

AKUplastics

Your supplier

Welding extruders



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Our profile

With years of experience in sales and processing of thermoplastic semi-finished products, we have become a significant Austrian provider of complete solutions for the entire processing industry.

From our headquarters near Melk on the Danube, we supply and support the domestic market as well as our customers in Western Europe, Hungary, and Southeast Europe. Our two warehousing subsidiaries in the Czech Republic and Slovakia are responsible for their respective markets as well as other Eastern European countries.

Our products are used in various sectors such as:

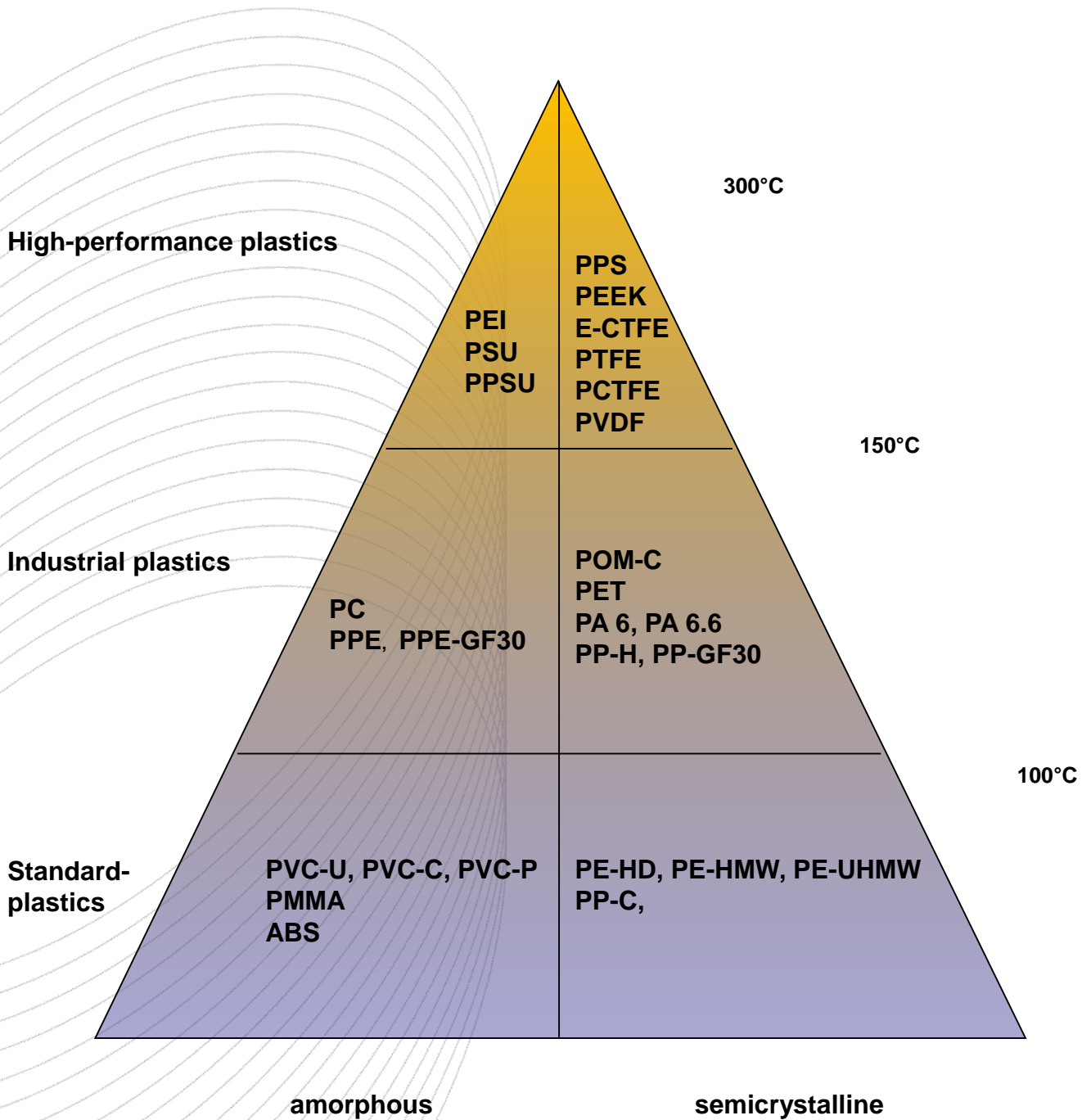
- Chemical industry
- Tank and plant construction
- Semiconductor industry
- Apparatus engineering
- Electrical and electronic industry
- Mechanical engineering
- Storage, lifting, and conveying technology
- Textile machine construction
- Automotive industry and vehicle construction
- Food industry
- VisCom applications
- Medical technology
- Nuclear technology
- and many other areas.

