

# Tetra Pak® Homogenizer 20C

Keep it simple. Keep it quality.



#### **Highlights**

- Plug-and-play design with integrated starter panel
- Homogenization device with integrated second stage for minimal operational costs
- 10-year warranty against mechanical cracking
- High uptime thanks to easy-access components
- Turnable parts for low service cost
- Hygienic design built for cleanability

## **Applications**

High-pressure homogenization of emulsions and suspensions, non-aseptic, high- or low-viscous products, including pasteurised milk, cream, yoghurt, condensed milk, ice cream mix, fruit juices, etc.

## Working principle

The product enters the machine through the inlet pipe. Pistons pressurise the product to the required homogenising pressure. The high pressure pushes the product through a small annular gap of the homogenising device. The pressure is transformed into high velocity, generating extreme turbulence and cavitation, which reduces the size of the liquid droplets and solid particles in the product. The product then exits through the outlet pipe.

### Design

Tetra Pak® Homogenizer 20C is a horizontally mounted, 3-piston positive displacement pump. It features an efficient homogenization device with an integrated second stage. The seat and forcer disc are reversible for double lifetime, and wear-resistant parts are made of cobalt carbide.

The unit features a high-pressure pump block of onepiece, forged, duplex stainless steel, with a quick-change piston seal cartridge system and fully replaceable suction and discharge-valve seats. An efficient serial cooling water system offers low water consumption. The pump block is backed by a 10-year warranty against mechanical cracking.

#### **Technical features**

- Homogenization device with hydraulic pressure setting for stable pressure
- Easy access thanks to easy-to-open hood, which includes a large inspection window
- Hygienic design separated wet and drive-end, with all parts located inside the housing
- Turnable parts doubles the lifetime of homogenising device and valve seats

- Splash-lubricated crankcase made in high-quality
  cast-iron
- One-piece, forged, duplex stainless steel pump block hygienic and durable with ten year warranty against mechanical cracks
- Pulsation dampers and hygienic, heavy-duty clamp connections
- Small footprint
- · Wear resistant chromium plated pistons
- Floating piston connection self aligning
- Serial piston cooling circuit low water consumption
- Premium efficiency motors
- Integrated starter panel

#### Options

- Variable speed design with external IP66 frequency converter
- Homogenising device for semi-abrasive products
- · Pneumatic cooling water valve



### **Capacity pressure range**

Pressure bar (PSI)	Max capacity I/h (gph)
250 (3600)	4300 (1130)
200 (2900)	5500 (1450)
160 (2300)	6800 (1790)

#### Service media

Cooling water (>300 kPa [40 psi], max 25°C [77°F],	
hardness < 10° dH) ambient temperature 30°C	95 L/h

## **Dimensions**

Depth	1495
Width	1246
Height	1535
Service area	2800 x 2200
Service height	1840

## **Environment**

## Consumption data

Energy consumption / 1000 l product (kWh)	4.2
Water consumption / 1000 I product (L)	14
Possible water to recirculate (% of total)	63
Noise, (dB (A))	77
Carbon footprint / 1000   product (kg CO <sub>2</sub> )	1.8

Data based on pasteurised white milk, max. capacity at 140 bar,  $0.429 \text{ CO}_2$  equivalent factor.

Noise level per ISO11204.

# Shipping data

Motor type	Net wheight
45 kW / 60 hp	1550 kg

Export packing add 350 kg Shipping volume: 5,3 m<sup>3</sup>