

CROSSLINKED FOAMS – BATCH PROCESS

Increasing the potential of commodity materials by implementing advanced strategies

CHARACTERISTICS

- **EQUIPMENT TO PRODUCE CROSSLINKED FOAMS: ROLL MILL, HOT-PLATES PRESSES, FURNACES, & MOLDS:**
 - ONE-STEP COMPRESSION MOLDING
 - TWO-STEP COMPRESSION MOLDING
 - CONTINUOUS PROCESS
 - SEMI-CONTINUOUS PROCESS
- **PHYSICAL OR CHEMICAL CROSSLINKING PROCESSES**
- **FINAL THICKNESS 100 mm.**
- **PROTOTYPES 500x500 mm²**
- **PRODUCTION OF RUBBER FOAMS, ELASTOMERS, ETC.**
- **PRODUCTION OF XL-POLYOLEFIN FOAMS: EVA, EBA, LDPE, HDPE, ETC.**



APPLICATIONS



DESIGN AND EVALUATION OF NEW FORMULATIONS

- Selection of raw materials (polymers and additives) and analysis of foamability and crosslinking kinetics.
- Testing of recycled polymers and new blowing agents.
- Formulations with reduced VOC emissions.



IMPLEMENTATION OF ADVANCED STRATEGIES TO IMPROVE PROPERTIES

- Reduction of the thermal conductivity.
- Improvement of the mechanical properties.
- Enhancement of the surface quality.
- Generation of new structures, such as open cell materials.



PROTOTYPE PRODUCTION AND CHARACTERIZATION

- Detailed analysis of the cellular structure.
- Fabrication of prototypes for testing properties: thermal conductivity, mechanical properties, fire behavior, acoustic absorption, etc.

CONTACT US FOR MORE INFORMATION

info@cellmattechnologies.com

www.cellmattechnologies.com

Tel: +34 983 189 197

CELLMAT TECHNOLOGIES S.L.

Edificio Parque Científico UVa

Paseo de Belén 9A

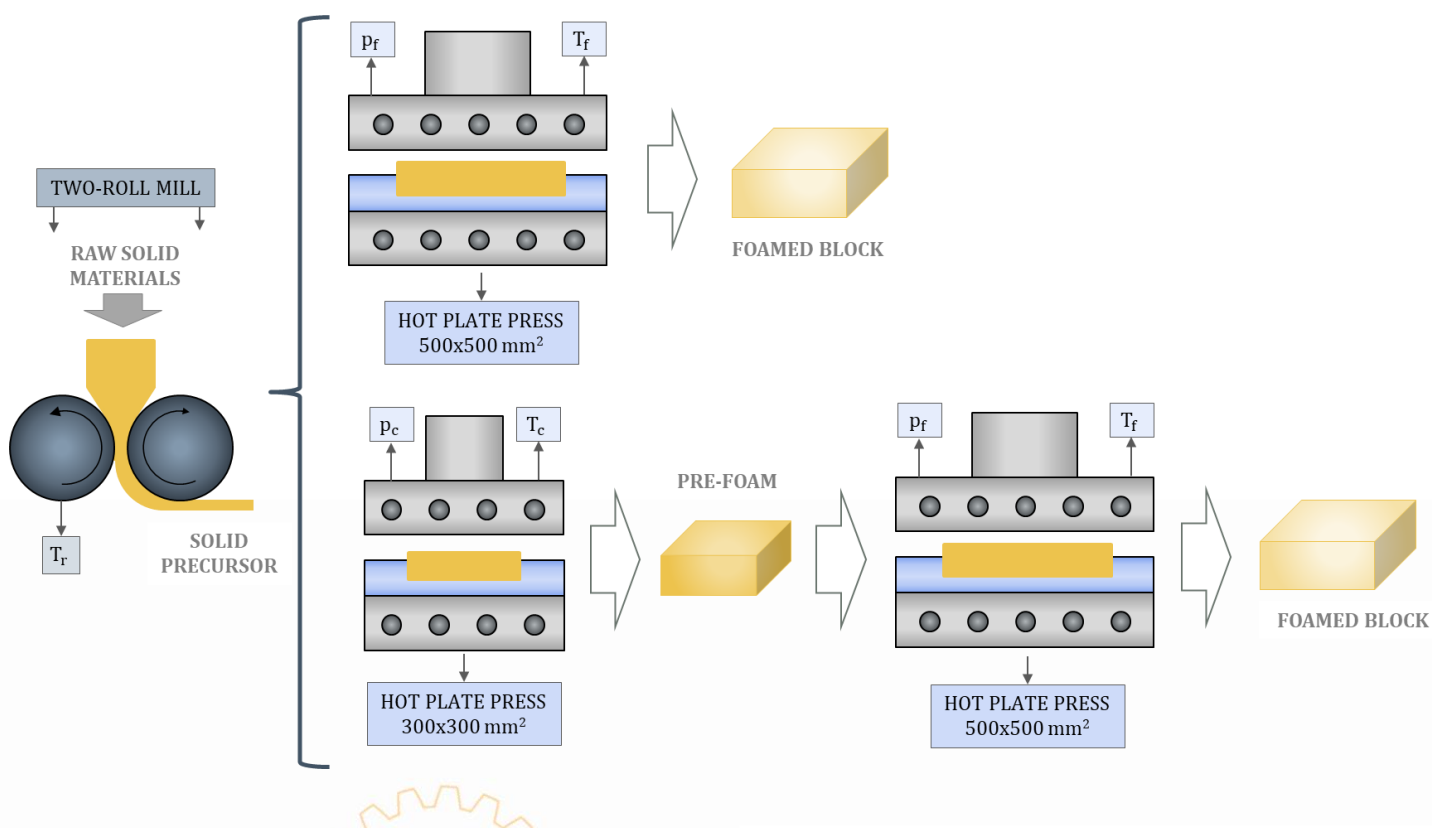
47011, Valladolid, Spain

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TECHNICAL SPECIFICATIONS

(I) ONE-STEP OR TWO-STEPS COMPRESSION MOLDING PROCESS



ROLL MILL

Model	Two roll mill DW5110, Fanyuan
Temperature range	300 °C
Mixing capacity	Up to 2 kg
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Temperature range	300 °C
Mixing capacity	Up to 2 kg

