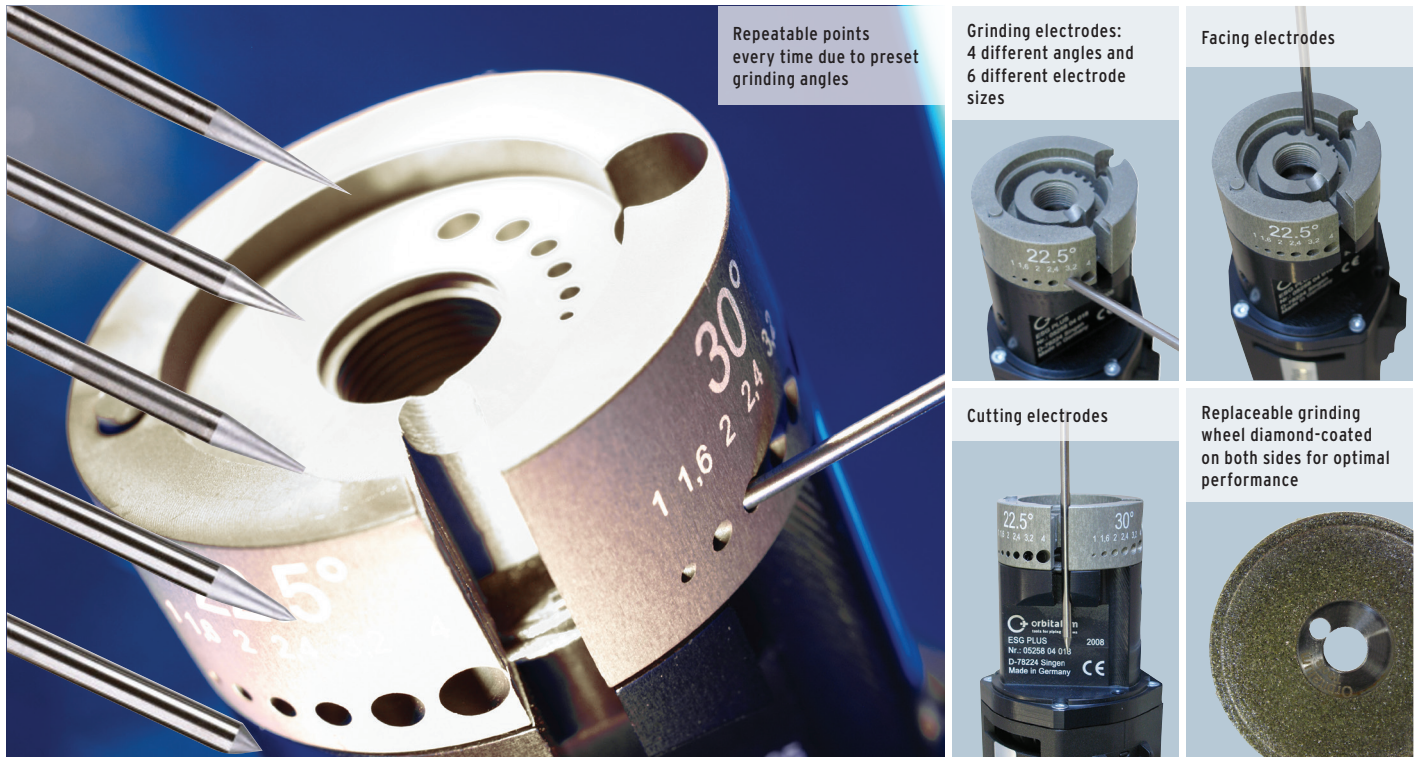


ESG Plus, ESG Plus²

Tungsten Grinders

The best solution for a precise and fast preparation of tungsten electrodes.

The perfect hand-held grinder for cutting, grinding and planing electrodes which are used in WIG/TIG welding machines.



The powerful Hand-Tungsten-Grinder for grinding, facing and cutting.

