

## Extrusion Welders



# Hand Extrusion Welders – Lightweights with a high output



For decades, **WEGENER** has been developing, designing, building and selling high-performance and reliable hand extrusion welders. They combine a very compact and lightweight design with a high welding performance and excellent quality of the extrudate. All extruders in the **WEGENER EXWELD x3** series have an extrusion part with a fully-fledged 3-zone extrusion screw, a rapid microprocessor-based control system for the extrudate and air temperature as well as the main drive and a patented thermal isolation of the extrusion part from the drive. One new feature is the modular design, so that users can perform minor maintenance and service work themselves. Even demanding materials such as CPVC can be easily processed with the corresponding PVC extruder version.

Which Extruder fits to which sheet thickness ?

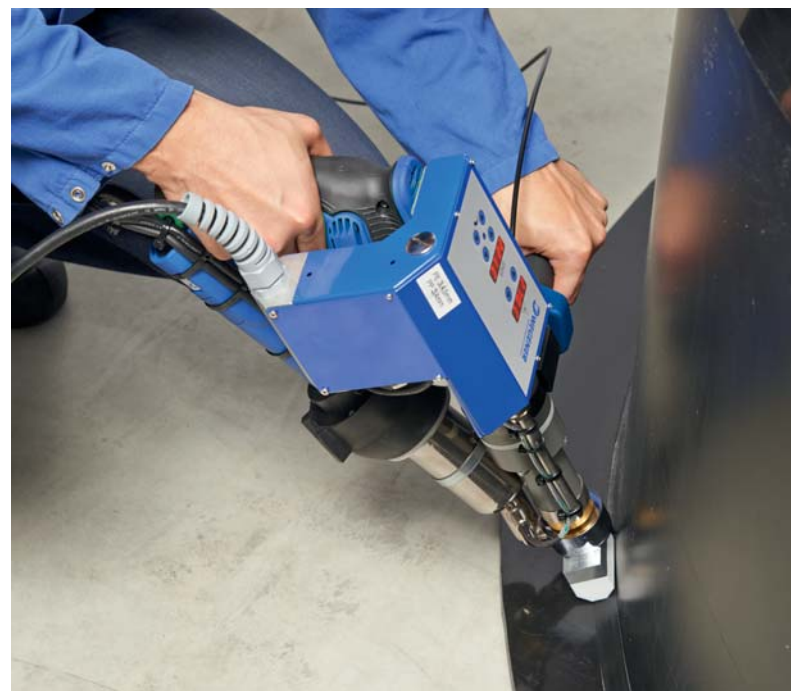
Extruder	max. welding output PE (kg/h)	Sheet Thickness [mm]													
		3	4	5	6	8	10	12	15	20	25	30	35	40	50
EXWELD mini2	0,9														
EXWELD aero	2,6														
EXWELD sigma3 EC	1,9														
EXWELD sigma3 SC	1,9														
EXWELD alpha3 EC	2,6														
EXWELD alpha3 SC	2,6														
EXWELD beta3 EC	4,6														
EXWELD beta3 SC	4,6														
EXWELD gamma3 EC	6,2														
EXWELD hydro beta2	4,8														

## Application


During extrusion welding, the components to be joined are welded using a continuously fed filler material (welding wire). A similar material is preferably used as welding wire. The extrudate that is continuously produced by the extruder is applied in the weld joint that has been pre-heated (hot gas) to the processing temperature.

User-friendly and practical design through:

- **WEGENER** microprocessor control system for air and extrudate temperature, and to control the motor
- Own air supply in the SC version through a **WEGENER** brushless Airbox 2,200 W
- EXWELD sigma3 and EXWELD alpha3 external air supply in the EC version through a **WEGENER** air heater 2,500 W
- EXWELD beta3 and gamma3 external air supply in the EC version through a **WEGENER** air heater 3,000 W
- Switch between actual and target value display for air heater and extrudate temperature
- Cold start protection (start-up protection dependent on time and temperature)
- Monitoring of the pre-set target temperature of the extrudate heater with motor-stop function if the deviation is too high
- Easily exchangeable PTFE welding shoe, adjustable front handle
- The scope of delivery includes a welding shoe of your choice



				
Technical Data	<b>sigma3 SC TWISTY</b> Item no. 30273	<b>sigma3 EC TWISTY</b> Item no. 30274	<b>EXWELD alpha3 SC</b> Item no. 30275	<b>EXWELD alpha3 EC</b> Item no. 30276
Power supply:	230 V 1/N/PE 50/60 Hz	230 V 1/N/PE 50/60 Hz	230 V 1/N/PE 50/60 Hz	230 V 1/N/PE 50/60 Hz
Power consumption:	3,390 W	3,690 W	3,660 W	3,960 W
Air requirement:	self-contained air supply	>300 l/min	self-contained air supply	>300 l/min
Heating capacity (air):	2,200 W	2,500 W	2,200 W	2,500 W
Welding capacity (PE):	approx. 1.9 kg/h	approx. 1.9 kg/h	approx. 2.6 kg/h	approx. 2.6 kg/h
Welding capacity (PP):	approx. 1.8 kg/h	approx. 1.7 kg/h	approx. 2.2 kg/h	approx. 2.2 kg/h
Welding rod diameter:				
PE (mm)	3,4,5	3,4,5	3,4,5	3,4,5
PP (mm)	3,4	3,4	3,4,5	3,4,5
Weight:*	5.6 kg	5.4 kg	6.9 kg	6.3 kg
Dimensions (L x H x W in mm):	440 x 230 x 130	440 x 250 x 130	530 x 290 x 140	530 x 220 x 135

