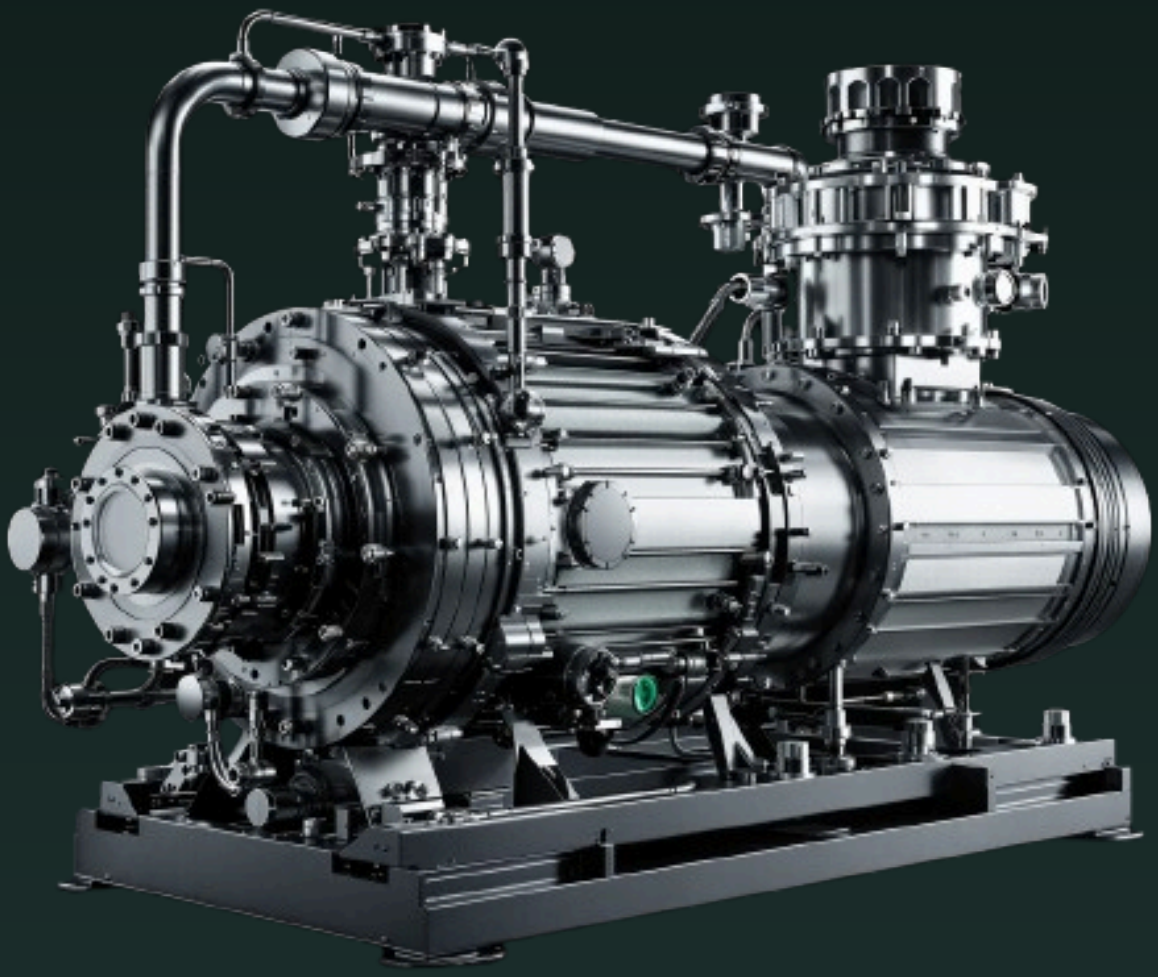
INDUSTRIAL PUMPS

BY TANSER PARS SANAT



TANSER PARS SANAT

Tanser Pars Sanat is a trusted supplier in providing industrial pumps tailored specifically for the petrochemical, oil and gas refining, and steel industries. Leveraging years of experience in sourcing and supplying top-quality, reliable equipment, we ensure that each solution meets the unique operational needs of our clients.

Our international presence, with offices in Hamburg, Shanghai, Dubai, and Tokyo, enables us to offer efficient and responsive support to our customers globally. We place great importance on thoroughly understanding client requirements, providing precise technical guidance, and delivering consistent after-sales service.