One machine - complete electrode preparation:

- Grinding electrodes:
 - 4 different angles
 - 6 different electrode sizes
- Facing electrodes
- Cutting electrodes

The machines are available with a high-quality and powerful drive with 230 Volt and/or 110 Volt. Machines and accessories are delivered in a durable storage and shipping case.

- 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
- Functional design
- Precise orbital grinding

- 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

ADDITIONAL FEATURES ESG PLUS²:

- 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.



SCOPE OF DELIVERY / APPLICATION RANGE		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°)
	Tungsten grinder	Pc. 1	1
	Durable storage and shipping case	Pc. 1	1
Grinding head for electrodes 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")	Pc. 1	1	1
Grinding head for grinding angle 15° - 18° - 22.5° - 30° or 15° - 30° - 45° - 60°	Pc. 1	1	1
Diamond grinding wheel Fine (790 052 487)	Pc. -	-	1
Diamond grinding wheel Medium (790 052 488)	Pc. 1	1	-
Diamond grinding wheel Coarse (790 052 550)	Pc. -	-	1
Tool to replace the grinding wheel	Pc. 1	1	1
Operating instructions and spare parts list	Set 1	1	1
TECHNICAL DATA		ESG PLUS	ESG PLUS ²
Dimensions (including motor)	[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
Power-on time	[%]	100	100
Speed (Rotary speed)	[rpm]	30.000	30.000
Main supply cable (length)	[m]	3	3
	[inch]	118.1	118.1
Vibration level (EN 28662, part 1)	[m/s ²]	< 2.5	< 2.5
Noise level at the workplace (Idle running), approx.	[dB (A)]	83	83

The technical data are not binding. They are not warranted characteristics and are subject to change.

Tungsten Grinders ESG

ESG Plus, ESG Plus²

Features, application range, technical data and scope of delivery, see from page 79.

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	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 Plus ²	230 V, 50/60 Hz EU	15 / 18 / 22.5 / 30	790 052 585	1.520	3.825
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	230 V, 50/60 Hz EU	15 / 30 / 45 / 60	790 052 546	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



ESG Plus

ESG Plus²

Diamond grinding wheels

Replaceable grinding wheel diamond-coated on both sides for optimal performance.

For 1.0 and 1.6 mm (0.039"/0.063") electrodes we recommend the standard grinding wheel. For 2.0 and 2.4 mm (0.078"/0.094") electrodes a medium grained grinding wheel and for 3.2 and 4.0 mm (0.126"/0.157") a coarse grained grinding wheel is advisable.

ARTICLE	APPLICABLE 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 Plus ²	Fine	33.50	1.319	2.2	0.087	790 052 487	0.010
Diamond grinding wheel	ESG Plus, ESG Plus ²	Medium	33.50	1.319	2.2	0.087	790 052 488	0.011
Diamond grinding wheel	ESG Plus, ESG Plus ²	Coarse	33.50	1.319	2.2	0.087	790 052 550	0.011



Diamond grinding wheels

Cutting device

For simple separating of the electrodes.

Applicable up to an electrode diameter of 2.4 mm (0.094").

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

* Further cutting lengths possible on request.



Cutting device

TUNGSTEN GRINDING TECHNOLOGY



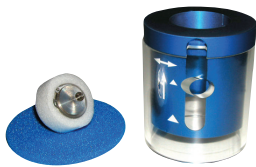
Electrode holder with collet



Spare collet



Wall-/table-/vice-mounting plate



Protective cover



Double-Decker Kit

Electrode holder

For machining smaller electrodes.

The electrode holder is supplied including 1 flexible collet.

ARTICLE	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

Wall-/table-/vice-mounting plate

For stationary use of the ESG Plus and ESG Plus².

Simple and rapid mounting to a wall, a table or a vice.

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 ESG Plus	790 052 496	0.170
Protective cover 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.

Including:

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

ARTICLE	APPLICABLE WITH	GRINDING ANGLES [°]	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