## **Drilling Mud Agitator**

MAV Couplings Help Manufacturer Ensure Safety



The stakes are high. Large agitators churn the "mud" that drilling teams pump thousands of feet into the earth. Keeping that fluid at the right consistency is critical to the deep-well operations that have revolutionized the oil and gas industry.

Even more critical is the safety of the crew in offshore extraction and hydrofracking operations. A wide range of hazards, from slips and falls to fires and explosions, has been documented by the U.S. Occupational Safety and Health Administration (OSHA).

Keeping crews safe is why one manufacturer, a global supplier to offshore operations, platforms, and drilling ships, came to MAV S.p.A., a product line of Fenner Drives, to replace a coupling on a vertical drilling mud agitator.

The manufacturer makes a vertical agitator that has a right-angle gearbox suspended over a cylindrical mixing tank. The coupling in question plays a crucial role, connecting the output of the gearbox to the agitator shaft. Large mixer blades attach to the shaft along its entire length, mixing the drilling fluid as the shaft turns.

The existing couplings on the company's agitator had slipped and failed several times. And, on one occasion, an impeller that weighed several thousand pounds plunged into a mud tank, narrowly missing a maintenance worker.

The agitator manufacturer turned to MAV, a world leader in customizing solutions to keyless locking devices like internal and external locking assemblies, shrink discs and rigid couplings.

MAV developed a cone-integrated flange coupling with a zero-gap design. It has supplied the couplings to the manufacturer for more than a decade, in sizes ranging from 2\% to 4\% inches.

The company adds a keeper plate and safety screw to the coupling as an additional safety measure. The coupling usually is coated with a varnish composed of zinc and aluminum flakes in a binder to resist corrosion in harsh offshore environments.



Large MAV couplings help a global manufacturer make its vertical drilling mud agitator safe for drilling crews.





Established in 1989, MAV is located in Altopiano della Vigolana (Bosentino) in Northern Italy, at the foot of the Dolomites, one of the most beautiful areas of the Alps. Over the years, MAV has become known for its industry-leading product breadth, its world-class engineering expertise, and its track record of tackling and solving engineering challenges others shrink from.

Learn more about how MAV couplings, shrink discs and other keyless locking devices can help you meet your toughest challenges. WWW.MAV.IT









