



Rovatti Pompe: High Quality Pumps for Every Purpose

Since 1953 the name of **Rovatti Pompe** has been synonymous with the production and distribution of high quality and innovative water pumps. The company has always been heavily engaged in active research and development programs with particular attention to technological innovations and manufacturing processes in respect to the environment. Thanks to this combination of experience, technology and research of new materials Rovatti is able to offer a wide range of high efficiency, long-life functioning, and maintenance-free products.

The wide range of pumps for clean water includes the following series:

- E-ER-EX-ERCX - Electric borehole pumps both in radial and mixed-flow version;
- MEK-MEKV-MEKVX - Horizontal and vertical multistage close coupled electric pumps;
- V-VX - Vertical lineshaft pumps;
- S-SQ-SP-SK-SKD - Horizontal low, medium, and high pressure centrifugal pumps;
- T-TK - Pump with overgear for tractor PTO;
- FL-FK - Flanged pumps for thermic engines;
- SNE-MNE- Horizontal end suction and close coupled centrifugal pumps according to EN 733.

The wide range of pumps for sewage, drainage, and slurry



includes the following series:

- RH - Wastewater electric submersible pumps;
- DA - Electric submersible pumps for heavy drainage;
- FL-FLK-SL-SLK-TL-TLK - Centrifugal pumps with anti-clogging impeller and with different drive options;
- SAI-SA-FA-TA-MEA - Self priming centrifugal pumps with different drive options.

Each of the products listed above (which represent only a segment of the Rovatti production range) is manufactured according to international standards, tested by skilled engineers and the relevant performances are able to satisfy any requirement in agriculture, municipal, and industrial installations ensuring the highest level of reliability, safety, and ease of use. ■

Armstrong Pumps with Built-In Inverters for Variable Speed Pumping Up to 55kW

Armstrong's award-winning Series 4300 and 4302 IVS pumps incorporate integrated inverters which automatically calculate demand and adjust the speed of the drives accordingly, for variable speed pumping without the need for remote VFDs and sensors.

The extension of the range means that an even wider range of applications can now benefit from the advantages of the IVS pump range. These extremely popular integrated 'Sensorless control' pumps (previously available up to 7.5kW) are now available with variable speed drives up to 55kW.

Benefits of the pumps include: Energy efficient variable speed pumping achieved more quickly and easily at lower cost; reduced complexity of system design (eliminating the need for remote VFDs and sensors); faster maintenance (even on the largest pump models) with a 50% reduction in seal costs; energy consumption reduced by over 20% compared to maintaining a constant pressure across the pump.

In addition to providing a far more effective alternative to traditional variable speed pumping in new projects, the built-in control of the IVS range also has valuable benefits for retrofits, simplifying the migration from fixed to variable speed. The integrated inverter, attached to the body of the pump, enables the pump to calculate its own speed requirements based on the load placed upon it at any one



Armstrong 4300 variable speed pump with built-in inverter

time. Embedded within the memory of the speed controller are pump performance curves for differing speeds, including power, pressure, and flow data across the flow range of the pump. So, as long as the inverter can identify the power and speed of the pump, it can carry out the necessary calculations to determine the hydraulic performance and position in the pump's head-flow characteristics. The speed controller then regulates the pump accordingly to ensure that only the required energy for its current base-load is used.

Armstrong also supplies a range of standalone inverters, the IVS102, for variable speed pumping up to 450kW maximum power. ■