

A faint, grayscale background image of a high-pressure piston pump is visible behind the text. The pump has a vertical cylinder with a piston rod extending upwards, and various pipes and valves at the base and side.

PRODUCT BROCHURE:  
**HRS BP PUMP SERIES**  
HIGH PRESSURE PISTON PUMP

# HIGH PRESSURE PISTON PUMPS

Hygienic pumps are manufactured to ensure that they are safe for the **food processing and pharmaceutical industries**. Essentially, they are designed in a way that prevents contamination of the product pumped and ensuring it is **safe for human consumption**. The materials of a hygienic pump, such as stainless steel, are those that avert contamination and cannot absorb the pumped fluid. All surfaces of the pump must be smooth to eliminate the chance of harbouring bacteria.

Experience of working with difficult heat transfer solutions in the food industry, has proven that pumping products **without destroying their integrity** is as important as developing heat exchange solutions.

This led to the development of the HRS BP Series Piston Pump, a reciprocating positive displacement pump, which can handle very delicate and viscous food products.



They provide the following benefits:

- Consistent product identity
- Gentle product treatment
- High flow rates (up to 20 m<sup>3</sup>/hr)
- High pressure (30 bar)
- Can run dry\*
- Minimal spare parts
- High temperatures (120°C)

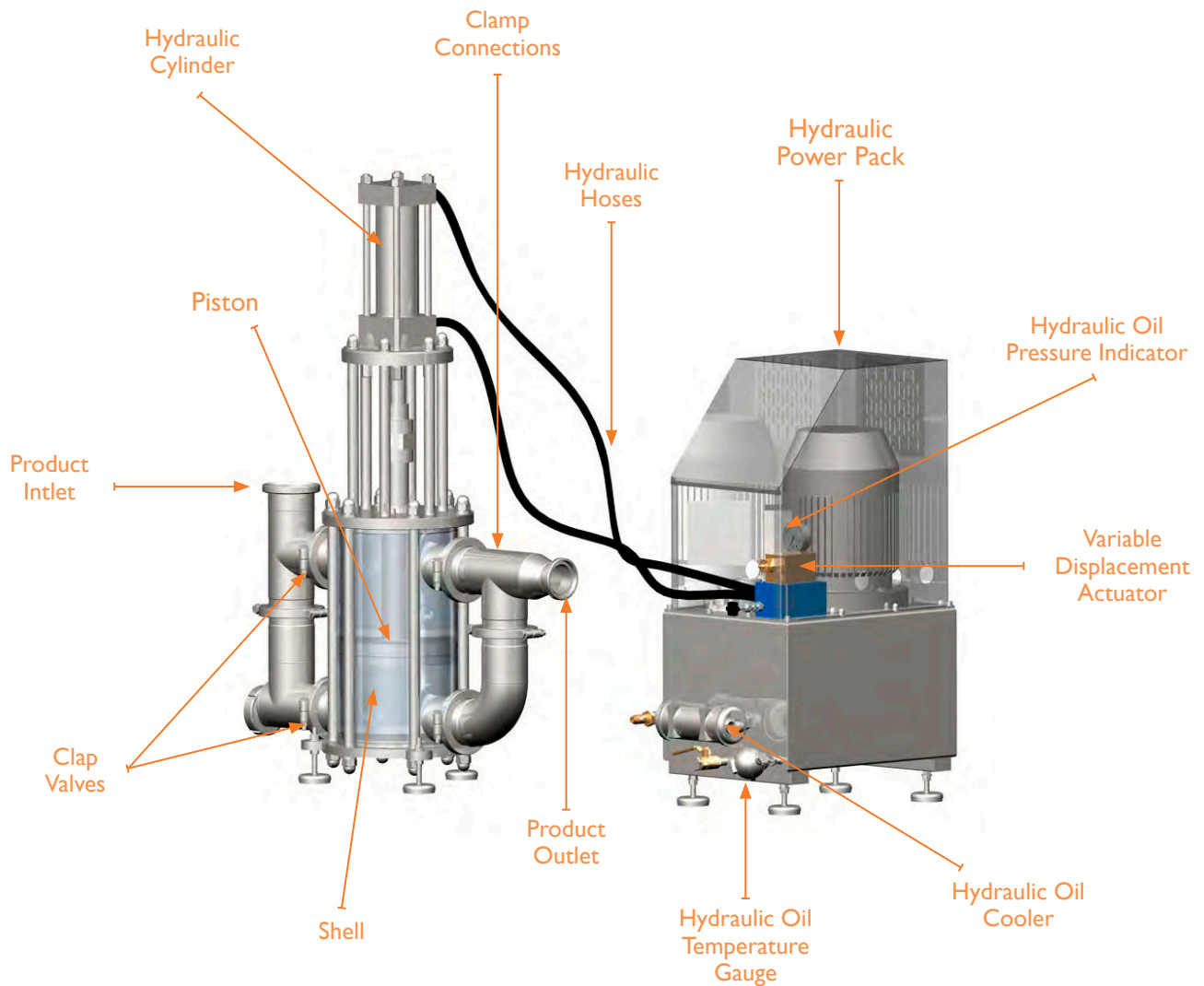
*\*Can run dry for a short periods only*



