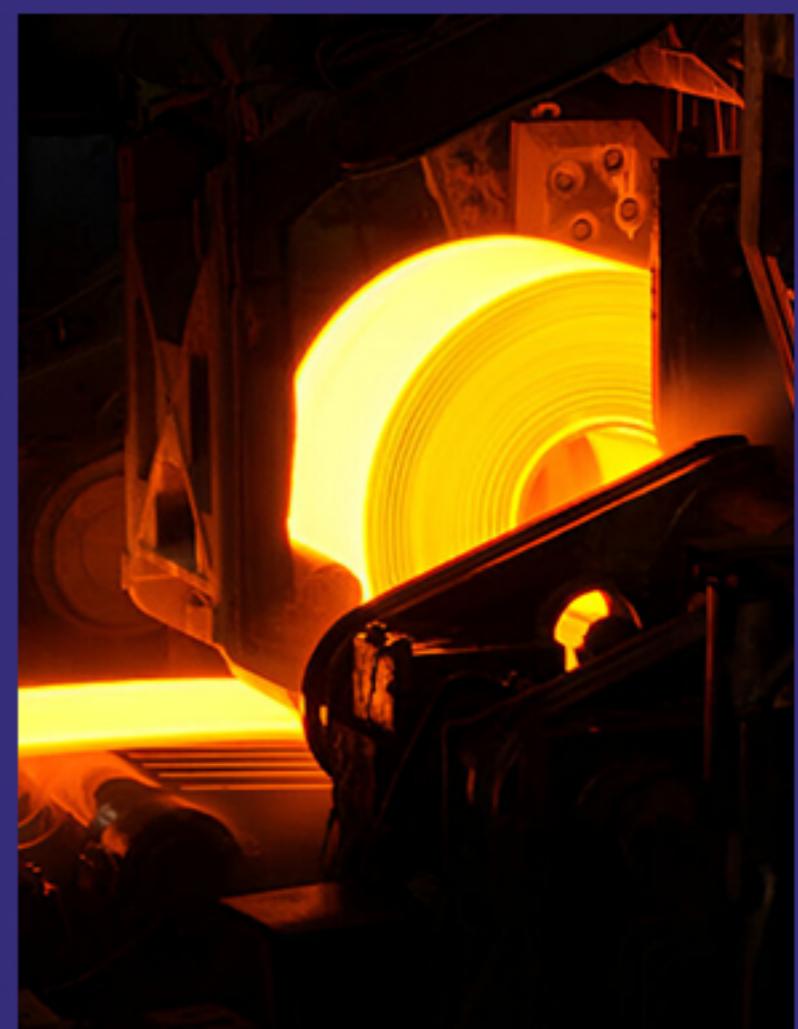


**PRECISION
PUMPING,
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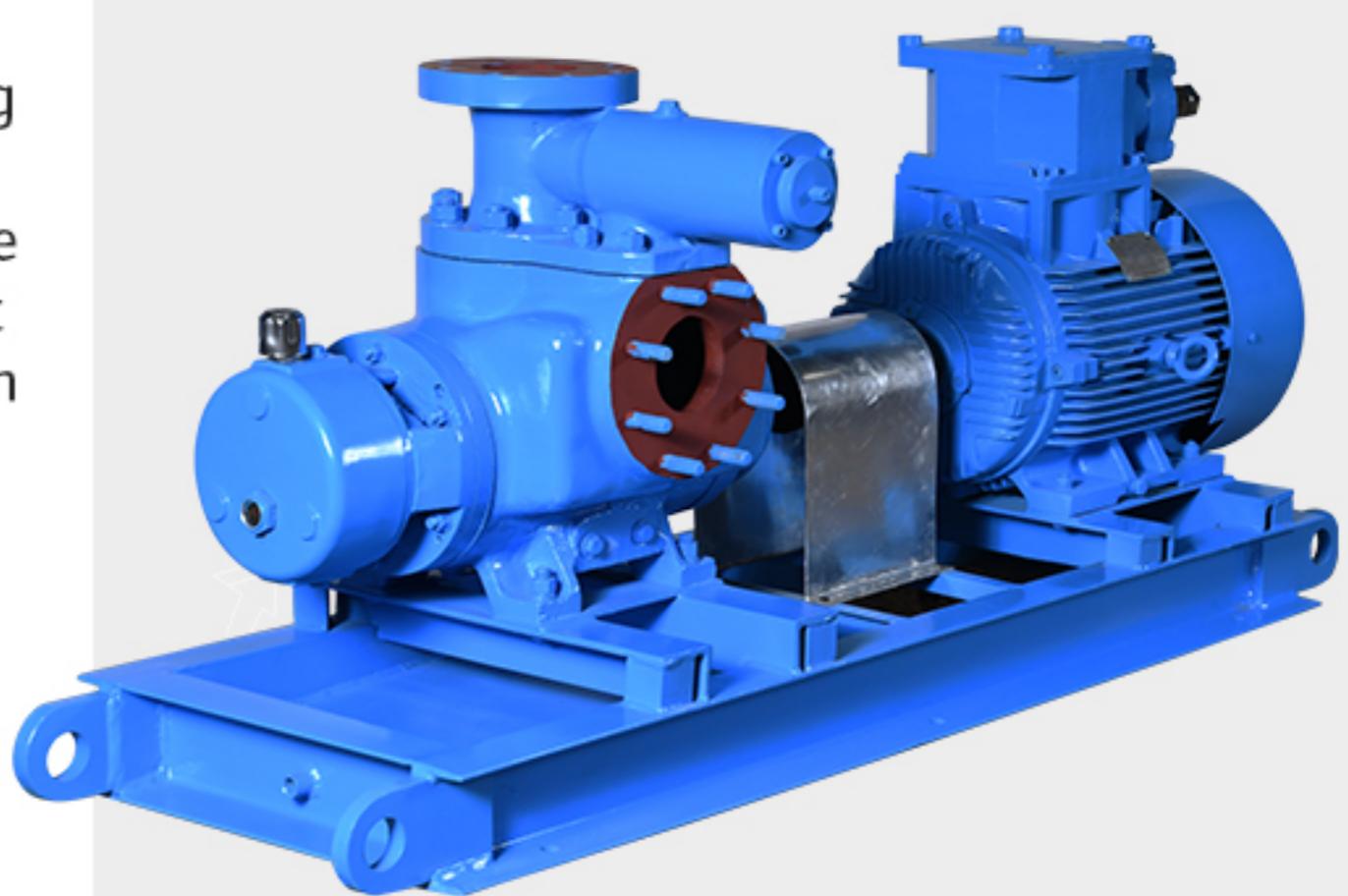


Twin Screw Pumps

UT pumps' twin screw series are self-priming, double ended positive displacement pumps with external gears and bearings. The design provides complete axial balancing of the rotating elements and eliminates all metal-to-metal contact within the pump. This feature makes them ideal for dry running for a short period and can be operated at low RPM. The pump is equipped with in-built balance pressure relief valve for safety. Customers can choose to heat the casing either through a heated base or via steam jacketing, depending on their application needs.

- Flow: Up to 450 m³/h
- Pressure: Up to 30 bar
- Temperature: Up to 250 °C
- Viscosity: Above 40,000 cP

TWIN SCREW PUMP



APPLICATIONS

Loading/unloading, transfer and process application for handling acids, bitumen, crude oil, chemical & corrosive fluids, dairy products, gasoline, glue, hydrocarbons, hydraulic controls, mineral oil, molasses, marine fuel oil, sea water, vegetable oil, very low & highly viscous liquid, liquid with entrained gases, etc.

INDUSTRIES

- Oil & Gas
- Manufacturing
- Chemicals & Petrochemicals
- Nuclear Energy
- Agrochemicals
- Metallurgy
- Power Generation
- Edible Oils
- Food Processing & Dairy
- Marine & Shipping

PRINCIPLE OF OPERATION

Twin screw pumps utilize two intermeshing screws that rotate in opposite directions. During operation, the rotation of these screws forms cavities that trap and transport fluid from the pump inlet to the discharge outlet.

The fluid moves smoothly along the screw length, ensuring consistent flow. Timing gears synchronize the screws, preventing contact between them and allowing the pump to handle fluids with varying viscosities and particulates without damage.

