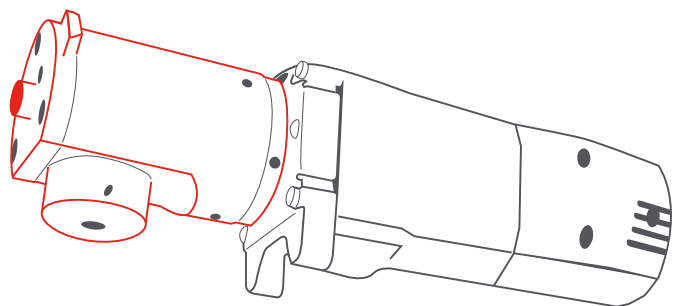


# TIG GRINDER MOBILE

## TUNGSTEN ELECTRODE GRINDER



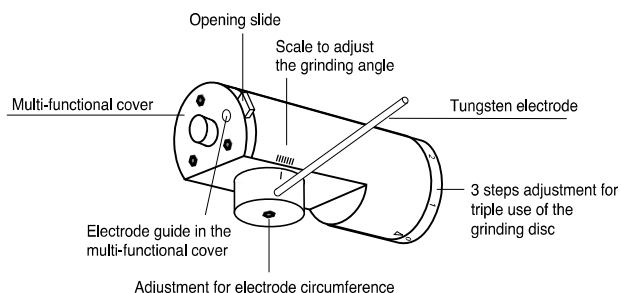
|                   |                         |
|-------------------|-------------------------|
| Power Consumption | 500 W                   |
| Voltage           | 220 - 240 V             |
| Amps              | 2,3 A                   |
| No Load Speed     | 27000 min <sup>-1</sup> |
| Sleeve-Ø          | 43 mm                   |
| Tension rod-Ø     | 6 mm                    |
| Grinding Wheel-Ø  | 50 mm                   |
| Weight            | 2075 g                  |

## SPECIAL SAFETY INSTRUCTIONS

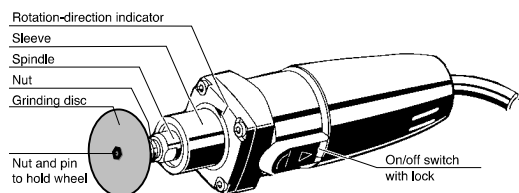
- Observe the safety guidelines in this manual!
- Sockets in open air should be equipped with a leak-power security switch. This is prescribed for your electrical tool. Please apply this when using our equipment.
- When using this machine always wear protective glasses and also gloves, closed and antislip shoes and an apron.
- Insert the plug into an electrical socket only if the machine is turned off.
- Remove the plug from the electrical socket before doing any work on the machine.
- Keep the flex away from the area where you are working. Run the flex away from the back of the machine.
- After disconnecting the spindle is still turning, lay down the tool only after complete standstill.
- Do not reach into the danger zone of machinery that is turned on.
- Only use tools with an rpm at least as high as the highest idle rpm of the machine.
- Inspect the grinding wheel before use. The wheel must be perfectly mounted in order to turn freely. Test the wheel for at least 30 seconds before use. Do not use wheels that are damaged, asymmetrical, or that vibrate.
- Grinding metals originate sparks. Please take care nobody gets hurt. Do to fire hazard no combustible materials should be in close range. Do not use fume extractors.
- Please hold the engine in such a way that sparks and grinding dust are blow away from your body.
- Tighten the tension nut before each use of the machine.
- Under extreme electromagnetic interference from outside, may occur temporary alternations in rotations.
- Keep always the vent-holes clean.

## BRIEF DESCRIPTION

### 1. Grinding Head :



### 2. Motor unit :



### 3. Power On/Off :

**Power on :** Push the on/off switch forward. Press the front of the switch to lock it in position.

**Power off:** Push the on/off switch back. The switch will automatically return in the 0 position.

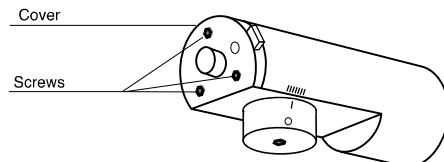
## BRIEF DESCRIPTION

### Electrical Connection :

Connect only to single-phase alternating current and only to the voltage stated on the specification label. The FRONIUS TIG GRINDER MOBILE is insulated according to DIN 57 740/ VDE 0740 (EEC 20) and can be connected to ungrounded electrical sockets. Radio interference complies with European Norm EN 55014.

