



*Specialist for Pumping Technology*



# SPI

**Vertical in-line API process pump  
(flexibly coupled - OH3)**

# Advanced pumping technology that moves our world

The SPI is a vertical in-line, single stage, single suction centrifugal pump engineered to cover a wide range of applications in the oil and gas industry and hydrocarbons processing.

Its heavy-duty process design, in accordance to API 610 latest edition (OH3 type), also includes a mechanical seal chamber in accordance with API 682.

Ruhrpumpen's quality program and in-house foundry, along with the latest testing equipment, ensure that the SPI will provide long operating life, even under the most severe conditions.

The SPI can be provided with customized hydraulics to meet the customer's specific requirements.



## Compact design

The pump is suitable for direct mounting into the piping without the need of a foundation saving valuable floor space.

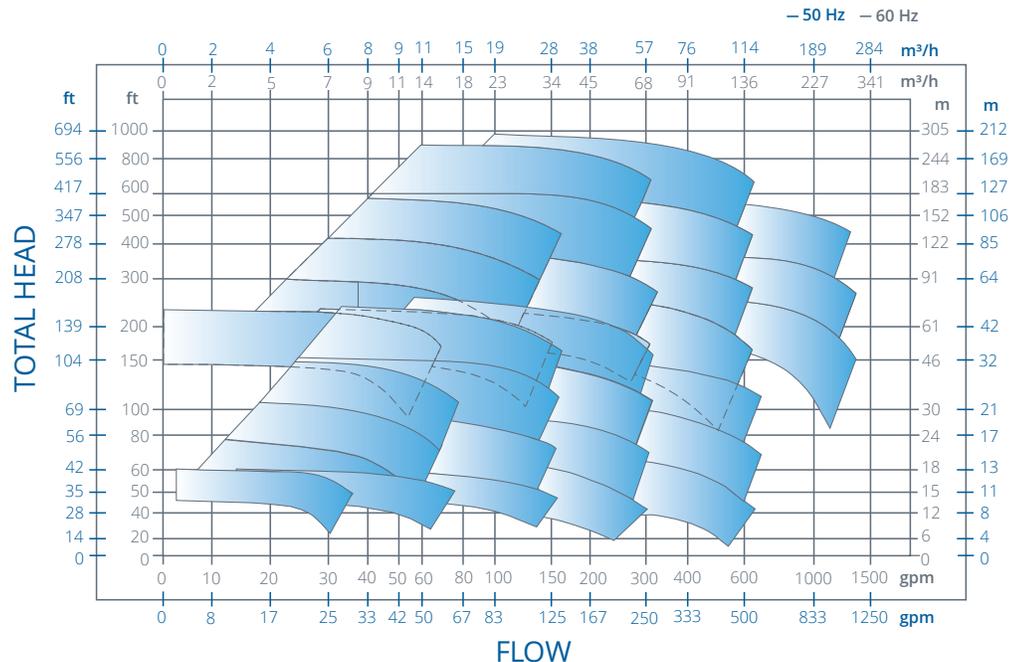
## Hydraulic coverage

The SPI pump range is designed to handle a wide range of process fluids and has one of the broadest hydraulic coverages in the industry.

## Applications

- Hydrocarbons
- Refining
- Crude production and distribution
- Pipeline
- Petrochemical
- Offshore platforms
- Process industry
- Jet fueling

## Performance Range



# SPI

## DESCRIPTION

- Heavy-duty process design according to API 610 latest edition - OH3 type
- Radially split, single stage, vertical in-line centrifugal pump
- Flexibly coupled
- Single suction, dynamically balanced, enclosed impeller
- Separate bearing frame
- Foot mounted
- Single and double volute casings (depending on size)
- Thrust compensation by balance holes
- Side-side nozzle arrangement
- Separate bearing bracket to absorb all pump thrusts
- Replaceable wear rings for casing and impeller

## CONSTRUCTION MATERIALS

Materials of construction per API 610 latest edition. *Other materials available on request.*

## OPERATING LIMITS

Capacity	11 to 2700 gpm 2.5 to 615 m <sup>3</sup> /h
Head	52 to 950 ft 15 to 290 m
Pressure	up to 600 psi up to 40 bar
Temperature	up to 500 °F up to 260 °C
Speed	up to 3600 rpm

*NOTE: for pump operation outside this range, please contact a Ruhrpumpen representative.*



*Images for illustration purposes not actual construction.*

- 1.** SHAFT - large shaft design results in deflections at the mechanical seal less than 0.002 in. This results in maximized seal life and minimized vibrations ensuring a long lasting, smooth running pump.
- 2.** BEARINGS - anti-friction bearings are designed with a minimum B10 life of 25,000 hr. Double angular contact bearings are available for high suction pressure applications.
- 3.** SEAL - mechanical seal chamber dimensions in full compliance with API 610 and API 682.
- 4.** SIZES - 19 pump sizes from 1 1/2" to 8" discharge nozzles. Built in accordance with API 610.
- 5.** CASING - double volute casings are standard for sizes greater than 3" nozzles (except 4x4x12 & 4x4x15, which are single volute).
- 6.** SUPPORT - foundation support is possible with the integral foot-plate.

## +65 years creating the pumping technology that moves our world

Ruhrpumpen is an innovative and efficient pump technology company that offers highly-engineered and standard pumping solutions for the oil & gas, power generation, industrial, water and chemical markets. We offer a broad range of centrifugal and reciprocating pumps that meet and exceed the requirements of the most demanding quality specifications and industry standards such as API, ANSI, UL, FM, ISO and Hydraulic Institute.