A balanced product range, ranging from semi-finished products such as sheets, solid and hollow rods, hexagonal rods, flat bars, standard profiles, welding wires, and sight glasses to machined finished parts as well as ventilation fittings and processing machines for welding and bending technology, clearly demonstrates this.

Through continuous examination and expansion of our supplier base, we are able to offer the best quality at fair prices.

As permanent market observation and societal changes require a rethink in solutions, semi-finished products based on biopolymers and recyclates are now being produced worldwide for the first time.

Materials



This overview provides a selection of the materials available on the market and obtainable from us, and it does not claim to be exhaustive.

Welding extruders

Extrusion welding of polyolefins such as PE-HD, PP-H, PP-C, or halogen-containing materials like PVC-U and PVDF is easily achievable thanks to the electronic regulation of the melt temperature and precise temperature measurement directly at the screw tip in the melt.

Our welding extruders are available in power classes ranging from 0.8 to 5 kg/h (PE-HD) and feature actual and setpoint display of the melt temperature as well as cold start protection.

The wire feed is facilitated by a patented internal, wear-free, and maintenance-free feeding system without external aids.

All our welding extruders come with preheated welding air and can be equipped with or without an air blower. Devices with an air blower are particularly suitable for on-site assembly work.

Devices used in landfill areas can also be supplied as granulate extruders, where granules with a particle size of up to approximately 3 mm can be used.

Welding wires for extrusion welding are exclusively used as round wires with **diameters of Ø3, Ø4, or Ø5 mm**, depending on the device model and its welding performance.

These "endless" welding wires on spools or in coils can be obtained from us in the highest quality and in accordance with applicable DVS regulations.

Welding extruders



Auxiliary equipment

To optimize the results of welding processes, we offer comprehensive accessories for the refinement of weld seams.

This post-welding refinement is prescribed in the DVS guidelines, as is the preparation of welding wires.

For this reason, we provide groove planes, weld seam planes, quarter or half-moon knives, drawing blades, and scrapers for deburring seams, as well as weld seam milling cutters.

These innovative weld seam milling cutters allow for very simple, clean, and faster post-processing of seams.

Cost-effective devices are available for inside corner seams at 90° or 120°, flat V, X, or butt weld seams, outside corner seams at 270°, or for seam preparation at 90° or 180°.

Other angles are possible upon request.

For manufacturers of car covers or installers of insulation foils, we offer various silicone pressure rollers in different widths, optionally equipped with or without ball bearings.

Special welding wire stands, which facilitate the easy and precise unrolling of welding wires from coils or spools, especially for extrusion welding, and also serve for storing the welding wires, are also available.

