

SPECIAL APPLICATION > Dimpled sheet

It's well known the importance of being able to use lowest possible cost materials in order to reduce product selling prices – and what is less costly than the simply washed and milled recycled material?

But it's also true that reclaim plastics contain fat and soaps that will not favour the extrusion process at all.

Therefore it was necessary for our engineering team to develop a special technique combining carefully dosed flakes feeding, intensive venting stage by means of high capacity vacuum pumps and an extrusion screw suitable to stand the high yields required.

Using recycled material implies also the presence of dirties that if remain, bearing in mind the minimum thickness required, would unavoidably cause the so called "holes" in the sheet, making it useless for its final application.

Therefore, the melt filtering stage has required the use of a large battery of screen changers, rather impressive but wholly reliable, since it grants the removal of minimum damaging particles.

The assembly is completed by a suitable gear pump which ensures constant feeding to the 4400 mm width extrusion head. The extruded product goes over a special alloy roll having over 16.000 studs made of highly conductive alloy material.

This is the core of the whole process, since this special calendaring produces the dimpled sheet. It is quite important for the rolls to have a perfectly efficient cooling system, a point that has been thoroughly studied by our process engineers. Of course, BG Plast can prepare machines getting similar productions using granulated material, either virgin or reclaimed, instead of flakes. This would certainly simplify the mechanical issue related with polymer transformation, since less resources would be necessary from the point of view of both power required and initial investment.

