

FDU PRODUCT PORTFOLIO

	FDU MINI open & SLS	FDU MIDI open & SLS	FDU MAXI open & SLS
Nozzle lengths	80-180 mm (stepped in 20 mm)	120-320 mm (stepped in 40 mm)	160-520 mm (stepless)
Melt channel open	7 mm	12 mm	20-24 mm
Melt channel SLS	7 mm	16 mm	20-24 mm
Cross-sectional area at the outlet open	6 mm ²	22 mm ²	80 mm ²
Cross-sectional area at outlet SLS	12 mm ²	42 mm ²	100 mm ²
Shot capacities open	3-100 cm ³ /sec.	50-1.000 cm ³ /sec.	300-2.000 cm ³ /sec.
Shot capacities SLS	3-70 cm ³ /sec.	50-750 cm ³ /sec.	300-1.700 cm ³ /sec.

FDU MINI

FDU MIDI

FDU MAXI



ADVANTAGES OF FDU WITH RECYCLING MATERIAL

- Clogs at the throat to the cavity are almost impossible with a large slot geometry.
- Due to its large cross-sectional emitting area, the FDU causes a considerably lower shear stress in the plastic melt, therefore critical materials/additives can be processed easily.
- Despite the large outlet cross-section to the cavity, the FDU has an optimal tear-off behavior and a optimum heat balance, this opens up a much larger process window for you!
- The specific pressure loss in the FDU nozzle is less than in a round die. The material is processed gently and, depending on the material type, a higher internal mould pressure is available.
- A much higher injection speed, the higher level of in-mould pressure and the larger outlet cross-section make the emphasis better and more effective in the component. This allows a reduced cycle time.
- The macromolecule chains of the regranulate are not degraded, thus, the material and component properties are retained.
- Due to the lower shear, there is almost no increase in the friction-induced melt temperature. This has an positive effect in processing. With the FDU, there is no or extremely reduced deposit formation in the mould and extremely reduced outgassing/odours on the injection moulding machine.
- General material fluctuations in the recycled plastic are compensated by the large outlet cross-section of the FDU nozzle.
- Basically, higher proportions of recycled plastic in components are possible, due to lower shearing (thermo-mechanical load) of the melt by the FDU.
- **For the processing of regranulate, the FDU is the gentlest and best hot runner solution!**