COMPREHENSIVE SOURCING CAPABILITIES

We procure industrial equipment and components from leading manufacturers worldwide, ensuring quality, reliability, and competitive pricing for our clients.

Our pumps Range

Domestic & Industrial Water Pumps

Reliable solutions for residential, commercial, and industrial water supply.

Circulator Pumps

Energy-efficient circulation for HVAC and heating systems.

Submersible Pumps (Well Pumps)

Designed for deep wells, boreholes, and groundwater extraction.

High-Pressure Pumps

Heavy-duty performance for firefighting, industrial cleaning, and water jetting.

Chemical Transfer Pumps

Corrosion-resistant handling of acids, alkalis, and aggressive fluids.

Drainage & Slurry Pumps

Robust dewatering and sewage handling for municipal/industrial wastewater.

SPECIALTY PUMP TECHNOLOGIES

A. Advanced Centrifugal Pumps

✓ Multistage Pumps: High-pressure water supply for high-rise buildings.
✓ Self-Priming Pumps: Automatic priming for versatile applications.
✓ Corrosion-Resistant Pumps: SS316 or polymer construction for harsh chemicals.

B. Industrial-Grade Pumps

✓ Slurry Pumps: Abrasion-resistant transfer of mining/mineral slurries.
✓ Gear Pumps: Precision metering for oils and viscous fluids.
✓ Piston Pumps: Ultra-high-pressure hydraulic systems (up to 1,000+ bar).

C. Oil & Gas Pumps

✓ Screw Pumps: High-viscosity crude oil and adhesive fluid transfer.
✓ Submersible Oil Pumps: Deep-well extraction in petroleum applications.

D. Water & Wastewater Pumps

✓ Submersible Sewage Pumps: Solids-handling for urban/industrial wastewater.
✓ Aerator Pumps: Oxygenation in wastewater treatment plants.

E. Solar & Energy-Saving Pumps

✓ Solar DC Pumps: Off-grid water supply for agriculture/remote areas.

EXTREME ENVIRONMENT SOLUTIONS

Deep-Well & HighPressure Pumps

·Deep Well Submersibles:
oDepth capability: >100 meters
oMulti-stage design for high-pressure delivery (up to 150 bar).
·High-Pressure Injection Pumps:
oOil/gas well stimulation and water injection.

Cryogenic Pumps (-100°C to -269°C)

·Applications:
oLNG (Liquefied Natural Gas) transfer
oLiquid nitrogen/helium for medical (MRI) and aerospace
·Features:
oSpecialized SS alloys to prevent brittle fracture
oZero-leakage seals for ultra-low temperatures

Types of cryogenic pumps and their differences

Centrifugal cryo pump

The cryogenic centrifugal pump (also known as receiver or generator) transforms mechanical energy of an impeller or runner into kinetic or pressure energy. Using centrifugal forces, it expels cryogenic liquids to the outside.

The centrifugal cryogenic pump is adequate for dealing with LNG, nitrogen, oxygen, ethylene, hydrogen and carbon dioxide, among other cryogenic gasses.

This type of cryopump includes the following features:

·Can be operated using gears and a fixed-speed motor or coupled to variable speed motors.

·They can be powered by electric motors with direct transmission as well as hydraulic power.

·Higher capacities and pressures can be achieved if a yearbox is included between the motor and the pump.

·The cold box must include a gas-seal.

This category may include multiple functioning systems, from one or two-stage pumps to stationary pumps, pumps on tankers and removable pumps.

Additionally, at Cryospain we’re able to provide turnkey-type, tailor-made pumping solutions, including stationary centrifugal pumps mounted on chassis with all the required instrumentation.

We also extend the life cycles of our centrifugal cryogenic pumps by using composite materials for mechanical seals, instead of conventional graphite seals.

The centrifugal cryogenic pump has many applications, including maritime bunkering, submerged marine fuel systems and liquid storage transferences, among others.

Piston or reciprocating cryogenic pumps

As cryogenic pumps suppliers, we also provide piston or reciprocating cryogenic pumps ranging from MRP pumps (used for the high-pressure filling of air gasses) to specialized pumps for the use of LNG, hydrogen, and other liquefied gasses.

Reciprocating cryo pumps compress liquids using piston movements at high pressures. This results in dislodging the fluid volume equivalent to that which it occupies during its stroke.

Reciprocating cryogenic pumps are used in many applications, including high-pressure LNG and air gasses applications. Both single and double electric motor systems are available, as well as single and multi-stage versions.

