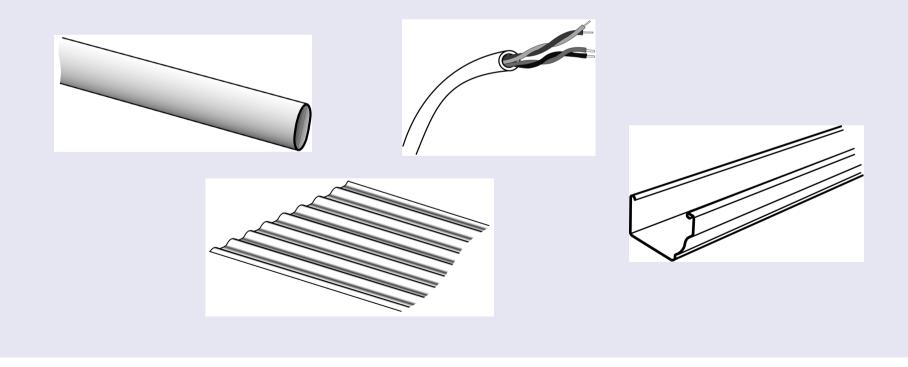


Part 1: Plastics Materials and Technologies.

Extrusion

- process used to make continuous shapes
- a wide range of different continuous shapes can be produced



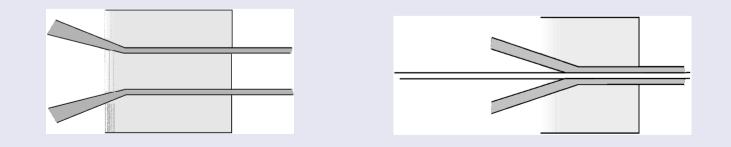
RLASTICS

Diploma in Design and Specification of Plastics

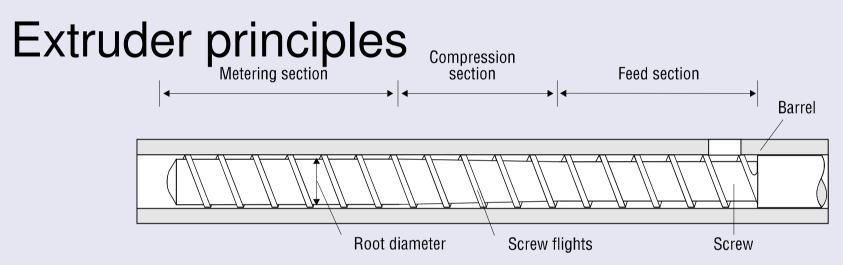
Part 1: Plastics Materials and Technologies.

Extrusion

- hot, molten plastic is pushed out of a specially shaped die
- steel die shapes the plastics material to the continuous form required
- plastics material is cooled as it comes out of the die to maintain its shape
- different die shapes produce different shapes of product



Part 1: Plastics Materials and Technologies.



Extruder screw

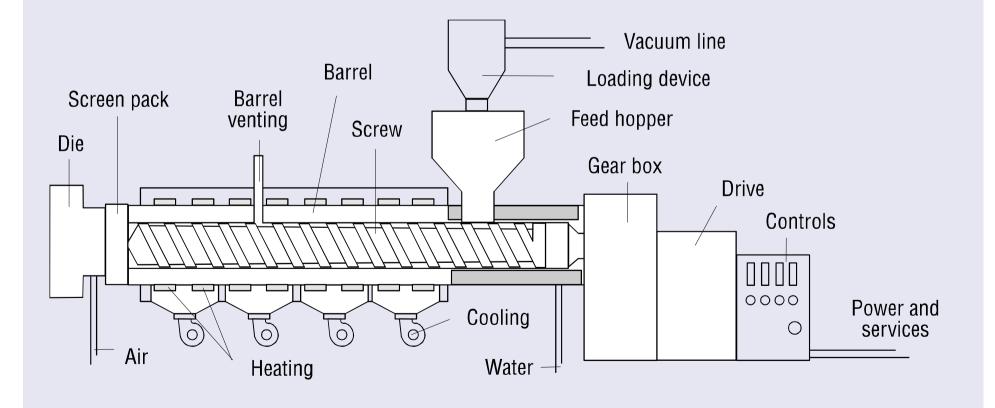
PLASTICS

- rotates in a close-fitting fixed steel barrel
- barrel is heated and accurately temperature controlled
- plastics materials are heated, compressed, sheared and mixed as they are moved along the screw
- plastics materials emerge as a homogenous melt at high pressure off the end of the screw
- melt is forced through the extrusion die

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Extruders - major components

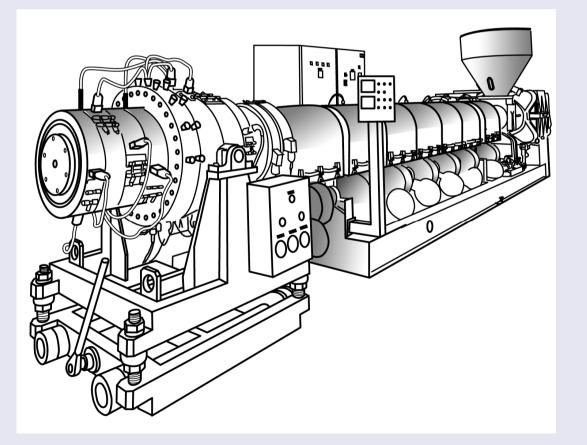
PLASTICS





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Extruders



Extruder and diehead for pipe production

Part 1: Plastics Materials and Technologies.

Extrusion lines include

• extruder

PLASTICS

- sizing and cooling equipment
- haul-off equipment
- marking equipment
- measuring and testing equipment
- cutting and trimming equipment
- winding and coiling equipment



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Sheet extrusion line

