

## Welding parameters for extrusion welding

Based on DVS 2207-4

Welding Process	Materials	Abbreviations	Material temperature <sup>1)</sup> °C	Hot gas temperature <sup>2)</sup> °C	Hot gas volume flow <sup>3)</sup> l/min	Welding speed <sup>5)</sup> mm/min
Extrusion welding (WE)	High-density polyethylene	PE-HD <sup>4)</sup>	210 ... 230	210 ... 300	300	300
	Polypropylene, Types 1, 2, 3	PP-H; PP-B; PP-R	210 ... 240	210 ... 300	300	300
	Unplasticised polyvinyl chloride	PVC-U	190 ... 200	330 ... 360	300	300
	Impact resistant polyvinyl chloride	PVC-HI	170 ... 180	280 ... 340	300	300
	Chlorinated polyvinyl chloride	PVC-C	195 ... 205	300 ... 360	300	300
	Polyvinylidene fluoride	PVDF	240 ... 260	280 ... 350	300	300
	Polyamide 6 <sup>6)</sup>	PA 6	280	315	300	300
	Polycarbonate <sup>6)</sup>	PC	270	315	270	300
	Acrylonitrile butadiene styrene <sup>6)</sup>	ABS	265	300	150	300
	Polystyrene <sup>6)</sup>	PS	245	280	300	300
	Polypropylen Athylen Propylen Terpolymer <sup>6)</sup>	PP-EPDM	200 ... 230	200 ... 290	300	300
	Polyurethane (Thermoplast) <sup>6) 7)</sup>	PUR	180	260 ... 300	300	300

<sup>1)</sup> Measured with an insert thermometer at the extrudate outlet of the hand extruder.

<sup>2)</sup> Measured 5mm in the nozzle, in the centre of the nozzle opening.

<sup>3)</sup> Drawn-in cold air volume at the ambient pressure.

<sup>4)</sup> PE 63, PE 80, PE 100

<sup>5)</sup> Depending on the preheating

<sup>6)</sup> LEISTER empiric parameters

<sup>7)</sup> Welding rod has to be predried

Please note:

The indicated welding parameter may vary depending on the ambient temperature and the material configuration.

Test welds need to be done and the parameter aligned accordingly! Leister takes no responsibility for poor quality welding!