Drive and Motion Systems for Mobile Elevated Work Platforms

Dana’s Spicer® and Brevini® lines of drive and motion system solutions for MEWPs
Your Single-Source Provider of MEWP Drive and Motion Systems

The mobile elevated work platform (MEWP) market is transforming rapidly. OEMs must respond to more stringent emissions regulations, while end-users are looking to lower noise levels and environmental impact.

Dana has a complete range of advanced drive and motion products for MEWPs that address these trends while boosting productivity. We design and manufacture fully integrated drive and motion products for many types of MEWPs, including scissor lifts, vertical mast lifts, articulating and telescopic boom lifts, crawler lifts, and truck-mounted lifts.

By adding Brevini® motion systems to its Spicer® drive systems, Dana has a full array of mechanical, hydraulic, and electronic advanced technologies to support customer application designs.

Vehicle Development Lab

As part of Dana’s mission to be a global technology leader in efficient power conveyance and energy maintenance solutions, we operate a state-of-the-art vehicle development lab in Arco, Italy. Dana’s flexibility and engineering expertise deliver the right solution for your vehicle.

Spicer® Smart Suite® Intelligent Load Monitoring System (ILMS)

Spicer® Smart Suite® ILMS is designed to alert the operator of potential tipping situations, reduce the risk of vehicle breakdowns, improve productivity and precision, and enhance the long-term durability of powertrain systems.

The Right Partner for Your MEWP

Dana’s engineering capabilities and broad portfolio allow us to team with our customers to provide optimal solutions. Our integrated solutions deliver the performance necessary to support high levels of efficiency. Meanwhile, as a single supplier, we can help optimize supply chains and serve the overall performance needs of our customers.

Market-Driven Innovations

We deliver innovative technologies that meet customer demands worldwide. By anticipating market trends, Dana uses its industry expertise to deliver product solutions that achieve customer goals.

- Emissions Reduction
- NVH (Noise, Vibration, and Harshness)
- Cost of Ownership
- Hybridization
- Mobility and Performance
- Emerging Markets
Reliability, durability and optimal cost of ownership are the common expectations from both rental fleets and individual machine purchasers in the construction market. Dana has the expertise, global reach and systems know-how to support Mobile Elevated Work Platforms (MEWPs) manufacturer’s needs worldwide.

Spicer® Torque-Hub® Wheel Drive H Series
- Product range engineered for best-in-class efficiency
- Torque ratings from 7,000 Nm to 15,000 Nm
- Deliver exceptional mobility, reliability and proven robustness to final drive
- Low maintenance requirements and easy to service
- Sealing system, hub and spindle designed for severe environmental conditions

Brevini® Slewing Drive
- Plug and play assembly, complete with flange
- 3,300 Nm (3,500 in-lb) torque output
- Compact design with multiple ratios available
- Spring applied, hydraulically released holding brake
- Convenient backlash adjustment feature between pinion and slew bearing

Brevini® Proportional High Efficiency Bankable Valve
- Compact design, electro-proportional directional flow sharing valve
- Energy saving: low pressure drop
- No need for relief valves to avoid zero flow with actuators at end of stroke
- Regulated flow up to 60 l/m @ 310 bar

Brevini® Combined Bankable Valves
- Suitable for several applications, offering directional control with a single or double solenoid
- Modular design for flexible assemblies
- Coil protection level IP66 standard
- Valve body is cast iron with zinc plating

Brevini® Gear Pump
- Up to 90 cc/rev
- Very high mechanical and volumetric efficiencies
- Low noise level
- Long life and reliability

Brevini® Programmable Control Unit ECU
- Redundant logic architecture, to achieve PLd according to EN 13849-1
- Easy to program through intuitive software suite
- Rugged, waterproof for harsh mobile off highway environments
- Bootloading and runtime diagnostic available via CANbus

Brevini® Digital Inclinometers
- TAC Series
- Waterproof robust plastic body
- 1 or 2 axis measurement
- Dual redundant outputs available for PLd EN13849 safety systems
- Optional thermal compensation available
- Customizable signal filtration
- Customizable hardness on demand

Brevini® Shear Beam Load Sensor TT Series
- Waterproof robust and compact body
- Dual/redundant output available for PLd EN13849 safety systems
- Optional thermal compensation available

Brevini® Shear Beam Load Sensor TT Series
- Waterproof robust and compact body
- 1 or 2 axis integrated inclinometer available
- Dual/redundant outputs available for PLd EN13849 safety systems
- Length up to 12.5 meter

Brevini® Angle – Transducer
- TLx and Asx Series
- Waterproof robust plastic body
- Bright TFT screen for outdoor usage
- Waterproof robust plastic body
- With and without touchscreen and/or physical keyboard
- Gaze to display camera

Brevini® Joystick BJ200
- Waterproof robust plastic body
- Bright TFT screen for outdoor usage
- Waterproof robust plastic body
- With and without touchscreen and/or physical keyboard
- Gaze to display camera

Brevini® Graphic Display
- Opus Series
- Large size panel up to 12"
20 Years of Proof

For two decades, Dana products have solved electrification challenges for mobile elevated work platform (MEWP) manufacturers. These solutions have been proven effective time and again in enhancing efficiency and reducing total cost of ownership.

Market-proven electric drives for propulsion

World-class capabilities and expertise for wherever you are in your electrification journey

- Electrified solutions for both drive and motion systems
- Engineered for the challenges of a wide range of MEWP applications, including the requirements of urban worksites
- Dana’s expanded product line includes motors engineered to support a wide range of input voltage.

Market-Driven Electrified Innovations

The Dana family of products continues to deliver solutions for mobile elevated work platform OEMs.
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.