PLASTIC PLASTIC LUMBER EXTRUSION LINE





ECO FRIENDLY
SUSTAINABLE
CIRCULAR ECONOMY



Plastic lumber is used today as a **substitute for wood in several scenarios**, including civil construction and urban furniture.

Reducing landfill waste by reusing plastic materials to create more sustainable new products that will have many long-term benefits for the environment, reduces our overall carbon footprint

Recycled plastic lumber is a perfect choice to solve the problems of the traditional wood, works with high-contaminated plastics without washing them reducing the maintenance costs to zero.



LINE **ELEMENTS**









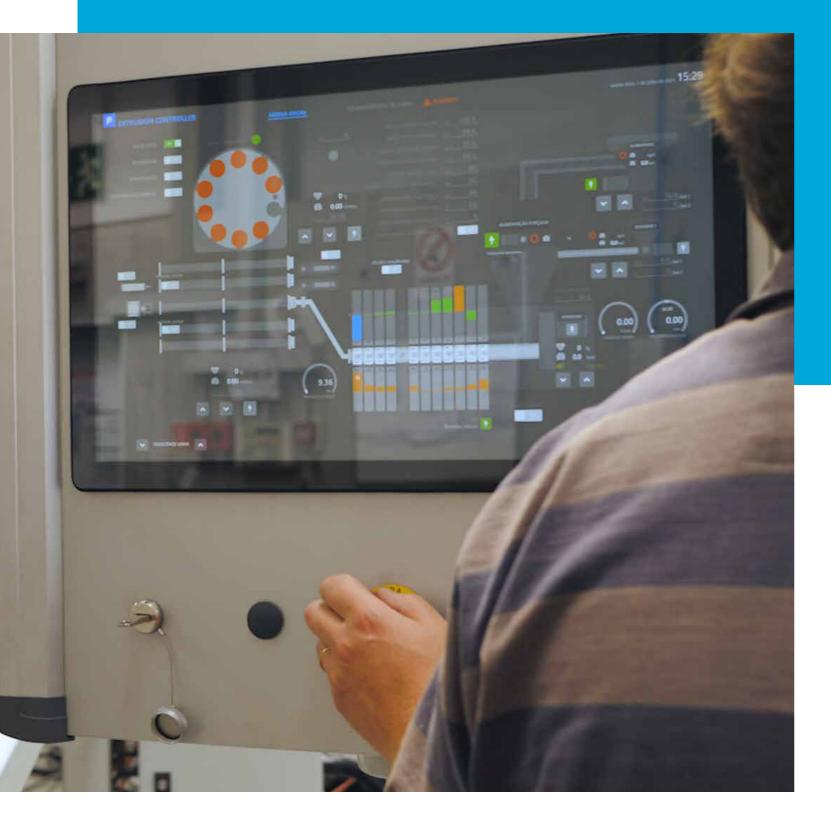




- 1. Line control
- 2. Feeding
- 3. Extruder
- 4. Moulding group
- 5. Collecting table



LINE **CONTROL**









Software that allows you to control the entire line synchronously and automatically, with the operator only intervening once in each cycle to remove the bars/load more raw material.

MAIN FEATURES

- Production history
- Recipes
- Ontrol every component of the line
 - Feeding (force feeding and dosers)
 - Extrusion (Temperature, speed degassing, pressure)
 - Mould Group position
 - Water temperature
 - Extraction



FEEDING AND FORCE FEEDING



FEEDING SYSTEM

- Big bag system
- Worm Screw (with alert for lack of raw material)
- Force feeding (allows mixing LDPE film)
- Doser for colouring or fibres could be included





EXTRUDER







Extruder with a capacity of more than 300 kg/h

MAIN FEATURES

- Insulated panels that guarantee thermal high efficiency
- Powerful vacuum degassing
- Closed loop circuit of contaminated water reducing freshwater waste
- Very accurate temperature control



