

Neutrix

Portable grinding machine for Tungsten electrodes



- Replaceable dust filter with dust collector
- Triple use of the diamond disc
- Minimal waste of electrodes when grinding
- Grinding electrodes as short as 15 mm

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NEUTRIX - hand-held Tungsten grinder with an integrated dust filter and dust collector

Effective

Neutrix is a handheld and portable grinding machine that fulfills the requirements for safe and environmentally friendly grinding of Tungsten electrodes in high quality for TIG and plasma welding. Grinding in the longitudinal direction of the electrode, variable grinding angle, three grinding positions on the diamond disc and the electrode holder ensure efficient grinding.

Mobile and safe

The storage case and low weight make Neutrix ideal where there is a need to take the grinder with you. At the same time, the Neutrix, is equipped with an integrated dust filter that protects against the harmful grinding dust and collects the dust for safe disposal.

Short electrodes

Neutrix can grind electrodes down to lengths of 19 mm and even 15 mm with a special clamp, for example for orbital welding. The inspection cover on the grinder makes it easy to follow the grinding process and to ensure that the electrode is not generating sparks during grinding. This avoids the electrode being damaged by high temperatures.

Simple operation

Insert the electrode in the electrode holder and lock it in the stick-out. Set the variable degree scale at the desired angle. Place the electrode holder in the grinder. Start the grinder and rotate the holder until it reaches the stop and the grinding is finished.

Grinder facts

Electrode size: $\varnothing 0.8 - 4 \text{ mm}$
Min. length: 19 mm standard (15 mm with special electrode clamps)
Angles: $15^\circ - 180^\circ$ tip angle
($7.5^\circ - 90^\circ$ grinding angle)

Technical specifications

Motor: 110V-50/60 Hz, 220V-50/60Hz
Motor effect: 850 W
Weight: 2.8 kg
Speed: 8,000 - 22,000 rpm.
Grinding speed: 28 - 50 m/sec.

Standard unit includes

- Complete grinder with diamond disc, filter and storage case
- Electrode holder
- Electrode clamps for $\varnothing 1.6, 2.4$ and 3.2 mm electrodes (clamps are available for other electrode sizes).

Extra accessories

- Table mount
- Wall mount
- Electrode clamps for all electrodes from $\varnothing 0.8 - 4.0 \text{ mm}$
- Electrode clamps for grinding extra short electrodes

Main features of Neutrix

- Sealed grinding chamber and dust filter to protect the user
- Variable angle setting gives more flexibility
- The 3 positions of the diamond disc give optimal utilisation
- Electrode holder ensures centring of the tip and reduces electrode waste
- Inspection cover so you can follow the grinding process
- Powerful motor with speed adjustment



Precise adjustment of the electrode's stick-out.



Adjustable tip angle from $15-180^\circ$.



Integrated dust filter, that is easy to change.



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Neutrix Acu

Portable grinding machine for Tungsten electrodes



- Replaceable dust filter with dust collector
- Triple use of the diamond disc
- Minimal waste of electrodes when grinding
- Grinding electrodes as short as 15 mm

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The way to grind

NEUTRIX ACU – hand-held Tungsten grinder with an integrated dust filter and dust collector

Effective

NEUTRIX ACU is a handheld and portable grinding machine that fulfils the requirements for safe and environmentally friendly grinding of Tungsten electrodes in high quality for TIG and plasma welding. Grinding in the longitudinal direction of the electrode, variable grinding angle, three grinding positions on the diamond disc and the electrode holder ensure efficient grinding.

Mobile and safe

The storage case and low weight make NEUTRIX ACU ideal where there is a need to take the grinder with you. At the same time, the NEUTRIX ACU, is equipped with an integrated dust filter that protects against the harmful grinding dust and collects the dust for safe disposal.

Short electrodes

NEUTRIX ACU can grind electrodes down to lengths of 19 mm and even 15 mm with a special clamp, for example for orbital welding. The inspection cover on the grinder makes it easy to follow the grinding process and to ensure that the electrode is not generating sparks during grinding. This avoids the electrode being damaged by high temperatures.

Simple operation

Insert the electrode in electrode holder and lock it in the stick-out. Set the variable degree scale at the desired angle. Place the electrode holder in the grinder. Start the grinder and rotate the holder until it reaches the stop and the grinding is finished.