*HRS offers a plug and play trial piston pump to aid zero risk product trials*

# HIGH PRESSURE PISTON PUMPS

## FEATURES



BP Series pumps are driven by a hydraulic power pack which drives a cylinder in alternate directions, moving the piston up and down.

The pump housing is split into two chambers, each with an inlet and outlet connection allowing the entry and exit of large particles. It has an adjustable flow, which can range from a minimum

of 200 litres/hour to a maximum of 20,000 litres/hour, and features a high pressure drop of up to 30 bar.

Clap valves allow pumping of whole fruits or vegetables, and an alternative piston pump with a pneumatic cylinder can be supplied for low pressure applications of less than 4 bar.

# HIGH PRESSURE PISTON PUMPS

## MOBILE POSITIVE DISPLACEMENT PISTON PUMP

### HRS BPM SERIES



The BPM Series is a mobile version of the standard BP Series pump. It is mounted on a mobile skid unit for easy movement, allowing it to be used across multiple production lines and locations, ideal for food manufacturers producing short runs of specialist products.

With the BPM Series, customers can enjoy the benefits of a BP Series pump without the need to invest in a dedicated pump, resulting in considerable capital savings.



## POSITIVE DISPLACEMENT PISTON PUMP WITH SCREW CONVEYOR

### HRS BPSC SERIES



The HRS BPSC Series is specifically designed for highly viscous materials such as pastes and particularly those which are produced and packed at low temperature.

The product's thickness can make it hard to prime the pump. To overcome this, the HRS BPSC uses a gravity-fed hopper, together with a screw conveyor, to feed product into the inlet of the pump. Once suction side has been filled, the pump is primed and will operate as normal with a constant flow of product.



## HORIZONTAL POSITIVE DISPLACEMENT PISTON PUMP

### HRS BPH SERIES



The HRS BPH Series is a horizontal version of the BP Pump for use with products with larger sized particulates.

The pump is mounted horizontally and inlet is vertical. The standard clap valve is replaced with an automatic ball valve.

Also comes with the option of a feed hopper.





# HIGH PRESSURE PISTON PUMPS

## STANDARD SPECIFICATIONS

**MATERIALS:**

Product Wetted Parts:                      AISI 316L Stainless Steel

**CONNECTIONS:**

Service Side:                                      Clamp

Product Side:                                     Clamp

**SURFACE FINISH:**

External:    Polished

Internal:     <0.8µ



*Clap valves allow pumping of whole fruits or vegetables*

## APPLICATIONS

Convenience Food

Protein

Bakery and Confectionery

Dairy

Beverages

Fruits and Vegetables

Pharmaceutical

Personal Care





**HRS UK**

+44 1923 545 625

**HRS Spain**

+34 968 676 157

**HRS USA**

+1 770 726 3540

**HRS Mexico**

+52 55 8095 3306

**HRS Malaysia**

+60 3 8081 1898

**HRS India**

+91 20 2566 3581

**HRS Australia**

+61 3 9489 1866

**HRS New Zealand**

+64 9 889 6045

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[www.hrs-heatexchangers.com](http://www.hrs-heatexchangers.com)