Centrifugal pumps are an integral part of Borets electrical submersible pumping systems designed to enhance production over the life of a well or a field and improve overall lift profitability for our clients. Borets has become a market leader by manufacturing centrifugal pumps and other system components to a high quality standard. Over 10,000 ESP systems are produced annually using this consistent high standard at 10 manufacturing facilities in 5 countries.

In addition to typical applications in oil, water, and brine production, Borets pumps are used for booster service, ballast transfer, waterfloods, direct injection, cavern storage, mine dewatering, fire protection, irrigation & commercial water systems.

Borets pump stage manufacturing processes range from conventional high-efficiency sand casting to mix flow stage casting and metal injection molding. Borets stage metallurgy includes grey iron and Ni-Resist for standard applications with different nickel content and special alloys to handle abrasive, corrosive and other challenging environments.

While Borets centrifugal pumps rotate at industry standard speeds, the innovative Wide Range Wear Resistant (WR2) pump operates at a rotational speed of 6,000 rpm.

Borets radial-flow stages are designed for efficiency at flow rates less than 1,000 BPD while mixed-flow stages are more efficient at higher flow rates. Besides, the mixed flow stages improve gas handling characteristics.

Constructed of iron with high nickel content, Borets pump stages are extremely resistant to wear and corrosion. The pumps have tungsten carbide radial bearings in the head and base to ensure stability. For abrasive environments Borets offers stage bearings with hardened inserts, which are strategically located within the pump. The stages are available in radial or mixed-flow design and can be assembled in a floater, packet or compression configuration, depending upon the well conditions.

Compression pumps cover a wider range of flow rates which is especially important to support the rapid decline curves associated with unconventional. When a centrifugal pump begins to operate in a downthrust environment, compression pumps transfer the downthrust force to the thrust bearing in the motor seal. Extended run life results from downthrust loads carried in the clean environment of the seal section rather than thrust washers in the centrifugal pump that are exposed to well fluids. Borets specifies a recommended operating range for all pumps to ensure optimal efficiency and to maximize run life.

All Borets pumps are built to ISO 9001:2008 standards and are tested to API-RP-11S2.
SERIES AND FLOW RANGES

Borets offers ESP systems in housings with outside diameters (OD) from 3.38 to 9.50 inches (85.8 to 241.3 mm) and lengths determined by the number of stages required to pump fluid to the surface.

** ESP ROR ranges from 96 to 57,800 bpd (15 m³/day to 9,192 m³/day) when ESP is operated by VSD at 45 to 75 Hz.

Borets offers corrosion and wear-resistant metal coatings applied to ESP housings, heads and bases that effectively address aggressive well conditions. Increased hardness and ductility of these coatings prevent their flex cracking during tripping.