Grinder facts

Electrode size: Ø0.8 - 4 mm
Min. length: 19 mm standard (15 mm with special electrode clamps)
Angles: 15° - 180° tip angle (7.5° - 90° grinding angle)

Technical specifications

Motor: 18 V
Rpm: 26.000
Weight: 2.5 kg
Filter: Inhalation filter
Diamond disc: Ø 40 mm

Standard unit includes

- Complete grinder with diamond disc, filter and storage case
- Electrode holder
- Electrode clamps for Ø1.6, 2.4 and 3.2 mm electrodes (clamps are available for other electrode sizes).

Item No. Includes

88898022 Neutrix Acu including Battery
88898023 Neutrix Acu including Battery and charger

Extra accessories

- Foot for mounting on a work table
- Wall mount
- Electrode clamps for all electrodes from Ø0.8 - 4.0 mm
- Electrode clamps for grinding extra short electrodes

Main features of Neutrix Acu

- Sealed grinding chamber and dust filter to protect the user
- Variable angle setting gives more flexibility
- The 3 positions of the diamond disc give optimal utilisation
- Electrode holder ensures centring of the tip and reduces electrode waste
- Inspection cover so you can follow the grinding process
- Powerful motor with speed adjustment
- Battery operated motor



Precise adjustment of the electrode's stick-out.



Adjustable tip angle from 15-180°.



Integrated dust filter, that is easy to change.



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Ultima-TIG

Patented wet grinder for Tungsten electrodes for TIG welding



- Environmentally friendly collection of toxic dust particles
- Precise grinding at the correct angle
- Perfect centring of the electrode
- Grinds down to 8 mm
- Minimal electrode waste

NEW

New engine control with

- Service indicator
- Overload protection
- Readout the number of grindings

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Ultima-TIG - high-quality Tungsten electrode grinding

Environmentally friendly and safe

Ultima-TIG is the environmentally friendly wet grinder of Tungsten electrodes for TIG welding, with minimal wastage of the expensive electrodes. Ultima-TIG is constructed with a unique disposable container that automatically collects the toxic dust particles and ensures safe disposal.

Cost-effective in high-quality

Ultima-TIG's unique construction reduces the waste of expensive Tungsten electrodes and reduces the time spent on grinding, resulting in a short payback time. The variable angle adjustment and unique clamping system centres the electrode, so that the grinding is carried out in the correct longitudinal direction of the electrode. A precise angle is not only important for the quality of the welding seam; the number of re-ignitions between re-grinding is also increased.

Wet grinding

The combination of liquid for cooling and a high grinding speed of the diamond disc results in a polished and even surface of the Tungsten electrode. In addition, the cool wet grinding shortens the grinding time and prevents overheated and damaged electrodes.

Simple operation

Set the variable angle setting at the desired angle. Place the electrode in the electrode holder and tighten it in the stick-out. Insert the electrode holder, turn on the grinder and rotate the electrode holder until grinding is finished. After grinding, flatten the tip by placing the angle adjustment in the 90° position, if needed.

Grinder facts

Electrode size: $\varnothing 0.8 - 4$ mm
Min. length: 15 mm standard (8 mm with special clamps)
Angles: 7.5° - 90° grinding angle (equal to 15° - 180° tip angle)

Technical specifications

Motor: 110V-50/60 Hz, 220V-50/60Hz
Motor effect: 280W
Motor speed: 6000 rpm
Grinding speed: 31 m/sec.

Standard unit includes

- Grinder complete with table, diamond disc and grinding liquid
- Electrode holder
- Electrode clamps for $\varnothing 1.6, 2.4$ and 3.2 mm electrodes (clamps are available for other electrode sizes)

Accessories

- Electrode clamps for all diameters from $\varnothing 0.8$ to 4.0 mm
- Electrode clamps for grinding short electrodes down to 8 mm

"Ultima-TIG-S" is available for grinding Tungsten electrodes up to $\varnothing 8$ mm

Main features of Ultima-TIG

- Sealed grinding chamber with dust collector to protect the user
- Variable angle setting gives more flexibility
- Wet grinding prevents overheating of the electrode during grinding
- High grinding speed provides faster grinding and a smooth surface
- The electrode holder ensures centring of the tip and reduces waste
- Less electrode waste results in a short payback time



Precise adjustment of the electrode's stick-out.



