

# Application

## Dealing with profiled sheet edge strips

Plastic granulate is extruded by cast film extrusion into sheeting and further processed by downline thermoforming into, for example, profiled dimpled sheet, mats for roof grassing, etc. The swelling that normally arises along both edges is removed by cutting off the two edges of the sheet. It is here that the LSZ 150/100 edge strip shredder from Hellweg Maschinenbau GmbH & Co. KG enables in particular the processing of the edge strips of profiled sheets that are difficult to feed into conventional feeding equipment.

The LSZ 150/100 edge strip shredders are fitted with four toothed rolls consisting of hardened tool steel that are machined out of the solid steel material. They are arranged in pairs one above the other within the housing, that is made of aluminium. The edge strips are forced to separate from the sheet during the production process, held under tension and reduced to shredded material with length of approx. 5-10 mm that can be subsequently dosed together with virgin material.

The edge strips are introduced during the shredding process via an approx. 800 mm rotary sensor arm on bearings that compensates with shuttle movements for delays in feeding that arise, for example, due to intermediate thermoforming. The equipment can be switched on and off by a push switch in order to prevent tearing off of the edge strips.

The toothed rolls are driven in pairs with torque of 1,300 Nm by two geared motors, each with 1.5 kW power rating. Maximum feed width is approx. 150 mm, with feed thickness of up to 1.5 mm possible, depending on the material. The rotation speed of the toothed rolls can be set by a potentiometer at the any desired level within the range of approx. 9-60 min<sup>-1</sup>, which corresponds to feeding speed of approx. 0,8-6 m/min.

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