



AVIAPLAST LLC Injection Molding capabilities



Basically we used Vertical Injection Molding Machine. This machine configuration allows manufacture plastics parts with metal elements inserts. The advantages of vertical injection molding have gained a lot of converts. Production molds for it has considerably simplified design, and for production run of a new product it is required to make only new mold templates and ejector pins that considerably reduces time of new parts manufacturing and the cost price of a final product at all.



Our company has in-house tool making & machining shop, but we using a combination of in-house and offshore resources for injection molds making. There are specialty shops where such processing is far more efficiently completed. Time and profit has proven that outsourcing certain processes or functions is the smart way of doing business at all levels, including Mold Making..

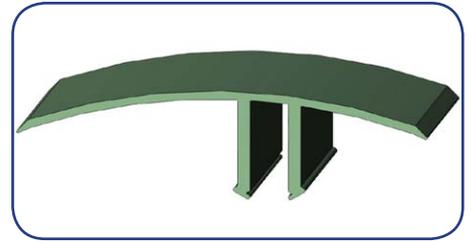
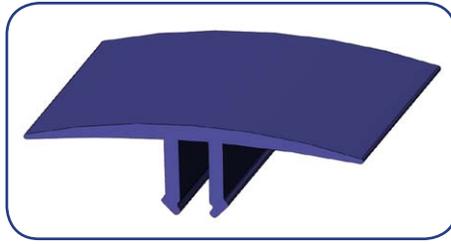
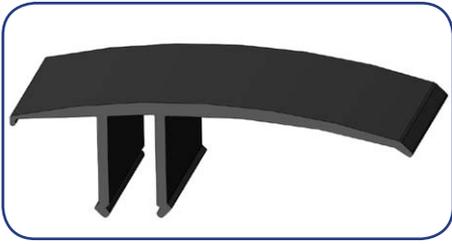
Injection molding

Injection molding is used primarily for the manufacture of thermoplastic products. Carried out under a pressure of 80-140 MPa (800-1400 bar) in the injection molding machines, reciprocating or screw type, with a high degree of mechanization and automation. Injection molding machines carry out dispense of granular material, translating it into a plastic condition, injection the dose of melt into the casting mold, exposure in the form of pressure before solidification or curing, open the form and eject the finished product. During the processing of thermoplastic the injection molding form is thermostated (temperature should not exceed its glass transition temperature and crystallization temperature), and the processing thermosets are heated to cure.



Injection molded part samples



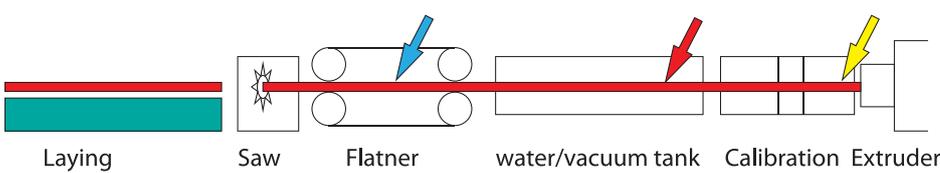


AVIAPLAST LLC Extrusion of the Seat Track covers

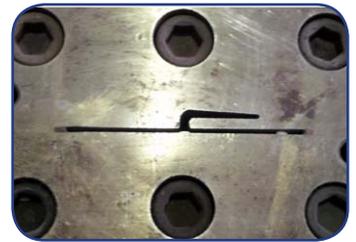
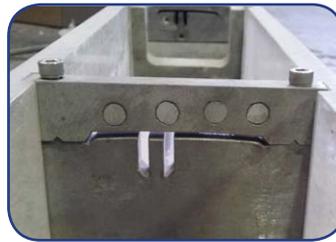
The technological process of manufacturing structural profiles is called extrusion (from Lat. Extrusio - eject). Extrusion – is a method of manufacturing shaped articles of great length of plastics and rubbers. It is the extrusion of the softened material through the openings defined sections.

The product line includes extruder tool (a die, the device dry and wet calibration), marking printer, the pulling device, a saw for cutting the profile, a device for packaging the finished product.

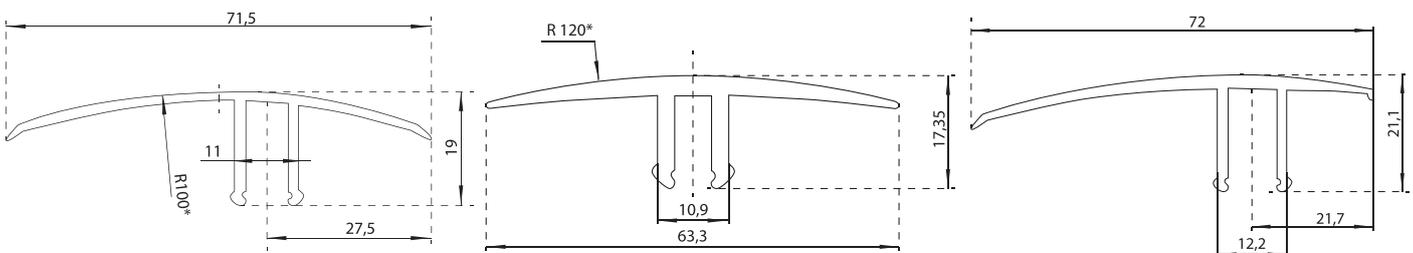
Line for production of PVC profile



Extrusion mold



Typically PVC Seat track covers



PVC as a feedstock for the manufacture of the profile, comes to production in the form of fine white powder. It's mixed with other additives (stabilizers, softeners, polymeric auxiliary agents, flame retardant additives- antipirens, fillers, plasticizers, and, if necessary, pigments) to obtain a homogeneous mixture, and after it's used to produce the final product.

The quality of the extruded PVC profile

depends on a number of interrelated factors, including: the quality of the raw material, structural features of the extruder; technological discipline, etc. The effectiveness of PVC as a material of construction can be realized only by using a combination of the additives, which leads to the creation of the material properties that can meet the stringent requirements of the consumer.

Methods of coloring Seat track covers

There are several ways to colour the structural profile, But only one that AVIAPLAST used: it is «coloring in the mass». Structural profile available in a variety of colours and in custom sizes.