

What is Plastic extrusion?

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Thermoplastic extrusion is a high-volume production process where a plastic compound is melted at high temperatures and formed into continuous lengths of product. It is one of the most widely used manufacturing processes, along with injection moulding. Extrusion is suitable for two-dimensional product manufacturing, whereas injection moulding is suitable for three-dimensional. Extrusion products can be rigid, flexible, or a combination, covering many industry applications. Common plastic extrusion materials are Polyvinyl Chloride (PVC), Polyethylene (PE), Polypropylene (PP), but there are many other raw materials available in an extrusion grade. The extrusion process can also include co-extrusions with other materials, such as metal mesh or strips. The extensive list of extrusion products includes pipes, tubes, roofing products, conduits, window and door profiles, fencing, planks, pipe covers, bags and sheets. Industries that use extrusions include construction, electronics, marine, automobile, horticultural, aeronautical, medical, geological, and architectural.

The advantages of plastic extrusion:

- Profiles can be made with complex shapes and cross-sections
- Products can be produced in large volumes with minimal wastage
- The continuous, high-volume manufacturing process helps to keep costs low and speed up turnarounds
- It is versatile, as many different types of raw materials can be used, including recycled materials
- Additives can be used to improve the product properties, e.g. fire resistance, anti-fungal, and also to reduce static and friction.

D W Plastics only manufactures profile extrusions and does not make plastic sheets, films, coatings or wire insulation. Please get in touch for any plastic extrusion requirements.