ESG Plus, ESG Plus²

Electrode grinders

The optimum solution for precise and quick working of weld electrodes.
For working, grinding and cutting weld electrodes which are used in the TIG welding machines.



- High angular precision through preset grinding angle for all electrodes ✓
- Light and rapid processing ✓
- Optimum preparation for orbital or manual welding ✓
- Grinding in the longitudinal direction for optimal arc ignition and high arc stability ✓
- Guarantees a higher service life and ignition ease of the tungsten electrode ✓
- Specially for small batch production directly on the building site ✓
- Compact version, optimal resistance and perfect repeatability ✓
- Functional design ✓
- Precise cylindrical grinding ✓

The powerful hand-held electrode grinding units for grinding, squaring and cutting.

One unit – complete electrode machining:
- Grinding electrodes:
  - 4 different angles
  - 6 different electrode diameters
- Squaring an electrode tip
- Cutting electrodes

The devices are equipped with a high-quality, powerful drive in 230 or 110 Volt design. Machine and accessories are supplied in a robust transport case.

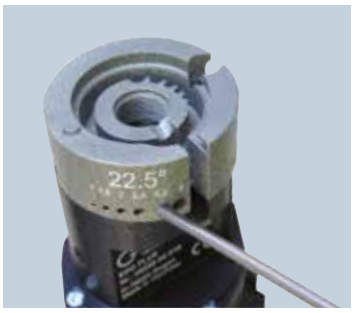
ADDITIONAL ADVANTAGES:

- Device for easy cutting of the electrodes (optional)
- External vacuum cleaners can be adapted easily
- Short machining times through the high grinding capacity
- Reduced work required without setup time

ADDITIONAL CHARACTERISTICS ESG PLUS²:

- Portable electrode grinders with 2 different grinding wheels. This way the electrode can be pre-sanded with the rough diamond grinding wheel without any effort and sharpened with the fine diamond grinding wheel.

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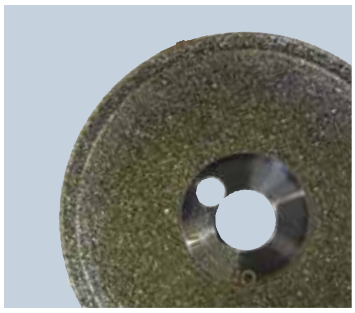
Grinding electrodes: – 4 different angles, 6 different electrode diameters



Squaring an electrode tip



Cutting electrodes



Interchangeable, diamond grinding wheels coated on both sides for an optimum operational performance







SCOPE OF DELIVERY/AREA OF APPLICATION		ESG PLUS	ESG PLUS[2]
Code	[230 V]	790 052 485 (15°/18°/22.5°/30°) 790 052 545 (15°/30°/45°/60°)	790 052 585 (15°/18°/22.5°/30°) 790 052 546 (15°/30°/45°/60°)
	[110 V]	790 052 486 (15°/18°/22.5°/30°) 790 052 645 (15°/30°/45°/60°)	790 052 586 (15°/18°/22.5°/30°) 790 052 646 (15°/30°/45°/60°)
Electrode grinder	PCS.	1	1
transport case	PCS.	1	1
Weld head for electrode Ø 1.0 - 1.6 - 2.0 - 2.4 - 3.2 - 4.0 mm (0.04" - 1/16" - 0.08" - 3/32" - 1/8" - 5/32")	PCS.	1	1
Weld head for grinding angle 15° - 18° - 22.5° - 30° **or** 15° - 30° - 45° - 60°	PCS.	1	1
Diamond grinding wheel fine (790 052 487)	PCS.	–	1
Diamond grinding wheel medium (790 052 488)	PCS.	1	–
Diamond grinding wheel rough (790 052 550)	PCS.	–	1
Table mount	PCS.	–	–
Tool to change the grinding wheel	PCS.	1	1
Operating instructions and spare part list	set	1	1
TECHNICAL SPECIFICATIONS		**ESG PLUS**	**ESG PLUS[2]**
Dimensions (with drive)	[mm]	Ø 65 x 350	Ø 65 x 350
	[inch]	Ø 2.56 x 13.78	Ø 2.56 x 13.78
Power	[W]	500	500
Duty cycle	[%]	100	100
Speed (idle speed)	[rpm]	30.000	30.000
Power cable (length)	[m]	3	3
	[inch]	118.1	118.1
Vibration level (EN 28662, part 1)	[m/s²]	< 2.5	< 2.5
Noise pressure level at the workplace (during idling), approx.	[dB (A)]	83	83

Technical specifications are non-binding. They do not constitute any assurance of properties. We reserve the right to make changes.

