

# Full-System Solutions for Deck Cranes

Deck cranes – cranes installed on the deck of a ship – come in a wide variety of types and sizes, and are often classified by the specific application for which they are designed. All deck cranes share similar basic functions – lifting, lowering, and positioning a load from one site to another. However, functionality varies greatly depending on where the crane is being used.

Deck cranes designed to move loads when a ship is docked in the quay handle much smaller loads than deck cranes for offshore

applications, which need to manage several hundred tons, often while ships are floating in a stormy sea.

Customizable design options include hydraulic and electric drivelines; telescopic, knuckle, or lattice booms; a range of control system features to improve accuracy; and environmental features to optimize performance based on worksite conditions. Dana works with customers to ensure that all local standards are met, as well as regulations set by the International Association of Classification Societies (IACS).

## Main Hoist System



## Active Heat Compensation Main Hoist Drive



### Brevini® Axial Piston Pumps

- Displacement up to 226 cc
- Medium- and high-pressure options
- Fixed and variable displacement available
- Open or closed loop circuit
- ATEX certification
- Environmentally Acceptable Lubricants (EAL fluids)
- Suitable for working in harsh and aggressive environments



### Brevini® Proportional Directional Valves

- Oil flow up to 1,000 lt/min
- High modularity
- ATEX certification
- Remote control, electronic operation
- Smooth control to improve operation functionality and accuracy



### Brevini® Axial Piston Motors

- Main hoist drive motors
- Marine painting cycle
- Fixed and variable displacement
- displacement up to 216 cc/rev
- Seven or nine piston options technologies
- Wide range of control valves
- Third-parties marine and ATEX certification
- Environmentally acceptable lubricants (EAL fluids)
- Suitable for working in harsh and aggressive environments



### Brevini® Industrial Planetary Gearboxes – S Series

- Main winch drives
- Ratio range up to 5,000:1
- Modular design
- Input flange for hydraulic or electric prime motor
- Compact, light solutions for a perfect fit on machine frames
- Marine painting cycle
- Third-parties marine certification available



### Brevini® Winch Drives

- Winch drive for auxiliary hoist system
- Ratio range up to 6,000:1
- Maximum torque up to 850 kNm
- Third-parties marine certification available
- Inline and right angle configuration versions available
- Electric motor connection available
- ATEX certification
- Integrated hydraulic failsafe negative brake and electromagnetic brake available
- Safety devices available as back stop, torque limiter, and sensors



### Brevini® Evolution™ Series Winches

- Winches for auxiliary hoist system
- Line pull up to 30 tons
- Third-parties marine certification available
- Wide range of safety controls
- Equipped with Brevini® high speed axial piston motor
- Man-lifting capabilities



### Brevini® Planetary Gearboxes - Slewing Drives

- Torque range up to 370 kNm
- Modular design, inline or right angle configuration
- Range of output support configurations (low angle, long and short support with eccentricity)
- Failsafe negative brakes
- Input flange for hydraulic and electric prime motor
- Compact, light solutions for a perfect fit on machine frames
- Flexible output pinion to meet customer needs
- Product marine/offshore class certification available
- Special solutions to meet requirements for low climate and ATEX certifications



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