

WHAT Is Extrusion

Extrusion is a widely used manufacturing process that involves pushing a material through a die or mold to create objects with a consistent cross-sectional profile. This process is commonly employed in various industries, including plastics, metals, food processing, and ceramics, to produce a wide range of products such as pipes, tubes, rods, sheets, and more.

Extrusion offers several advantages, including the ability to create continuous lengths of products with consistent cross-sectional profiles, cost-effectiveness in mass production, and the ability to work with a wide range of materials. As such, it is widely used in industries such as construction, automotive, packaging, and more for producing a variety of components and products. Overall, extrusion is a valuable manufacturing process that has revolutionized the production of many products.

The process of extrusion involves several basic steps. Firstly, the raw material in the form of pellets, powder, or a solid bar is prepared, depending on the material being extruded. Secondly, the material is heated to a specific temperature to make it more pliable, commonly referred to as the melt temperature in plastic extrusion.

Next, the heated material is forced through a specially designed die or mold, which imparts the desired shape and dimensions to the extruded product. The die has an opening or profile that matches the desired cross-section of the final product. Once the material has passed through the die, it is rapidly cooled to solidify and maintain its shape, using methods such as air cooling, water cooling, or cooling rollers depending on the material being extruded.

Finally, after cooling, the extruded product is typically cut to the desired length, with additional finishing processes applied as required, such as surface treatments or coatings.

The several type of extrusion products as below.

PLASTIC PIPE	PVC PROFILE	ALUMINIUM PROFILE	PLASTIC SHEETS
			