

# Full-System Solutions for Reach Stackers

Dana is a leading supplier of Spicer® Drive and Brevini® Motion products for material handling vehicles that are designed to work seamlessly and allow operators to engage, lift, and transport heavy loads with speed and precision. Our technologies improve the performance, fuel efficiency, safety, and durability.



## Spicer® Planetary Non-Steering Axles

Deliver maximum performance and offer easy, low-cost service  
Modular design on several heavy axles and all medium axles  
Proven technology expertise  
Maintenance-free brakes and high-integrity sealing  
Many configurations and options available



## 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® 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



## Spicer® Hydrodynamic Transmissions

Best-in Class Efficiency  
Full powershift options with or without lockup  
Advanced electronic controls  
Highly efficient aluminum-cast converter



## Brevini® Slewing Drives

Nominal torques up to 26,000 Nm  
Inline and right-angle configurations available  
Suitable for both hydraulic and electric motors  
Integrated motor adaptor  
Negative multidisc brake



## Brevini® Graphic Display Opus Series

Large size panel up to 12"  
Bright TFT screen for outdoor usage  
Waterproof robust plastic body  
With and without touchscreen and / or physical keyboard



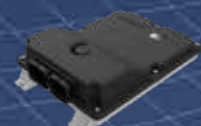
## Spicer® Hydromechanical Variable Transmission

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



## 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



## 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® Joystick BJ200

Waterproof robust plastic body  
Ergonomic grip  
Customizable button options  
Available in both analogue and CANbus versions



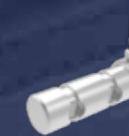
## Brevini® Boom Angle/Length Extension Sensor AS Series

Draw-wire length sensor robustly designed  
Available with dual/redundant output for PLd EN13849 compliance  
Voltage: 4-20mA or CANbus output  
From 5 to 12.5m length range



## Brevini® Tilt Sensor IDXY Series

Constantly measures vehicle tilt  
Single and double axis measurement  
Dual Output  
Waterproof



## Brevini® Shear Beam Load Sensor

Waterproof robust and compact body  
Dual/Redundant output available for PLd EN13849 safety systems  
Optional thermal compensation available

