Pre-expander

For now and in the future
Pre-expander

Pre-expanders form the basis for the processing of particle foams, such as EPS, co-polymers and several types of biofoams. 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 VA40 all-in-one Pre-expander consists of 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. This specific all-in-one version distinguishes itself from the other pre-expanders by its small footprint and fixed position. 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 VA40 all-in-one

**TECHNICAL DATA**
- Footprint: 
  L x W x H mm: 1300 x 900 x 2350 mm
  Total weight: 257 kg
- **Pre-expander:**
  - Stainless steel barrel and stirrer
  - 40 mm rock wool insulation, covered with aluminium plate
  - Variable speed material feed screw
  - Steam/air mixture heating device
  - Controlled by means of an adjustable air flow
  - Electrical control cabinet, prewired for hopper loader and fluid bed material dryer
  - Capacity: approx. 40 kg / h max.
- **Fluidbed dryer:**
  - Unit made of painted galvanized plate
  - Covered with a stainless steel cover
  - Heater unit
  - Drying capacity: 40 kg / h

**SPECIFICATIONS**
- Steam connection ½" and 4 bar
- Steam consumption max. 40 kg / h
- Air connection ½" and 7 bar
- Air consumption max. 0.4 m³ / min
- Power consumption 1.7 kW / h
- Electrical connection 3-phase, 380 VAC, 50 Hz. + N + FG
- Machine code THW 1156 / 1620

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