

SPECIAL APPLICATION > Optical quality sheets

The main extruder, with bimetallic barrel and screw, has been specifically designed for PC processing, mainly in what concerns the efficiency of the venting system. The gravimetric high precision dosers guarantee constant feed rates synchronized with the gear pump and the extruder screw rpm. The co-extruder is extruding a thin layer suitable to protect the sheet against UV rays.

It is well known how critical is for the calendaring system to obtain high optical quality sheets: in the 3-roll calender BG Plast engineers have applied the best mechanical and technological solutions. The calender has three rolls of 410 mm diameter with high gloss finishing on surface with internal circulation of pressurized water flow at high temperatures.

The total width of the rolls is related to the final net width of the sheet. Standard width for this type of machine is 2300 mm for net width on sheet of 2000 mm.

The calender geometry can be varied: the upper roll turns around the central roll axis. This particular feature permits to adapt the calender to the thicknesses required for the sheet.

Roll speed transmission, motor and reducer controls have been particularly studied to guarantee a rotational movement with absolutely no vibration, an unavoidable factor to get the properties required by optical quality sheet. The extruded sheet is later protected with polyethylene film and cut to size up to 3000 mm length. An automatic vacuum sucker unit picks up the sheets and stacks them at the side. Different configuration available upon request.