Grinding angle from 7.5 - 90° creates accurate electrode tip angles of 15 - 180°.



Tip may be flattened by 1/10 mm per point in the 90° position.



Sealed disposable container for dust collection and disposal.

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Ultima-TIG-Cut

For precision grinding and cutting of Tungsten electrodes for TIG Welding



- Environmentally friendly dust collection when grinding and cutting
- Precise grinding and cutting of electrodes
- Minimal use of electrodes
- Perfectly ground angles

NEW

New engine control with

- Service indicator
- Overload protection
- Readout the number of grindings

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Ultima-TIG-Cut - the efficient and safe way of grinding and cutting Tungsten electrodes for TIG welding

Environmentally friendly and safe

Ultima-TIG-Cut is an environmentally friendly wet grinder and cutter of Tungsten electrodes for TIG welding, with minimal wastage of the expensive electrodes. Ultima-TIG-Cut is constructed with a unique disposable container that automatically collects the toxic dust particles and ensures safe disposal.

Cutting

The cutting module has many setting options, which ensures the precise length needed. Ultima-TIG-Cut makes it simple to make electrode tips with the exact angle and precise length for use in any specific TIG welding job, including robotic and orbital welding.

High quality

Variable angle setting and unique clamping system centres the electrode so that the grinding is carried out correctly in the longitudinal direction of the diamond disc's running surface. A precise angle of the electrode tip is crucial for weld quality and it increases the number of re-ignitions so that the electrode life is extended.

Simple operation

It is possible to grind and cut the electrode without removing the electrode from the holder. Hence, handling is very simple. Adjust the grinding angle and length once, and produce the same electrode tip again and again.

Grinder facts

Electrode size: $\varnothing 0.8 - 4$ mm
Cutting: down to 8 mm length
Min. length (grind): 15 mm standard (8 mm with special electrode clamps)
Angles: 7.5° - 90° grinding angle (equal to 15° - 180° tip angle)

Technical specifications

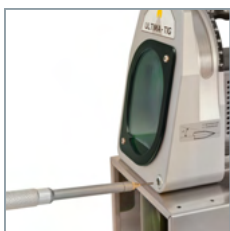
Motor: 110V-50/60 Hz, 220V-50/60Hz
Motor effect: 280W
Motor speed: 6000 rpm
Grinding speed: 31 m/sec.

Standard unit includes

- Complete grinding and cutting machine including table, diamond discs and grinding liquid
- Electrode holder
- Electrode clamps for $\varnothing 1.6 - 2.4 - 3.2$ mm electrodes for grinding
- Electrode clamps for $\varnothing 1.6 - 2.4 - 3.2$ mm electrodes for cutting (Clamps are available for other diameters)

Main features of Ultima-TIG-Cut

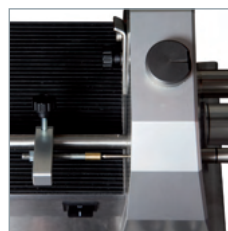
- Safe cutting without the electrode splitting
- Sealed grinding and cutting chamber with dust collector to protect the user
- Variable cutting length and angle setting gives more flexibility
- Wet grinding prevents overheating of the electrode during grinding
- High grinding speed provides faster grinding and a smooth surface
- Electrode holder ensures centring of the tip and reduces electrode waste
- Less electrode waste results in a short payback time



Precise adjustment of the stick-out.



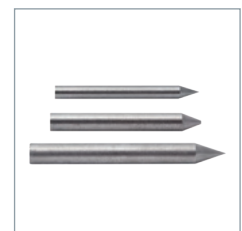
Grind the electrode in the desired angle.



Set the cutting length.



Cut the electrode by turning the handle.



Perfectly ground and cut electrodes.

