

Screw Extruders for Manufacturing Plastic Compounds

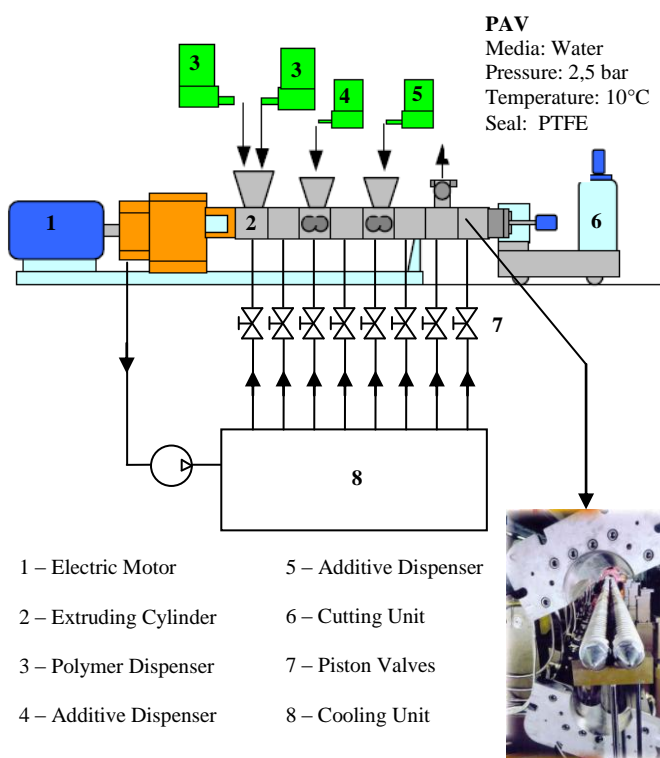


Extruders are used for blending plastic compounds or rubbers for industrial use.

The extrusion technology is widely used in processing plastic materials for manufacturing pipes, films, covering materials, cables, wires, sheathings, tapes, filaments, and structural shapes such as doors, windows and shutters.

The central part of the extruder consists of a cylinder with an endless screw turning inside.

PLANT DESIGN



APPLICATION

The hopper (3) sends spherules of polymer into the cylinder (2) to be warmed up to the melting point. By an electric motor (1) the endless screw heats and homogenizes the material, pushing it to the exhaust hole.

During the extrusion process dispensers (4)-(5) can mix thermoplastic additives, laden, reinforced or variously coloured materials.

Valves (7), connected to a cooling unit (8), control cold water at 10° C at the pressure of 2,5 bar to cool the cylinder in the various stages and ensure that the grinding temperature remains steady.

In the extrusion lines the exhaust hole has the same shape as the final product to be obtained; a flat section for films and laminated plastic, a circular section for pipes and more elaborate sections for structural shapes.

Once the product is extruded, it is cut (6) and cooled to get its final shape.

SOLUTION



TYPE BTG205SXW00 / SXS code 75883733293

Normally Closed Bi-directional Bronze PAV
Body Actuator Ø63 – Connection ½” BSP, DN15

Flow Direction over / under seat

Pilot Pressure over seat min. 5,5 bar

Pilot Pressure under seat min. 3,8 bar

Pilot Pressure max 10 bar

Working Pressure 0-16 bar

Seal Material PTFE