				
Technical Data	<b>alpha3 SC TWISTY</b> Item no. 30277	<b>alpha3 EC TWISTY</b> Item no. 30278	<b>EXWELD beta3 SC</b> Item no. 30279	<b>EXWELD beta3 EC</b> Item no. 30280
Power supply:	230 V 1/N/PE 50/60 Hz	230 V 1/N/PE 50/60 Hz	230/400 V 3/N/PE 50/60 Hz	230/400 V 3/N/PE 50/60 Hz
Power consumption:	3,660 W	3,960 W	4,560 W	5,360 W
Air requirement:	self-contained air supply	>300 l/min	self-contained air supply	>300 l/min
Heating capacity (air):	2,200 W	2,500 W	2,200 W	3,000 W
Welding capacity (PE):	approx. 2.6 kg/h	approx. 2.6 kg/h	approx. 4.6 kg/h	approx. 4.6 kg/h
Welding capacity (PP):	approx. 2.2 kg/h	approx. 2.2 kg/h	approx. 4.3 kg/h	approx. 4.3 kg/h
Welding rod diameter:				
PE (mm)	3,4,5	3,4,5	3,4,5	3,4,5
PP (mm)	3,4,5	3,4,5	3,4,5	3,4,5
Weight:*	7.0 kg	6.4 kg	10.6 kg	9.9 kg
Dimensions (L x H x W in mm):	555 x 280 x 135	555 x 240 x 130	590 x 390 x 140	590 x 335 x 150

			
Technical Data	<b>beta3 SC TWISTY</b> Artikel-Nr. 30281	<b>beta3 EC TWISTY</b> Artikel-Nr. 30282	<b>EXWELD gamma3 EC</b> Artikel-Nr. 30283
Power supply:	230/400 V 3/N/PE 50/60 Hz	230/400 V 3/N/PE 50/60 Hz	230/400 V 3/N/PE 50/60 Hz
Power consumption:	4,560 W	5,360 W	5,760 W
Air requirement:	self-contained air supply	>300 l/min	>300 l/min
Heating capacity (air):	2,200 W	3,000 W	3,000 W
Welding capacity (PE):	approx. 4.6 kg/h	approx. 4.6 kg/h	approx. 6.2 kg/h
Welding capacity (PP):	approx. 4.3 kg/h	approx. 4.3 kg/h	approx. 5.6 kg/h
Welding rod diameter:			
PE (mm)	3,4,5	3,4,5	3,4,5
PP (mm)	3,4,5	3,4,5	3,4,5
Weight:*	10.7 kg	10.0 kg	10.1 kg
Dimensions (L x H x W in mm):	600 x 390 x 140	600 x 335 x 140	590 x 335 x 150

Do you need an extruder to weld PVC or pellets / granules? If so, we are your competent partner too! Contact us now, we will be happy to help!


\* without input lead (cable)

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## Accessories

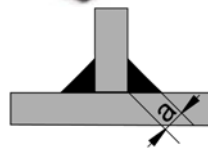

An extensive range of accessories for weld seam preparation, quality control and weld seam finishing as well as a complete assortment of welding shoes for all welding geometries round off the **WEGENER** delivery portfolio.

### Welding Shoes for Extrusion Welder:




**fillet weld (90° weld): (a-measurement according to DVS Rules)**

article no.	sheet thickness	a size
14153	5, 6, 8 mm	5.6 mm
14154	10 mm	7.0 mm
14155	12 mm	8.4 mm
14156	15 mm	10.5 mm
11060	20 mm	14.0 mm
11061	25 mm	17.5 mm
11062	30 mm	21.0 mm
11063	35 mm	24.5 mm
11064	40 mm	28.0 mm

**V-weld:**

article no.	sheet thickness
11065	5,6 mm
11066	8 mm
11067	10 mm
11068	12 mm
11069	15 mm
11070	20 mm
11071	25 mm
11072	30 mm
11073	35 mm
11074	40 mm




**Blower DT 16**


- On-site blower for extrusion welders with external air supply
- 350 l/min at 0.6 bar
- 1.1 kW alternating current motor, 230 V
- Air distributor for one extrusion welder
- Integrated pressure relief valve
- 2.5 m connection cable with plug

article no. 14177




**Temperature Gauge**

article no. 24644



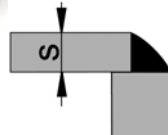

**Air Flow Meter**

article no. 13125



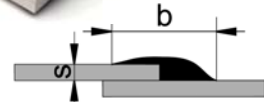

**outer edge weld (90°):**

article no.	sheet thickness
11075	5.6 mm
11076	8 mm
11077	10 mm
11078	12 mm

**overlap weld for membranes:**

article no.	dimensions
11079	50 x 50 x 30 mm

**rough shoes:**

article no.	dimensions
11080	50 x 30 x 30 mm
11082	70 x 40 x 40 mm
13512	50 x 50 x 30 mm



**Draw Blade DE/EU** article no. 18609

**Draw Blade US** article no. 19046



**Quarter Moon Knife**

article no. 10593



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