The pumps' design allows for axial balance, reducing wear and enabling dry running capabilities. Twin screw pumps are highly versatile, capable of handling a wide range of fluids—including abrasive, corrosive, and solid-laden types—making them ideal for diverse industrial applications.

MATERIALS OF CONSTRUCTION



Pump Casing

Carbon steel, cast iron, and stainless steel



Shaft & Screw

Stainless steel and alloy steel



Seals

Gland packing, single mechanical, and API 682 compliant mechanical seals

SPECIAL FEATURES

- API 676 compliant
- Separate screw and shaft assembly design offer many advantages
- Extremely good suction capability
- Compact design and rugged construction
- Various combinations of materials available
- Partial/full heating jacket available in various designs
- Customizable sealing and casing designs
- Low Net Positive Suction Head (NPSH) requirement
- Low maintenance cost

TWIN SCREW ROTOR



SPECIFICATIONS

Model	Nozzle Size (mm)		Flow Rate m³/h	Pressure bar
	Suction	Discharge		
2	40	40	9	10
3	50	50	21	10
4	80	80	39	15
5	100	100	60	20
6	150	150	108	25
7	200	200	210	30
7T	250	250	450	30

ABOUT

For over four decades, UT Pumps has been a trusted provider of industrial pumping solutions, renowned for engineering excellence and dependable performance in demanding environments. Specializing in the manufacture of high-quality screw pumps and high-pressure plunger pumps, we serve critical sectors including chemicals, water treatment, and food processing with precision-engineered systems tailored to industrial requirements.

Our commitment to quality, sustainability, and safety is reflected in our ISO 9001, ISO 14001, and ISO 45001 certifications, ensuring that every solution we deliver enhances productivity and operational efficiency.

As a brand of Hydro Prokav Pumps India Pvt. Ltd. and Ingersoll Rand, UT Pumps offers its customers the advantage of global expertise, expanded capabilities, and a commitment to innovation.



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PROKAV**

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