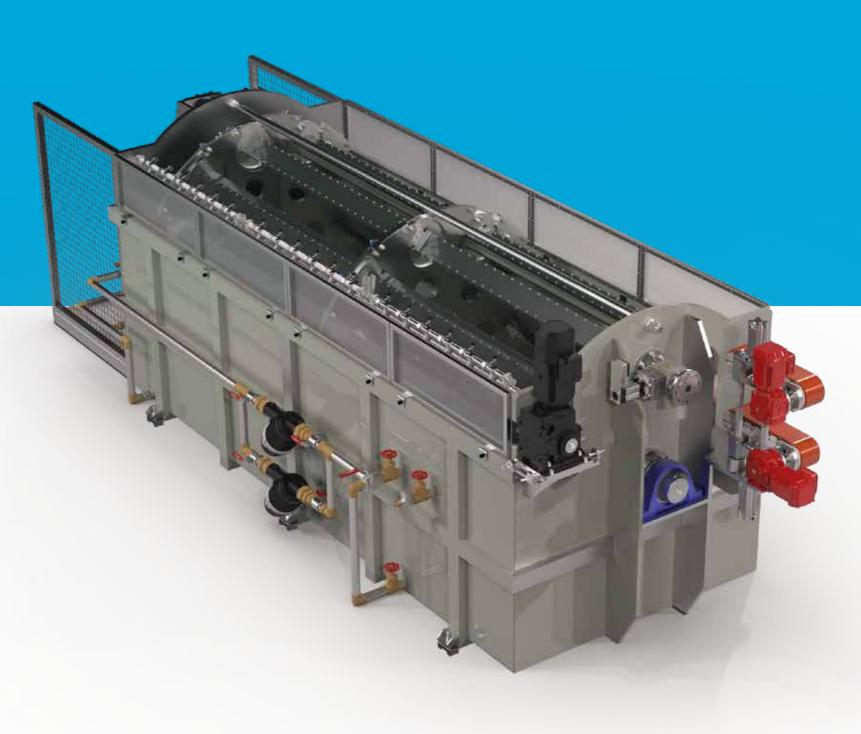
MOULDING GROUP

Moulds holding group unit for 10 4-metre-long moulds. The complete cycle time corresponds approximately to 1 mould filling, 8 mould in cooling and 1 mould being extracted.

Extraction system by pneumatic cylinder assisted by a haul-off for parallel positioning to the plasticizing unit.

Moulding unit installed inside a stainless-steel cooling tank in a closed water circuit with controlled temperature to optimise cooling.





TECHNICAL DETAILS:

- Maximum production: 300 kg/h
- Total installed power: 175 kW
- Power consumption (@250kg/h): 60 kW/h
- Cooled water:
- Air consumption: 600 lt/min
- Operator (workers): 1 for 2 lines
- Moulds length: 0,1 m to 4 m
- Mould (WxH): Square 150x150 mm Rectangular 230x20 mm Round 200 mm



10 MIXERS AND COOLERS MIXERS AND COOLERS 11

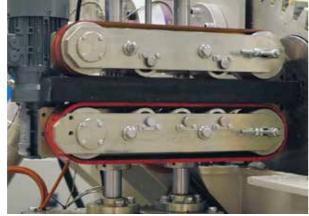
EXTRACTION & COLLECTING TABLE



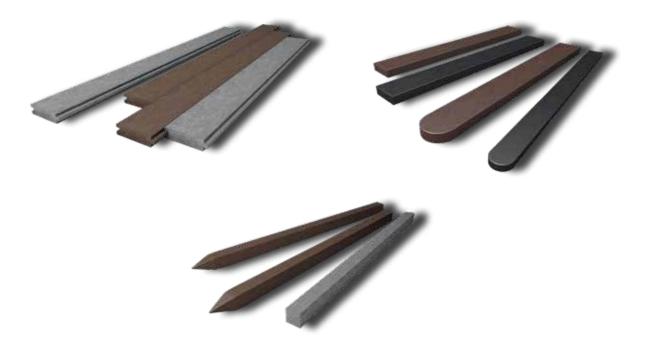
Dumping table pneumatically driven.

Capable of collecting more than 10 pieces of 100×50 plastic lumber beams.





FINAL PRODUCT



The plastic lumber line is designed to produce round, square, and rectangular beams, from 0,1 to 4 metres (using the same mould).

The tops of the beams - round, square or rectangular - can have a straight, pointed or half-moon shaped finish.

On the beams sides it is possible to make tongue-and-groove joints or slip resistant footpath planks.











Address

Rua de Marrazes, lote 32 Zicofa 2415-807 Leiria Portugal

Phone

+351 244 859 990

Online

comercial@periplast.pt
www.periplast.pt