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Ultima-TIG-S

Patented wet grinder for Tungsten electrodes
up to Ø8.0 mm for TIG welding



- Environmentally friendly collection of toxic dust particles
- Precise grinding at the correct angle
- Perfect centring of the electrode
- Grinds down to 8 mm
- Grinds up to Ø8.0 mm

NEW

New engine control with

- Service indicator
- Overload protection
- Readout the number of grindings

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Ultima-TIG-S - high-quality Tungsten electrode grinding

Environmentally friendly and safe

Ultima-TIG-S is the environmentally friendly wet grinder of Tungsten electrodes for TIG welding, with minimal wastage of the expensive electrodes. Ultima-TIG-S is constructed with a unique disposable container that automatically collects the toxic dust particles and ensures safe disposal.

Cost-effective in high-quality

Ultima-TIG-S' unique construction reduces the waste of expensive Tungsten electrodes and reduces the time spent on grinding, resulting in a short payback time. The variable angle adjustment and unique clamping system centres the electrode, so that the grinding is carried out in the correct longitudinal direction of the electrode. A precise angle is not only important for the quality of the welding seam; the number of re-ignitions between re-grinding is also increased.

Wet grinding

The combination of liquid for cooling and a high grinding speed of the diamond disc results in a polished and even surface of the Tungsten electrode. In addition, the cool wet grinding shortens the grinding time and prevents overheated and damaged electrodes.

Simple operation

Set the variable angle setting at the desired angle. Place the electrode in the electrode holder and tighten it in the stick-out. Insert the electrode holder, turn on the grinder and rotate the electrode holder until grinding is finished. After grinding, flatten the tip by placing the angle adjustment in the 90° position, if needed.

Grinder facts

Electrode size: Ø0.8 - 8.0 mm
Min. length: 15 mm standard (8 mm with special clamps)
Angles: 7.5° - 90° grinding angle (equal to 15° - 180° tip angle)

Technical specifications

Motor: 110V-50/60 Hz, 220V-50/60Hz
Motor effect: 280W
Motor speed: 6000 rpm
Grinding speed: 31 m/sec.

Standard unit includes

- Grinder complete with table, diamond disc and grinding liquid
- Electrode holder up to Ø 4 mm
- Electrode holder Ø 4.8 to 8.0 mm
- Electrode clamps for Ø1.6, 2.4, 3.2, 4.8, 5.3, and 6.4 mm electrodes

Accessories

- Electrode clamps for all diameters from Ø 0.8 to 8.0 mm
- Electrode clamps for grinding short electrodes down to 8 mm

Main features of Ultima-TIG-S

- Sealed grinding chamber with dust collector to protect the user
- Variable angle setting gives more flexibility
- Wet grinding prevents overheating of the electrode during grinding
- High grinding speed provides faster grinding and a smooth surface
- The electrode holder ensures centring of the tip and reduces waste
- Less electrode waste results in a short payback time



Precise adjustment of the electrode's stick-out.



Grinding angle from 7.5 - 90° creates accurate electrode tip angles of 15 - 180°.



Tip may be flattened by 1/10 mm per point in the 90° position.



Sealed disposable container for dust collection and disposal.

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Truncator

Precise truncating of ground Tungsten electrode tips
Separate module designed for Ultima-TIG, Ultima-TIG-S and Ultima-TIG-Cut



- Precise truncating of Tungsten electrodes
- Eliminates the risk of melting off the tip into the weld, causing contamination
- Ideal for AC welding where it reduces the risk of obtaining an excessive ball at the tip

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Precise truncating of ground Tungsten electrode tips

Truncator module

Our Truncator is a separate module, designed and engineered for truncating of ground Tungsten electrodes for TIG welding. The Truncator module can be mounted on our well-known Ultima-TIG and Ultima-TIG-Cut grinders. Besides we offer a special version for Ultima-TIG-S.

For better welding results

There are mainly two reasons to truncate the tip of the freshly ground electrode.

1) In high-current applications, the truncated geometry eliminates the risk of melting off the tip into the weld pool, causing contamination.

2) In AC applications, the truncated geometry reduces the risk of obtaining an excessive ball at the tip. Knowing that an excessive ball causes an unstable arc and might fall and contaminate the weld.

Easy to use

1. Grind an electrode tip on your Ultima-TIG.
2. Loosen the electrode from the electrode holder and secure it in the adjustment for the Truncator
3. Insert the electrode holder in the Truncator.
4. With the grinder switched on, press the electrode holder in to truncate the electrode tip.
5. Switch off the grinder and remove the electrode from the holder.

