

# Scraped Surface Heat Exchanger VT+

VT+422, VT+460, VT+660 AND VT+680





VT+660/VT+680

OPEN FOR SERVICE AND INSPECTION

# Scraped Surface Heat Exchanger VT+

## FIELD OF APPLICATION

Dairy, food and other industries. The units are designed to heat, sterilise and cool a wide range of products containing particles up to 30 mm or products with high viscosity.

## OTHER APPLICATIONS

- Crystallisation
- Whipping applications
- Treatment of thixotropic or heat sensible products

## CAPABILITIES

Up to about 10,000 l/h, depending on product, temperature, specific requirements and number of cylinders.

## STANDARD DESIGN

Light and medium duty SSHE with vertical cylinder arrangement mounted on a base console under which a dasher gear motor is mounted.

## CYLINDER

Polished surface cylinder fitted to base plate with clamp and provided with welded-on jacket. Depending on the application, the cylinder jacket can operate with steam, water or glycol media.

The cylinder is made of EN.1.4404 (AISI316L)

## DASHER AND SCRAPER BLADES

The dasher has two rows of scraper blades which are fitted to pins to allow them to swing freely and scrape the total heat transfer area.

The standard dashers are available in two diameter options, i.e. a low displacement dasher and a high displacement dasher.

The top section of the dasher is supported by a bearing bush, positioned in the product area. The top bearing surface of the dasher is made of SAF quality steel for high level of abrasive resistance and both the bush and the dasher bearing surface are replaceable in case of excessive wear.

The dasher is made of EN.1.4404 (AISI316L) and the scraper blades of food approved plastic (PEEK).

## SHAFT SEAL

The SSHE cylinder has only one shaft seal, located on the drive end at the bottom of the cylinder. The shaft seal is a double mechanical cartridge seal designed for water or steam flushing (aseptic design).

## CYLINDER AND DASHER LIFTING DEVICE

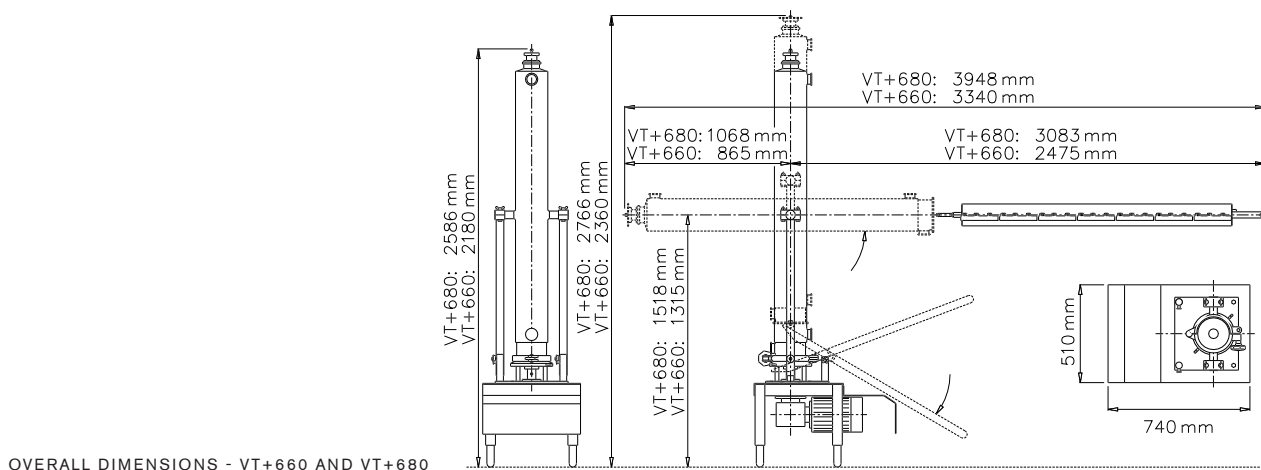
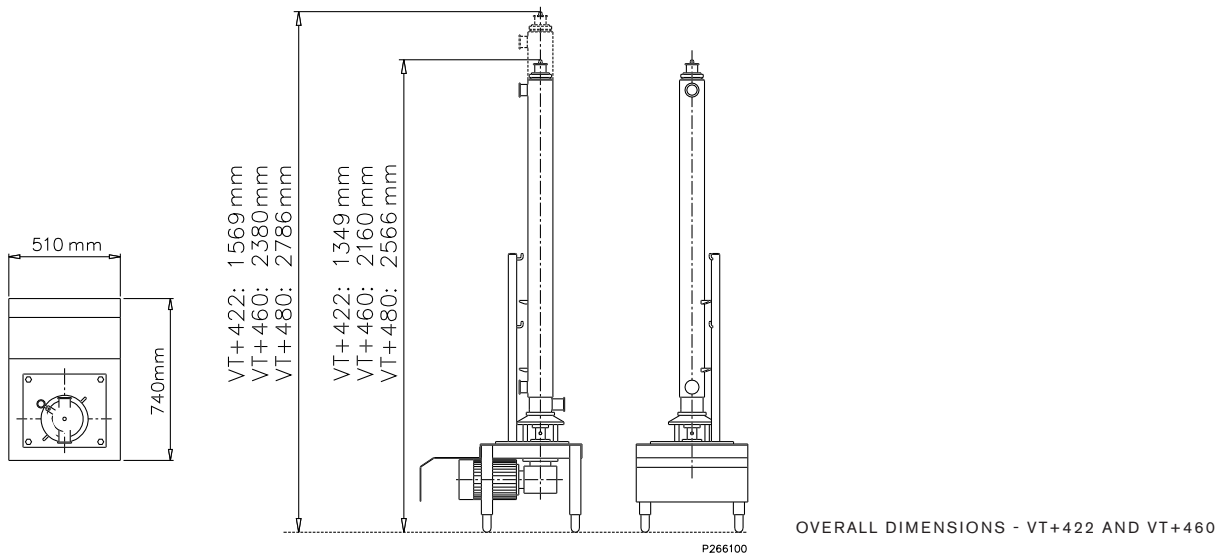
The VT+660 and VT+680 modules are provided with a manually operated lifting device, which lifts cylinder and dasher free of the shaft seal. Cylinder and dasher are turned into horizontal position for inspection and service. The VT+422 and VT+460 units have support brackets on which the cylinder can be fixed temporarily during inspection and service of scraper blades, seals etc.

