

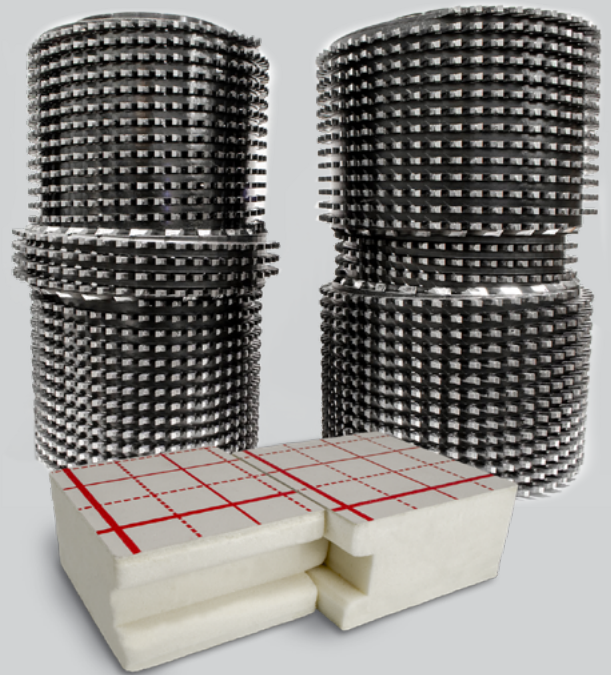
# Cutter

For high density foams



## Lightweight and excellent performance with high feed speeds

FREZITE has developed a constructive system for cutting high density foams (up to 700 Kpa) without any melting of material. It is a material that is featured for being lightweight and be able to prevent the proliferation of microorganisms, it is a thermal insulation and is also a recyclable material. Because it has practically no water absorption and high durability, it is widely used in construction – as thermal insulation to prevent the appearance of damp patches – and in packaging. The tools developed by FREZITE also allow working multi-layer boards with XPS foam coated, for example paper reinforced with fiberglass.



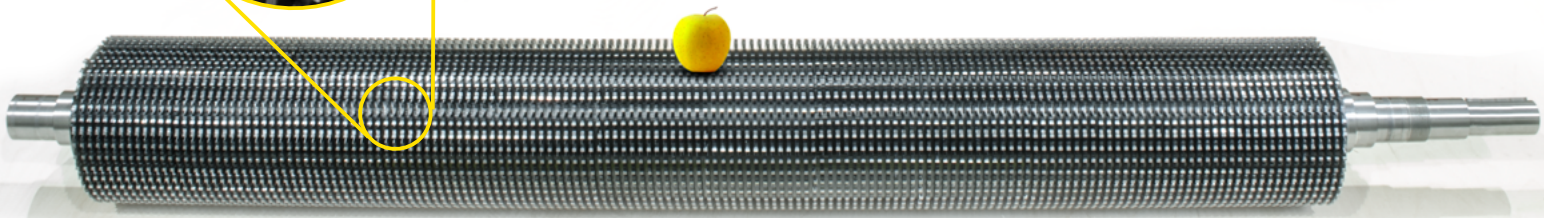
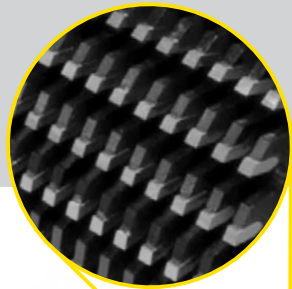
### ADVANTAGES

- Reduced weight of the tool set (compared with saw sets).
- Optimized chip evacuation.
- Allows working at high speed feed. (20-35 m/min.)

### CUTTING PARAMETERS

- Recommended peripheral cutting speed: 30 to 50 m/s.
- Recommended feed per tooth: 0.1 to 0.3 mm/Z.

Extruded polystyrene, designated by the acronym XPS, is obtained by an extrusion process, where other expansive gases are applied. The boards of this rigid foam are produced with different densities - from 38 kg/m<sup>3</sup> and up to 47 kg/m<sup>3</sup> - presenting closed cells, which gives it a more uniform surface.



## APPLICATIONS

The tools developed by FREZITE are used to calibrate the boards and also to produce tongue and groove profiles.

### Thermal insulation of:

- Inverted flat roofs accessible to road traffic and foundation slabs.
- Inclined roofs under laths, floors and internal partitions.
- Insulation of double walls with air gap, inclined roofs and buried walls.
- External insulation systems (ETICS) and thermal bridges.



The Cruise Terminal of Porto (Portugal), a project that included XPS thermal insulation on the façade.