ESG electrode grinders



ESG Plus



ESG Plus²

ESG Plus, ESG Plus²

ITEM	VERSION	GRINDING ANGLE [°]	CODE	MACHINE WEIGHT KG	SHIPPING WEIGHT KG
ESG Plus	230 V, 50/60 Hz EU	15/18/22.5/30	**790 052 485**	1.430	3.560
ESG Plus	110 V, 50/60 Hz EU/US	15/18/22.5/30	**790 052 486**	1.430	3.560
ESG Plus	230 V, 50/60 Hz EU	15/30/45/60	**790 052 545**	1.430	3.560
ESG Plus	110 V, 50/60 Hz EU/US	15/30/45/60	**790 052 645**	1.430	3.560
ESG Plus²	230 V, 50/60 Hz EU	15/18/22.5/30	**790 052 585**	1.520	3.825
ESG Plus²	110 V, 50/60 Hz EU/US	15/18/22.5/30	**790 052 586**	1.520	3.825
ESG Plus²	230 V, 50/60 Hz EU	15/30/45/60	**790 052 546**	1.520	3.825
ESG Plus²	110 V, 50/60 Hz EU/US	15/30/45/60	**790 052 646**	1.520	3.825



Diamond grinding wheels

Diamond grinding wheels

Interchangeable, diamond grinding wheels coated on both sides for an optimum operational performance.

For 1.0 and 1.6 mm electrodes we recommend the fine grinding wheel grains.
For 2.0 mm and 2.4 mm electrodes an average grinding wheel grain is recommended and for 3.2 mm and 4.0 mm a rough grinding wheel grain.

ITEM	CAN BE USED WITH	GRAIN	WHEEL Ø		S		CODE	KG
			[MM]	[INCH]	[MM]	[INCH]		
Diamond grinding wheel	ESG 4	Standard	32.00	1.290	1.2	0.047	**790 052 460**	0.005
Diamond grinding wheel	ESG Plus, ESG Plus²	Fine	33.50	1.319	2.2	0.087	**790 052 487**	0.010
Diamond grinding wheel	ESG Plus, ESG Plus²	Medium	33.50	1.319	2.2	0.087	**790 052 488**	0.011
Diamond grinding wheel	ESG Plus, ESG Plus²	Rough	33.50	1.319	2.2	0.087	**790 052 550**	0.011



Cutting device

Cut to length device

For simple separating of the electrodes.
Can be used up to an electrode diameter of 2.4 mm (0.094").

ITEM	SETTING	CUTTING LENGTHS		CODE	KG
		[MM]	[INCH]		
Cutting device	fix	12.0 13.0 15.0 17.0	0.472 0.512 0.591 0.669	**790 052 513**	0.030

Electrode holder

For processing smaller electrodes.
The electrode holder is delivered including 1 flexible collet.

ITEM	SETTING	ELECTRODE Ø		CODE	KG
		[MM]	[INCH]		
Electrode holder with collet	continuous	1.0 - 3.2	0.039 - 0.126	**790 052 457**	0.023
Spare collet	continuous	1.0 - 3.2	0.039 - 0.126	**790 052 481**	0.002



Electrode holder with collet



Spare collet

Wall, table, vise mount

For stationary use of the ESG Plus and ESG Plus².
Simple and rapid mounting to a wall, a table or a vice.

ITEM	CODE	KG
Wall, table, vise mount	**790 052 483**	0.102



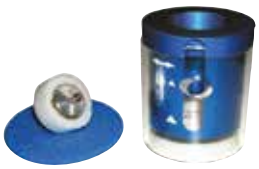
Wall, table, vise mount

Dust protection

Easy to mount on the ESG grinding head.
With integrated mounting for extraction systems.
To be used for electrodes containing thorium.

Country-specific regulations, standards and guidelines have to be observed.

ITEM	CODE	KG
Dust protection ESG Plus	**790 052 496**	0.170
Dust protection ESG Plus²	**790 052 596**	0.220



Dust protection

Double-decker kit

Easy to mount for the ESG Plus. This mount allows simultaneous working with 2 different grinding wheels.

Including:

- 1 grinding head
- 1 diamond grinding wheel (rough)
- 1 cylinder-head screw with collar (M4x34)
- 1 shaft extension

ITEM	CAN BE USED WITH	GRINDING ANGLE [°]	CODE	KG
Double-decker kit	ESG Plus	15/18/22.5/30	**790 052 490**	0.160
Double-decker kit	ESG Plus	15/30/45/60	**790 052 390**	0.100



Double-decker kit

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