## DRIVE MOTOR

The dasher is driven from a tooth wheel gear, powered by a high-efficient electric motor, all located under the SSHE base console.

## GROUPING OF CYLINDERS

Depending on the duty of the SSHE, cylinders are mounted in groupings of up to four on a common stainless steel base with all product and service interconnections made.



TECHNICAL DATA	MODEL VT+422	MODEL VT+460	MODEL VT+660	MODEL VT+680
HEAT EXCHANGE SURFACE/CYL.	0.19 M <sup>2</sup>	0.44 M <sup>2</sup>	0.68 M <sup>2</sup>	0.87 M <sup>2</sup>
<b>DASHER SIZES</b>				
LOW DISPLACEMENT	38 MM	38 MM	89 MM	89 MM
HIGH DISPLACEMENT	60 MM	60 MM	114 MM	114 MM
<b>PRODUCT:</b>				
- MAX PRESSURE LOW DISPLACE- MENT DASHER	20 BAR	16 BAR	12 BAR	9 BAR
- MAX. PRESSURE HIGH DISPLACEMENT DASHER	20 BAR	20 BAR	18 BAR	14 BAR
- MAX. TEMPERATURE	150°C	150°C	150°C	150°C
- IN-/OUTLET CONNECTION	Ø 51 MM	Ø 51 MM	Ø 51 MM	Ø 51 MM
- NET VOLUME/CYLINDER				
- Ø 38 MM DASHER	4.0 L	9.0 L	-	-
- Ø 60 MM DASHER	3.0 L	7.0 L	-	-
- Ø 114 MM DASHER	-	-	11 L	14 L
- Ø 89 MM DASHER	-	-	16 L	21 L
<b>MEDIA:</b>				
MAX. PRESSURE	10 BAR	10 BAR	10 BAR	10 BAR
RECOMMENDED FLOW	2,000 L/H	5,000 L/H	10,000 L/H	10,000 L/H
IN-/OUTLET CONNECTION	Ø 51 MM	Ø 51 MM	Ø 51 MM	Ø 51 MM
MOTOR EFF./CYLINDER	2.2 KW	2.2-4 KW	2.2-5.5 KW	2.2-5.5 KW



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## ABOUT SPX

Based in Charlotte, North Carolina, SPX Corporation (NYSE: SPW) is a global Fortune 500 multi-industry manufacturing leader. For more information, please visit [www.spx.com](http://www.spx.com).

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