Auxiliary equipment



Semi-finished products - Delivery Overview

Material designation according to DIN / ISO	+ PANELS, SHEETS, BLOCKS										STANDARD PROFILES
	Standard dimensions (mm)						Additional delivery options				
	Thickness 1)	Thickness 1)	ODØ 2)	LW	ODØ 3)	ODØ 4)	(✓ = available / - = no)			Type of profile	
BIO-Polymere div.	-	-	10-40	-	-	-	-	-	-	-	✓
PVC-U (Hard-PVC)	1-100	-	5-400	10-38	15-230	10-600	✓	✓	✓	-	U/L/H/T
PVC-HI	3-50	-	20,30,40	-	-	-	-	-	-	-	-
PVC-ESD	-	-	20,30,50	-	-	-	-	-	-	-	-
PVC-Hardfoam	1-24	-	-	-	-	-	-	-	-	-	-
PVC-C	3-30	-	10-150	-	-	16-500	-	✓	-	-	L
PVC-P (Soft-PVC)	-	2-10	-	-	-	-	-	✓	-	-	-
PE-HD (PE 300)	2-120	-	10-700	17-38	30-1350	10-1400	✓	✓	✓	-	U/L
PE-HMW (PE 500)	10-100	-	-	-	-	-	-	-	-	-	-
PE-UHMW (PE 1000)	3-100	-	20-200	17-38	-	-	-	-	-	-	-
PP-H	2-120	-	10-700	17-32	30-1350	10-1400	✓	✓	✓	-	U/L
PPs	3-20	-	20-100	-	-	-	✓	✓	-	-	-
PPs-EL	3-20	-	20-80	-	-	-	-	✓	-	-	-
PP-GF30	40	-	20-150	17-38	-	-	-	-	-	-	-
PP-PET-F30	-	-	25-100	-	-	-	-	-	-	-	-
PP-C	3-15	-	-	-	-	-	-	✓	-	-	-
PP-R	-	-	-	-	-	-	-	✓	-	-	-
PP-ESD	-	-	20-110	-	-	-	-	-	-	-	-
ABS	15-100	-	10-100	-	-	-	-	-	-	-	-
PET (PETP)	10-80	-	12-200	17-38	-	-	-	-	-	-	-
PMMA-XT	-	-	4-200	-	-	7-250	-	-	-	-	-
PMMA-GS	-	-	10-200	-	-	40-500	-	-	-	-	-
PC	15-50	-	10-180	17-38	-	10-200	-	-	-	-	-
PPE	10, 20	-	20-80	-	-	-	-	-	-	-	-
PPE-GF30	-	-	30, 40	-	-	-	-	-	-	-	-
PA 6 xt	2-100	-	6-300	17-38	20-100	-	-	-	-	-	-
PA 6.6	10-50	-	6-150	17-38	-	-	-	-	-	-	-
PA 6 cast	16-100	-	50-320	-	-	-	-	-	-	-	-
PA 6.6-GF30	10-100	-	20-150	-	-	-	-	-	-	-	-
POM-C	2-130	-	3-500	17-38	20-200	20-450	-	-	-	-	-
POM-ESD	12, 20	-	-	-	-	-	-	-	-	-	-
POM-ELS	30, 50, 80	-	12, 20, 30	-	-	-	-	-	-	-	-
POM-PE10	10-50	-	20-100	-	-	-	-	-	-	-	-
PEEK	8-50	-	5-200	17-38	-	-	-	-	-	-	-
PEEK mod.	10, 20	-	10-80	-	-	-	-	-	-	-	-
PEEK-GF30	-	-	10100	-	-	-	-	-	-	-	-
PES	-	-	12-100	-	-	-	-	-	-	-	-
PSU	-	-	20-100	-	-	-	-	-	-	-	-
PPS	-	-	20-50	-	-	-	-	-	-	-	-
PPS-GF40	-	-	20-50	-	-	-	-	-	-	-	-
PPSU	-	-	20-40	-	-	-	-	-	-	-	-
PEI	-	-	25-100	-	-	-	-	-	-	-	-
PVDF	2-60	-	10-250	17-38	110-250	16-400	✓	✓	-	-	-
PVDF-ELS	-	-	20-60	-	-	-	-	-	-	-	-
ECTFE	1,5/2,3/3	1,5/2,3	25-127	-	-	20-110	✓	✓	-	-	-
PCTFE	5-30	-	9-125	-	30-430	-	-	-	-	-	-
FEP	5-30	1,5-2,3	9-125	-	-	32-110	-	✓	-	-	-
PFA	5-30	1,5-2,3	9-125	-	-	16-32	-	✓	-	-	-
PTFE-virg.	1-50	0,5-3	4-775	-	10-1440	10-80	-	-	-	-	-
PTFE-C25	1-50	0,5-3	4-775	-	10-1440	10-80	-	-	-	-	-
PTFE-GF25	1-50	0,5-3	4-775	-	10-1440	10-80	-	-	-	-	-

1) Standard formats, 2) Standard length, 3) Inner diameter and length as well as 4) Wall thickness (if applicable, pressure series) and length on request.

Minimum quantities, standard formats, designs, colors, cuttings, and machined parts according to drawing are available on request.

This overview illustrates our delivery options for standard products and does not claim to be complete and accurate.

As a specialist company, we also supply machinery, equipment, and accessories for plastic welding, joining, bending, and folding technology.

Semi-finished products - Delivery Overview



Plates and bars made of
PA 6, PA 6.6, PA 6.6 GF30



Plates and bars made of
POM-C, POM-ESD, POM-AS



Plates and bars made of
PET (PETP)



Plates and bars made of
PVC-U, PVC-C



Plates and bars made of
PP-H, PP-C



Plates and bars made of
PE-HD (PE80, PE100), PE-UHWM



Plates and bars made of
PEEK, ECTFE, PCTFE, PTFE, FEP, PFA



Plates and bars made of
ABS



Pipes and bars made of
PMMA



Standard profiles and shaped pipes made of
PVC-U, PE-HD, PP



Pipes and bars made of
transp. PVC-U



Plates and bars made of
PC (Industriequalität)

Welding extruders

Model	Thickness sheet s [mm]	3,0	4,0	5,0	6,0	8,0	10,0	12,0	15,0	20,0	25,0	30,0	35,0	40,0	50,0
	fillet weld a [mm]	2,1	2,8	3,5	4,2	5,6	7,0	8,4	10,5	14,0	17,5	21,0	24,5	28	35
	welding performance														
HSK 10	1,0 kg/h (PE Ø3 mm)														
HSK 18	1,8 kg/h (PE Ø4 mm)														
HSK 22	2,3 kg/h (PE Ø5 mm)														
HSK 26	2,5 kg/h (PE Ø4 mm)														
HSK 28	3,0 kg/h (PE Ø4 mm)														
HSK 40	4,0 kg/h (PE Ø5 mm)														
HSK 60	6,0 kg/h (PE Ø5 mm)														



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