

Pre-expander



For now and in the future

Pre-expander



Pre-expanders form the basis for the processing of particle foam, such as EPS, co-polymers and several types of biofoam. The process of thin-wall particle foaming requires an even grain size, which only can be accomplished in a continuous pre-expansion process.

The set-up of the THW VA:60 combi consists of a fluid bed dryer and a vertical cylindrical vessel operating at atmospheric pressure, with a limited temperature up to 100°C. The raw material, together with the steam, is continuously transported to the bottom of the vessel by a screw feed system. The expanded particles then exit the machine through an opening at the top. The combination of the screw feed rate, steam pressure and the height of the overflow opening make it possible to control the density of the particles. Thermoware Pre-expander systems are supplied in a range of 40 - 160 - 300 kg per hour. Thermoware provides in equipment for a complete production line such as pre-expansion, drying, sieving, material-transportation, -maturing and -dividing, dry-moulding, stacking, sleeving, packaging and labelling.

Pre-expander THW VA160 combi

TECHNICAL DATA

• Footprint:

L x W x H mm: 3000 x 1360 x 2130 mm Total weight: 555 kg

Pre-expander:

- Stainless steel barrel and stirrer
- 50 mm rock wool insulation, covered with aluminium plate
- · Variable speed material feed screw
- Steam/air mixture heating device
- Controlled by means of a linear flow meter
- Electrical control cabinet, prewired for hopper loader and fluid bed material dryer
- Electrical source: 220 / 380 VAC,
 50 Hz, 4.0 kW / h
- Capacity approx. 160 kg / h

Fluidbed dryer:

- Unit made of painted galvanized plate
- · Covered with a stainless steel cover
- Material transport blower
- Heater unit

- Steam and electrical connections for coupling to pre expander
- Electrical source: 220 380 VAC, 50 Hz, 1.1 kW / h
- Drying capacity: 160 kg / h

Double deck sieve:

- Upper sieve mesh 2 mm
- Lower sieve mesh o.4 mm
- Air-vibrator drive

SPECIFICATIONS

- Steam connection 1/2" and 4 bar
- Steam consumption max. 40 kg / h
- Air connection 1" and 7 bar
- Air consumption max. o.4 m³ / min
- Power consumption 5.1 kW / h
- Electrical connection 3-phase, 380 VAC, 50 Hz. + N + FG
- Machine code THW 1116 / 1415 / 1508

Machines we manufacture for the European market comply with CE regulations.



Thermoware Particle Foam Machinery B.V.

Voltastraat 17 | 3771 RX Barneveld | The Netherlands | T: +31 342 490 899 | E: info@thermoware.com | I: www.thermoware.com