



One machine – complete electrode preparation!



Grinding electrodes:
4 different angles and
6 different electrode sizes



Facing electrodes



Cutting electrodes



Durable storage and
shipping case



Exchangeable diamond
grinding wheels for
optimal performance

Tungsten Grinder ESG Plus

69

Tungsten Grinder

- Repeatable points every time due to preset grinding angles
- Easy and fast to use
- Optimum preparation for orbital and manual welding
- Longitudinal grinding for optimum arc ignition and excellent arc stability
- Guarantees longer tool life and ease of ignition of the tungsten electrode
- Specially designed for one-off jobs on site
- Compact design, optimum resilience and perfect reproducibility
- Solid, functional design
- Precise orbital grinding
- Grinding angles 15° / 18° / 22,5° / 30° or 15° / 30° / 45° / 60°
- Facility for easy trimming of the electrodes (optional)
- External dust extractor can be easily adapted
- Short preparation times with high grinding performance
- No adjustment needs to be done before operation



ESG Plus

ESG Plus, ESG Plus²

This ESG Plus is the perfect hand-held grinder for cutting, grinding and planing electrodes which are used in WIG/TIG welding machines. Consider country-specific regulations, standards and guidelines when using tungsten electrodes with thorium.

ESG Plus²: The first portable tungsten grinder with two different grinding wheels. This allows the electrode to be pre-ground with the coarse diamond wheel then finished with the fine diamond wheel.

Machine comes with:

- 1 Tungsten Grinder ESG Plus or ESG Plus²
- 1 Durable storage and shipping case
- ESG Plus: 1 Diamond grinding wheel (medium, Code 790 052 488)
ESG Plus²: 1 Diamond grinding wheel (coarse, Code 790 052 550) and 1 diamond grinding wheel (fine, Code 790 052 487)
- 1 Tool to replace the grinding wheel
- 1 Set of operating instructions and spare parts list



ESG Plus²

Application range	ESG Plus, ESG Plus ²
Electrode Ø	1.0 / 1.6 / 2.0 / 2.4 / 3.2 / 4.0 mm 0.040 / 1/16 / 0.080 / 3/32 / 1/8 / 5/32 inch
Grinding angles	15° / 18° / 22.5° / 30° or 15° / 30° / 45° / 60°
Technical data	Electric drive with single-phase AC motor
Dimensions (with drive)	Ø 65 x 350 mm / 2.56 x 13.78 inch
Power	500 W
Power-on time	100 %
Rotary speed	30,000 rpm
Main supply cable (length)	3 m / 118.1 inch
Vibration level in accordance with 28662, part 1	< 2.5 m/s ²
Noise level at the workplace	Idle running approx. 83 dB (A)

Article	Version	Grinding angles [°]	Code	Weight of machine kg	Dispatch weight kg
ESG Plus	230 V, 50/60 Hz EU	15 / 18 / 22.5 / 30	790 052 485	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 ²	230 V, 50/60 Hz EU	15 / 18 / 22.5 / 30	790 052 585	1.520	3.825
ESG Plus ²	230 V, 50/60 Hz EU	15 / 30 / 45 / 60	790 052 546	1.520	3.825
ESG Plus	110 V, 50/60 Hz EU/US	15 / 18 / 22.5 / 30	790 052 486	1.560	3.570
ESG Plus	110 V, 50/60 Hz EU/US	15 / 30 / 45 / 60	790 052 645	1.560	3.570
ESG Plus ²	110 V, 50/60 Hz EU/US	15 / 18 / 22.5 / 30	790 052 586	1.520	3.825
ESG Plus ²	110 V, 50/60 Hz EU/US	15 / 30 / 45 / 60	790 052 646	1.520	3.825

Accessories for ESG Plus

Diamond grinding wheels

Replaceable grinding wheel diamond-coated on both sides for optimal performance.
For 1.0 and 1.6 mm (0.039 and 0.063 inch) electrodes we recommend the standard grinding wheel. For 2.0 and 2.4 mm (0.078 and 0.094 inch) electrodes a medium grained grinding wheel and for 3.2 and 4.0 mm (0.126 and 0.157 inch) a coarse grained grinding wheel is advisable.

Article	Version	Grinding wheel Ø [mm/inch]	s [mm/inch]	Code	kg
Diamond grinding wheel*	Standard	32.0/1.260	1.2/0.047	790 052 460	0.005
Diamond grinding wheel**	Fine	33.5/1.319	2.2/0.087	790 052 487	0.010
Diamond grinding wheel**	Medium	33.5/1.319	2.2/0.087	790 052 488	0.011
Diamond grinding wheel**	Coarse	33.5/1.319	2.2/0.087	790 052 550	0.011

* for ESG 4

** for ESG Plus



Diamond grinding wheels

Cutting device

To cut tungsten electrodes to length.

Application range	[mm]	[inch]
Electrode Ø	1.0 / 1.6 / 2.0 / 2.4	0.040 / 1/16 / 0.080 / 3/32
Fixed cutting lengths*	12 / 13 / 15 / 17	0.472 / 0.512 / 0.591 / 0.669

* Other cutting lengths possible.

Article	Code	kg
Cutting device for ESG Plus	790 052 513	0.030



Cutting device

Electrode holder

With clamping collet (Code 790 052 481) for clamping range 1.0 - 3.2 mm (0.039 - 0.126 inch).

Article	Code	kg
Electrode holder	790 052 457	0.023



Electrode holder

Clamping collet

To center the electrode in the holder.
For easy grinding of smaller electrodes.
Flexible clamping collet for clamping range 1.0 - 3.2 mm (0.039 - 0.126 inch).

Article	Clamping range [mm]	Clamping range [inch]	Code	kg
Clamping collet	1.0 - 3.2	0.039 - 0.126	790 052 481	0.002



Clamping collet



Wall-/table-/vice-mounting plate



Protective cover



Double-Decker Kit

Wall-/table-/vice-mounting plate

For stationary ESG Plus set-up.

Article	Code		kg
Wall-/table-/vice-mounting plate	790 052 483		0.102

Protective cover

Easy to adapt on the ESG Plus head.

With integrated retainer for suction units. For use on electrodes with thorium.
Consider country-specific regulations, standards and guidelines.

Article	Code		kg
Protective cover for ESG Plus	790 052 496		0.220
Protective cover for ESG Plus ²	790 052 596		0.220

Double-Decker Kit

Easy to mount to the ESG Plus. This attachment makes it possible to use 2 different grinding wheels at the same time. The kit contains a head and a diamond grinding wheel (Code 790 052 550) with an extension shaft.

Article	Grinding angles [°]	Code		kg
Double-Decker Kit	15 / 18 / 22.5 / 30	790 052 490		0.160
Double-Decker Kit	15 / 30 / 45 / 60	790 052 390		0.160