**Product Line Overview**

**ROTO-JET®**
High Pressure Pitot Tube Pumps

**Model RD-11 Pump**
- Capacity: to 150 gpm (34 m³/hr)
- Heads: to 1500 ft (457 m)
- Pressures: to 650 psi (45 Bar)
- Temperatures: to 250°F (121°C)
- Maximum Speed: 4858 RPM

**Model R11 Pump**
- Capacity: to 150 gpm (34 m³/hr)
- Heads: to 1500 ft (457 m)
- Pressures: to 650 psi (45 Bar)
- Temperatures: to 250°F (121°C)
- Maximum Speed: 4858 RPM

**Model VSR® Pump**
(Variable Speed Roto-Jet®)
- Capacity: to 535 gpm (121 m³/hr)
- Heads: to 3930 ft (1198 m)
- Pressures: to 1730 psi (120 Bar)
- Temperatures: to 250°F (121°C)
- Maximum Speed: 5400 RPM

**Model 2100 Pump**
- Capacity: to 465 gpm (106 m³/hr)
- Heads: to 2950 ft (899 m)
- Pressures: to 1300 psi (90 Bar)
- Temperatures: to 250°F (121°C)
- Maximum Speed: 4709 RPM

**Model 2200 Pump**
- Capacity: to 535 gpm (121 m³/hr)
- Heads: to 3930 ft (1198 m)
- Pressures: to 1750 psi (120 Bar)
- Temperatures: to 250°F (121°C)
- Maximum Speed: 5443 RPM

**Model RO/ROH Pump**
- Capacity: to 450 gpm (102 m³/hr)
- Heads: to 5500 ft (1676 m)
- Pressures: to 2250 psi (155 Bar)
- Temperatures: to 550°F (288°C)
- Maximum Speed: 6321 RPM

**Model RO D850 Pump**
- Capacity: to 750 gpm (170 m³/hr)
- Heads: to 2100 ft (640 m)
- Pressures: to 900 psi (62 Bar)
- Temperatures: to 250°F (121°C)
- Maximum Speed: 4380 RPM

**Model RG Pump**
- Capacity: to 400 gpm (91 m³/hr)
- Heads: to 2600 ft (792 m)
- Pressures: to 1125 psi (77 Bar)
- Temperatures: to 250°F (121°C)
- Maximum Speed: 4380 RPM
**Operation**

The Roto-Jet® pump is totally, hydraulically stable and can operate with a minimal continuous bypass flow at shut-off indefinitely and at any flow point throughout the total head curve range with no wearing or damaging effect to the pump. The reason for this unique benefit is that all radial forces tend to be balanced within the rotor, and axial thrust is solely a function of suction pressure. Radial and axial forces applied to the Roto-Jet® pump are independent of flow rate. Thus, the pump can operate at design point to shut-off free of shaft deflection or added thrust load applied to the bearings.

**Seize-Proof**

Unlike conventional centrifugal pumps, the Roto-Jet® pump will not seize if run dry by a loss of suction or if operated with a minimal continuous bypass flow against a closed discharge valve. The mechanical seal is not mounted to the pump drive shaft, therefore, seal failure temperature rise is not transferred to the critical drive shaft/bearing area. The Roto-Jet® pump design does not incorporate wear rings or any close shaft tolerances which would be subject to heat expansion and drive shaft seizure.

**Design Simplicity**

The Roto-Jet® pump is a single stage pump with only two basic working parts: a rotating case and a stationary pitot tube. The mechanical seal of the Roto-Jet® pump is subject to only suction pressure, whereas many other pump seals are exposed to elevated seal chamber pressures producing a potentially higher fail rate. The mechanical seal is isolated from the bearings pedestal, minimizing the risk of bearing contamination from mechanical seal leakage. Therefore the Roto-Jet® pump can be kept in service with a damaged seal to meet the critical demands of daily production.

**Performance Flexibility**

Any given model is capable of higher or lower pressure performance by simply changing the external pump speed and applying the required horsepower. No modification of the pump is required. A wide range of flow capability is achieved by simply changing the pitot tube.

**Applications:**

- Boiler Feed and Desuperheating
- Oil Production
- Semi-Conductor Manufacturing
- Central Cleaning Systems
- Mining
- Spraying Systems
- Hydraulic Systems
- Petroleum-Chemical
- Steel Mills
- Hydro-Blast Cleaning
- Pulp and Paper Mills
- Transfer
- Reverse Osmosis
- Water Injection
- Turbine Fuel Feed
- NOₓ Suppression