The size of the truncated tip can easily be adjusted to any desired diameter.

Special double module with two positions is available, if there is a need for two different electrode tips.

The Truncator also works with AutoGrind Digital mounted on the Ultima-TIG grinder.

The Truncator module includes

- Truncator module
- Grinding disc for truncating
- Grinder mounting screws (for mounting on the grinder)

NOTE!

For mounting on older versions of Ultima-TIG/-S/-Cut (serial no starting with 2036 or lower) you need two extra holes on the front of the grinding module. A toolset with drill and thread tap or a new grinding console can be ordered with the following item numbers:

	Item no.
Toolset with drill and tap	75523030
Grinding console	44520000
Grinding console complete	75523020

Main features of new truncator module

- Precise truncating of Tungsten electrodes
- Various positions on the grinding disc
- Eliminates the risk of melting off the tip into the weld, causing contamination
- Ideal for AC welding where it reduces the risk of obtaining an excessive ball at the tip

Grinder Model

Ultima-TIG
Ultima-TIG-Cut
Ultima-TIG-S
Ultima-TIG
Ultima-TIG-Cut
Ultima-TIG-S

Truncator

Single
Single
Single
Double
Double
Double

Item no.

75523010
75523010
75523011
75523012
75523012
75523013



Truncator single module for Ultima-TIG and Ultima-TIG-Cut.



Truncator double module for Ultima-TIG and Ultima-TIG-Cut.



Truncator single module for Ultima-TIG-S.



Truncator double module for Ultima-TIG-S.

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AutoGrind

Digital

Automatically grind your Tungsten electrodes
- Designed for Ultima-TIG and Ultima-TIG-Cut



- Faster grinding
- Ergonomic solution
- Precise and uniform grinding every time
- Easy adjustment of grinding time

NEW

AutoGrind-S for
large diameter electrodes
(Ø 4,8 - 8 mm)

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grinders

AutoGrind Digital - High efficiency with automated grinding

AutoGrind Digital is a separate module for automatic grinding of Tungsten electrodes on the Ultima-TIG and Ultima-TIG-Cut

- The automatic grinding of the electrode ensures a precise and uniform result
- The high rotation speed shortens the grinding time
- The grinder is automatically switched off when the grinding is finished
- The user can prepare the next electrode during the grinding

AutoGrind Digital – the easy and fast way to get your Tungsten electrodes as sharp as you need – every time

The automatic process delivers precise and uniform grinding. It is also the best ergonomic solution for the user, because the electrode holder's automatic rotation means no more repeated movements in the wrist and arm. It ensures a quick replacement of the electrode in the welding torch, because there is no need to adjust each electrode separately. This gives a correct welding seam, as well as longer time between regrinds.

AutoGrind Digital is engineered to be mounted on the Ultima-TIG and Ultima-TIG-Cut grinders for electrodes up to Ø4 mm. The version AutoGrind-S Digital, designed for the Ultima-TIG-S grind electrode size Ø4,8 – 8 mm.

AutoGrind Digital can run on all voltages from 100 V to 240 V and on both 50 Hz and 60 Hz. Please refer to the model list for the correct model incl. cable set for the local voltage, Hz and plug type.

The AutoGrind Digital includes

- Control box – 100-240 V, 50-60 Hz
- Grinding module
- Grinder mounting screws (for mounting on the grinder)
- Electrode holder up to Ø4,0 mm.
- Cable set (mains cable for control box, connection cable for grinder)
- AutoGrind-S Digital includes the above plus electrode holder up to Ø4,8 - 8 mm., instead of the holder for electrodes <Ø4,0 mm.

Model	V/Hz	AutoGrind Digital Item No.	AutoGrind-S Digital Item No.
UK	110 V/50 Hz	88897871	88897891
UK	230 V/50 Hz	88897876	88897896
EU	230 V/50 Hz	88897874	88897894
US	110 V/60 Hz	88897882	88897895

Special electrode holder with bayonet lock holds the electrode in place during grinding



Fits on Ultima-TIG



Fits on Ultima-TIG-Cut



Grinding module – automatic rotation of the electrode holder



Control box – Digital display with adjustable grinding time



YouTube

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