Rotary Drilling Machines
Off-Highway Drive and Motion Technologies

Market-leading Spicer® drive systems and Brevini® motion systems from Dana
Your Single Source for **Drive and Motion Systems** to Support Drilling Applications

Dana is a single-source supplier with a complete system solution for both the mobility and working functions of rotary drilling machines. Our product portfolio includes a wide range of track drives, slewing drives, winches, hydraulic motors and pumps, flow control systems, and electronic devices. With in-depth application knowledge and strong engineering support, along with local pre- and post-sale service, we can help customers become technology and market leaders.

Dana’s engineering capabilities, broad product range, and focus on collaboration with customers allow us to deliver optimal solutions with the performance required to support high levels of efficiency. As a single supplier with a unique portfolio of Brevini® motion systems and Spicer® drivetrain systems, we can also help to optimize supply chains.

**A Trusted Partner**

**Market-Driven Innovations**

We deliver innovative technologies to meet worldwide customer demands. By anticipating market trends, Dana uses industry expertise to deliver product solutions to help customers achieve their goals.
Full-System Solutions for Rotary Drilling Machines

In the construction segment, both vertical and horizontal drilling applications are utilized. Vertical drilling machines include piling rigs, rotary drilling machines, and mini drills. Horizontal applications include horizontal directional drilling (HDD). All machines vary in weight, power, and size in order to meet market requirements.

Drilling machines have become more efficient in terms of productivity and cost of ownership. The introduction of smart technology has also increased efficiency, with sensor and electronic controls to improve operability and driver comfort, enhance safety, and better job sites.

Brevini® Winch Drives
- Ratio range up to 6,000:1
- Max torque up to 850 kNm
- Integrated hydraulic failsafe negative brake

Brevini® Industrial Series
- Wide range of sizes and ratios
- Output torque up to 95,000 Nm
- Modular concept
- High efficiency
- Hydraulic or electric motor

Brevini® Axial Piston Pumps
- Displacement up to 226 cc
- Medium and high pressure
- Fixed and variable displacement available
- Open or closed loop circuit

Brevini® Planetary Gearboxes – Slewing Drives
- Improved thermal capacity
- Robust design
- Reliable operation, engineered for harsh conditions
- Spherical graphite cast iron housing for low temperature applications
- Custom-made output support and pinions

Spicer® Track Drives
- Product range suitable for all customer requirements
- Wide range of ratios in combination with Dana Brevini® hydraulic motor and motion control valves
- Compact design solution
- Manual disengagement device for hoisting
- Hub and spindle made of high strength material
- Dedicated sealing system designed for severe environmental conditions
- Electric motor version available

Brevini® Gear Pumps
- Customized solution

Spicer® Track Drives
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- Dedicated sealing system designed for severe environmental conditions
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Brevini® Proportional Directional Valves
- Oil Flow Up to 1100 l/min
- High modularity
- ATEX certification
- Remote control, electronic operation
- Smooth control to improve operation functionality and accuracy

Brevini® Winches
- Winches for auxiliary hoist system
- Line pull up to 30 tons
- Wide range of safety controls
- Equipped with Brevini® high speed axial piston motor

Brevini® On-Off and Proportional Valves
- NPT connections
- Brevini® Bankable Valve
- Hydraulic Integrated Circuit HIC
- Fully controls all machine movements

Brevini® Tilt Sensor SP / TAC Series and Self Levelling Control
- SP Series: single axis 360° absolute tilt measurement
- TAC Series: single axis ±20° absolute tilt measurement
- Self levelling control: automatic levelling to ground specific tilt setpoint

Dana offers customized solutions to meet a range of customer needs, including modular designs and add-on accessories.
Market-Driven Innovation

Global presence is our strength. Dana has the capability to work in proximity with drilling machine manufacturers throughout Italy, Germany, and China with manufacturing plants, engineering centers, and service and assembly centers strategically located to provide local support. We continue to deepen our commitment to our global markets by making investments that optimize our already substantial footprint, extensive market knowledge, and established supply chain.

### Drilling Machine

<table>
<thead>
<tr>
<th>Drivetrain System</th>
<th>Horizontal</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulic Transmission</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotary Head Rotation</td>
</tr>
<tr>
<td>Slewling</td>
</tr>
<tr>
<td>Hydraulic System for Functional Controls</td>
</tr>
<tr>
<td>Lifting</td>
</tr>
<tr>
<td>Rotary Head Travel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Electronic Management</td>
</tr>
<tr>
<td>Human Machine Interface (HMI)</td>
</tr>
<tr>
<td>Electronic Control (MAV)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tilt Sensor</td>
</tr>
<tr>
<td>Self Levelling Control</td>
</tr>
<tr>
<td>Angle Sensor</td>
</tr>
</tbody>
</table>

Global Strength, Local Execution

**ITALY**
- Arco
- Carponeto Piacentino
- Castel Guelfo
- Cavenago di Brianza
- Crescentino

**GERMANY**
- Bad Homburg
- Essen
- Magstadt
- Mammendorf
- Nuremberg
- Schkeuditz

**CHINA**
- Chongqing
- Fujian
- Hubel
- Shanghai
- Shenyang
- Shiyan (2)
- Wuxi (3)
- Xiamen
- Yancheng (2)
Technologies Customized to Every Part of the Globe

With a global presence in 33 countries, Dana incorporated boasts more than 100 engineering, manufacturing, and distribution facilities. Our worldwide network of local service centers provides assurance that each customer will benefit from the local proximity and responsiveness that they need.

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 Technologies
Dana delivers fully optimized Spicer® drivetrain systems and individual product solutions to customers in construction, agriculture, material-handling, underground mining, and forestry markets, plus Brevini® motion systems for machine working functions.

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