This type of cryopump is useful for many applications, including high-pressure pumping, and the filling of storage systems for cryogenic substances such as LNG, LN2, LH2, among others.

Submerged pumps

Submerged cryogenic pumps are used when low temperatures are needed for liquids to be transported. As a consequence, they're a common feature in the production and transport of liquid nitrogen, liquid natural gas (LNG), liquid Helium, and liquid Oxygen and in ship to ship bunkering processes.

At Cryospain we develop tailored cryogenic equipment as part of our comprehensive innovative engineering projects. We thus are in charge of supplying cryogenic equipment components and devices, including cryogenic pumps for the industry's most renowned companies.

Through our top engineers, designers and experts, we're able to generate efficient and optimized cryogenic equipment, customizing it to our clients' specific needs.

In terms of cryogenic pump maintenance, incorrect processes may result in poor motor performance or poor insulation, leading to repeated part replacements and consequent reduced service life. Because of this, as part of our commitment to generate the highest-quality systems, we provide maintenance and after-sale services, guaranteeing our clients' investments remain cost-efficient and our equipment is both safe and optimized at all times.

Centrifugal & Multistage Pumps

·Grundfos (Denmark): Building services, water treatment
·KSB (Germany): Industrial high-pressure applications
·Sulzer (Switzerland): Power plant pumps

Submersible & Deep Well Pumps

·Franklin Electric (USA): Water well systems
·Lowara (Italy): Industrial submersibles
·Pedrollo (Italy): Deep well applications

Slurry & Abrasive Handling Pumps

·Warman (Australia): Mining industry
·GIW (USA): Heavy abrasive services

Positive Displacement Pumps

·Alfa Laval (Sweden): Sanitary applications
·Viking Pump (USA): Industrial gear pumps

Cryogenic Pumps

·Cryostar (France): LNG & industrial gases
·Nikkiso (Japan): LNG transfer

Wastewater & Drainage Pumps

·Flygt (Sweden): Municipal wastewater
·Tsurumi (Japan): Industrial dewatering

Hydraulic Pumps

Bosch Rexroth (Germany): Mobile hydraulics

Heavy-Duty LNG & Industrial Gas Pumps

Cryostar (France)
·Model: TC4 (Horizontal centrifugal for LNG)
·Model: H2 (Liquid hydrogen transfer)
·Model: NS (Submersible LNG pumps)
Nikkiso (Japan)
·Model: ACD (Ambient-cold LNG pumps)
·Model: Cryo-Powertrain (Integrated pump/expander)
Fives Cryomec (France)
·Model: ALH (Axial flow LNG, up to 10,000 m^3/h)
·Model: CBS (Compact booster pumps)

Ultra-Low Temperature Specialty Pumps

Ebara (Japan)
·Model: Cryo-Pump EC (-269°C helium service)
Sulzer (Switzerland)
·Model: LNG-MAX (-196°C nitrogen processing)
Flowserve (USA)
·Model: LNG-16 (API 685 sealed LNG pumps)

Specialty Cryogenic Applications

Chart Industries (USA)
·Model: MVE CryoPump (Medical/biogas applications)
Linde Engineering (Germany)
·Model: CryoSpeed (Air separation plant pumps)
Herose (Germany)
·Model: VT (-210°C oxygen service)

Compact & Skid-Mounted Systems

LGM Engineering (Germany)

·Model: CP-Series (Modular cryogenic units)

Brooks Automation (USA)

·Model: Cryo-Torr (High-vacuum cryopumps)

PHPK Technologies (USA)

·Model: ISOPump (Isolated shaft designs)

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Technical Comparison Highlights

BRAND	TEMP RENGE	FLOW CAPACITY	**SPECIALTY**
cryostar	-163°C to +30°C	Up to 3,000 m^3/h	LNG terminals
nikkiso	-269°C to +40°C	5-500 m^3/h	Hydrogen infrastructure
fives	-196°C to +50°C	1-10,000 m^3/h	Large-scale ASUs

GLOBAL PUMP BRANDS

Explosion-Proof Pump Types (ATEX/IECEx Certified)
The following pump categories are commonly available in explosion-proof (Ex-proof) designs for hazardous environments (Zone 1/Zone 2, Class I Div 1/2)

Contact Us

For more information about our products, services, or to request a quote, feel free to reach out to us through the following contact details:

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