MELT COOLERS

Tailored-shape prototypes

HOT PLATE PRESSES (x2)

HOT PLATE PRESS 300x300 mm²

Model	Plastic Press, Fanyuan
Maximum pressure	20 T
Maximum temperature	350 °C
Cooling system	Recirculating cooling system

HOT PLATE PRESS 500x500 mm²

Model	Plastic Press, Fanyuan
Maximum pressure	50 T
Maximum temperature	350 °C
Cooling system	Recirculating cooling system

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CROSSLINKED FOAMS – CONTINUOUS PROCESS

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CHARACTERISTICS

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 - ONE-STEP COMPRESSION MOLDING
 - TWO-STEP COMPRESSION MOLDING
 - CONTINUOUS PROCESS
 - SEMI-CONTINUOUS PROCESS
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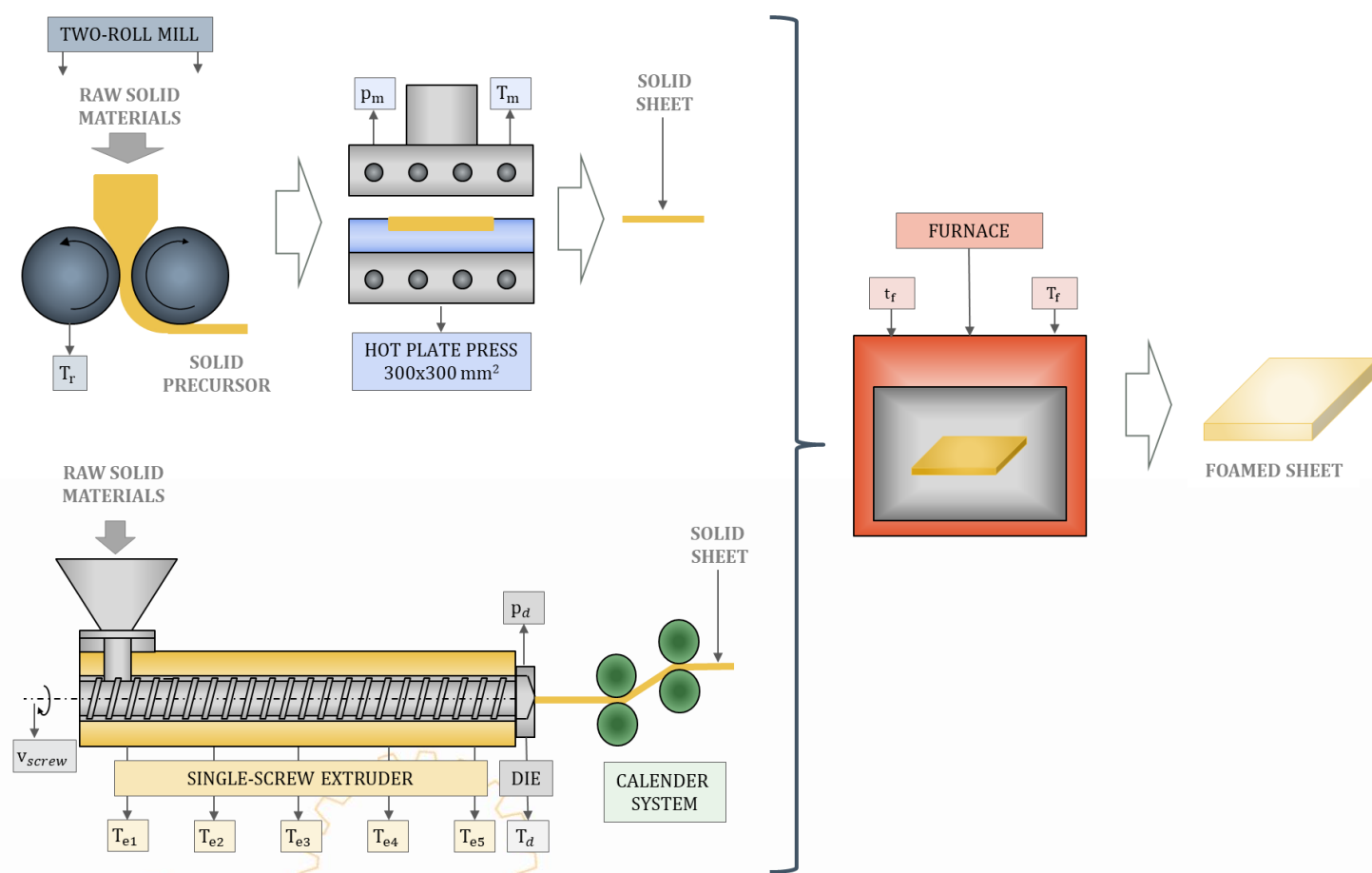
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CROSSLINKED FOAMS – CONTINUOUS PROCESS

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TECHNICAL SPECIFICATIONS

(II) CONTINUOUS OR SEMICONTINUOUS PROCESS



SINGLE-SCREW EXTRUDER

Model	CR 72 T Teachline, Collin
Screw configuration	Single screw
Screw diameter	20 mm

CALENDER SYSTEM

Three-roll chill system

FURNACE

Model	2001405, JP Selecta
Maximum temperature	250 °C

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