

Sulzer & Borealis – ePP Foam Extrusion technology

Sulzer's unique foam extrusion team presents its newest development: Extrusion based expanded polypropylene.

Sulzer has developed an extrusion process which enables industrial molders to launch their own ePP production by developing their proprietary formulations and by using Borealis PP resin as raw material.

Customers can benefit from a wide field of applications and product properties.

Borealis has developed this high melt strength PP grade particularly for the Sulzer foam extrusion process. ePP beads produced with this resin can be molded using low steam pressure and standard molding equipment.

ePP - Excellent product characteristics

Adjustable bulk density from 25 g/l to 150 g/l and bead sizes in the range of 3-5 mm after expansion

- High toughness
- Good thermal insulation properties
- High temperature resistance
- High moisture- and chemical resistance
- High color fastness
- High sound absorption
- Easy cleaning
- Easily recyclable (nontoxic, free of heavy metal)

ePP - Wide range of applications

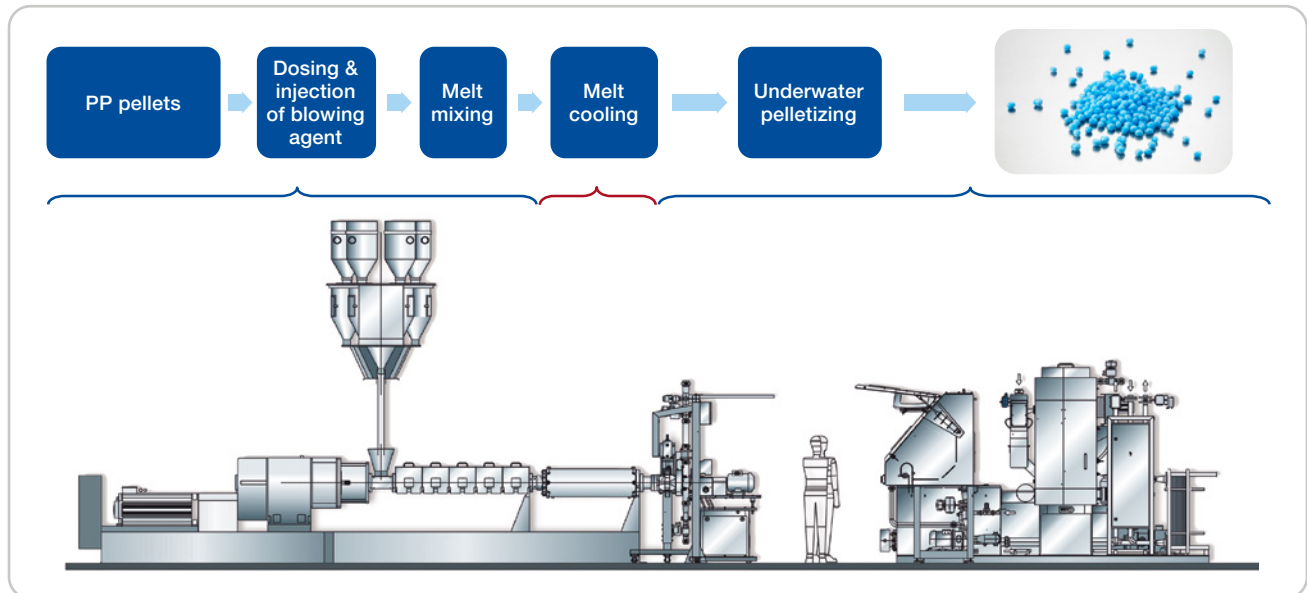
- Multiple use as transport and storage boxes
- Various thermal isolation applications
- Automotive industry
- Furniture and toys industry
- Exercise balls and rollers
- Load carriers
- White goods protective packaging
- Thermo boxes



New reliable foam extrusion process for production of ePP beads

The combination of a high quality dosing system, a tailor-made twin screw extruder and an accurate direct injection of blowing agents as carbon dioxide or isobutane into the PP melt ensures specific characteristics of the product and flexibility for a huge field of applications for the ePP industry.

Sulzer's unique melt cooling technology and an individual designed underwater pelletizing system completes the extrusion foam process for customized beads production.



Bead characteristics of extruded ePP and foam extrusion line capacities

ePP properties	Blowing agent carbon dioxide	Blowing agent isobutane
Bulk density [kg / m ³]	35 - 120	25 - 150
Bead size range [mm]	3 - 5	3 - 5
Production capacity [kg / h]	80 - 150	70 - 150

Sulzer - your partner for customized solutions in foam extrusion technology

Polymer	Process	Equipment

Customized ePP beads by extrusion

For further information, please send us your email to polymer@sulzer.com

www.sulzer.com

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