 370 bar working pressure
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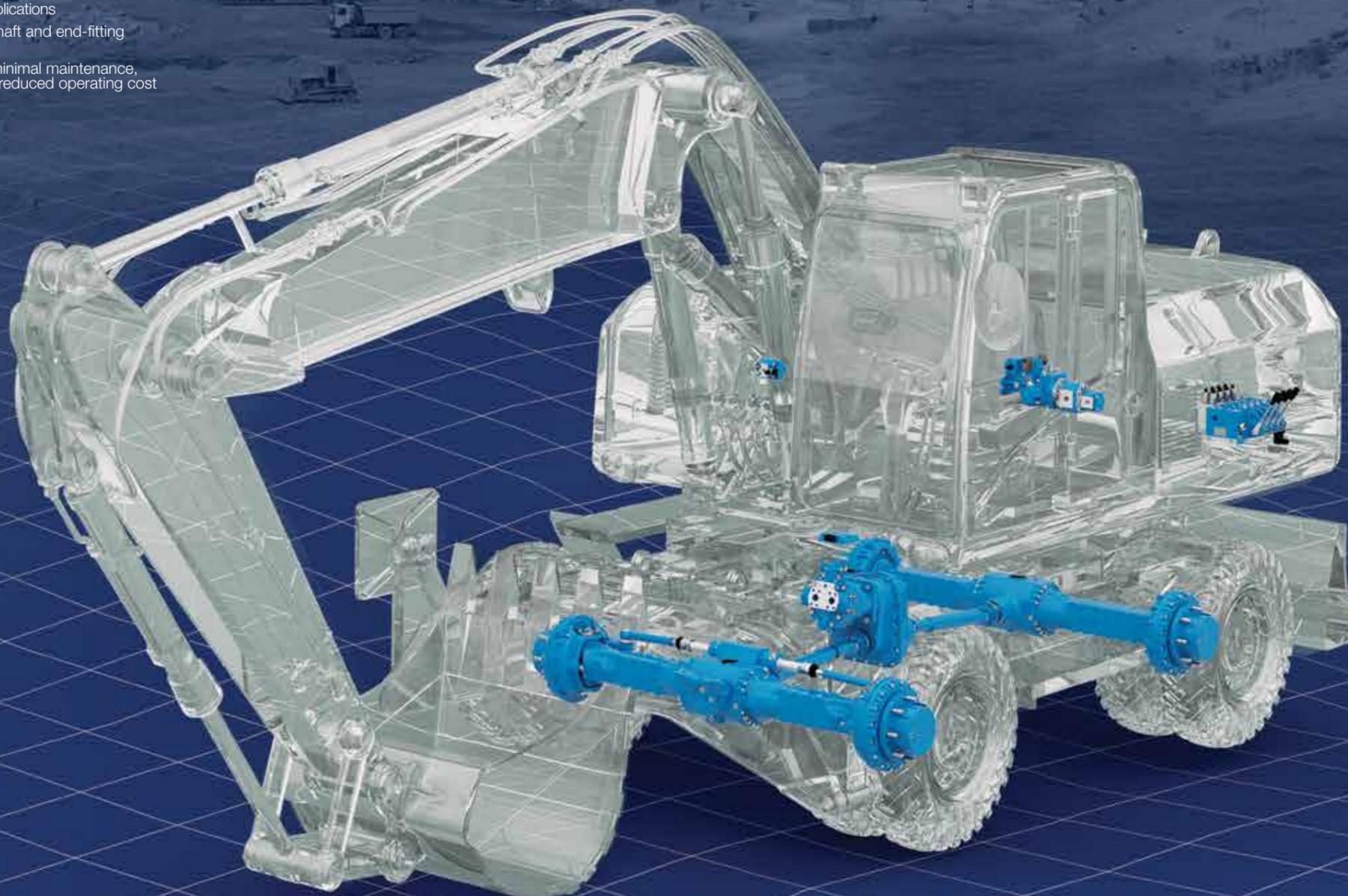
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The Only Supplier Delivering Complete Fully Integrated e-Drive and e-Motion Systems

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.

Pioneering Electrification. Protecting the Environment.



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.

Dana.com/oh/contact

Application Policy

Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.