### 4. Vacuum Removal of Dust :

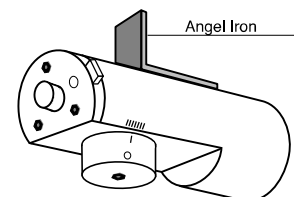
- Loosen and then completely remove the three hexagonal countersunk screws with a 4mm hexagonal key
- Remove the cover
- Use the supplied rotating socket and connect to the vacuum system.



We recommend this procedure as a safety measure to minimise contact with the tungsten dust that results from the grinding process.

### 5. Angle Iron :

- The angle iron must be mounted so that the machine - can be fastened in a vice - can be fastened by means of a screw clamp



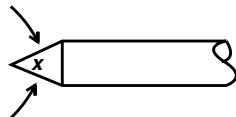
### 6. Optional Grinding Head :

- A second head (coloured red) is available for the FRONIUS TIG GRINDER MOBILE for electrodes with diameters of 1.0 / 4.0 / 4.8 / 6.0 millimetres.

## BRIEF DESCRIPTION

### 7. How to Use :

- Make adjustments for the angle of the point (in degrees) and the electrode diameter
  - Loosen the central screw on the head
  - Set the degree and the electrode diameter by turning the head
  - Tighten the central screw



The number of degrees equals the angle of the point on the sharpened electrode:

- Guide the tungsten electrode through the opening that coincides with its diameter;
- Turn on the TIG GRINDER MOBILE;
- Carefully press the tungsten electrode onto the revolving disc, while at the same time rotating it with light pressure;
- Continue to rotate the electrode as it is removed from the disc until there is no longer any contact;
- Inspect the results and, if necessary, repeat the process;
- The multi-functional cover with integrated opening slide makes it possible to surface grind electrodes that have welding deposits due to the welding process. In addition, ground electrodes can be optimised for aluminium welding by being given a truncate cone.
- 3 steps adjustment for triple use of the grinding disc by turning the grinding in position 1,2 or 3.

**Warning !** Do not sharpen bent or burnt electrodes. Remove any drops on the point of the electrode before it is sharpened. Use the electrode holder for short electrodes.

## CHANGING THE GRINDING WHEEL

Remove the plug from the electrical socket before doing any maintenance on this machine !

- Loosen the M 6 screws and remove them completely
- Remove head showing the angle adjustment
- Loosen the stud bolts on the sides
- Remove the house
- Loosen and unscrew the tension nut
- Change the wheel
- **Warning ! Ensure that the wheel is mounted correctly**
- Replace the washer
- Screw the nut back on and tighten it

## USEFUL TIPS

The best results will be obtained by applying light pressure to the electrode while at the same time rotating it on the disc. Remove the electrode before turning off the grinder.

Using too much pressure while grinding will damage the grinder and require more grinding discs; performance will suffer.

**Warning :** Always keep the air-intake vents clean.

**Accessories :** Only use FRONIUS accessories and spare parts.

**Spare parts :**

Grinding wheel

Order No.  
42,0411,0012

Please refer to the FRONIUS Product Catalogue for other replacement parts, or ask your dealer.

## SYMBOLS



Read the instructions before using this equipment.



Protect your eyes ! Wear safety goggles when using this equipment.



Removal of used equipment, this tool can be disposed, free of charge , at indicated local agencies.



This equipment has been tested according to EN 60745, 98/37/EG (28.12.09), 2006/42/EG (29.12.09), 2004/108/EG.

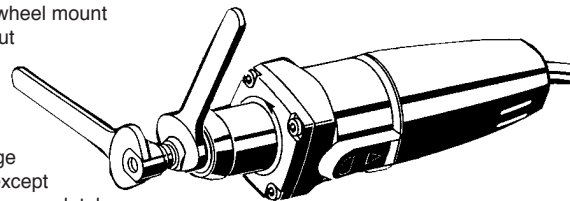


Safety class II, safety insulation

## CHANGING THE WHEEL MOUNT

Remove the plug from the electrical socket before doing any maintenance on this machine !

- Position spanner SW 13 on the spindle
- Position spanner SW 19 on the nut
- Loosen the nut
- Replace the wheel mount
- Tighten the nut



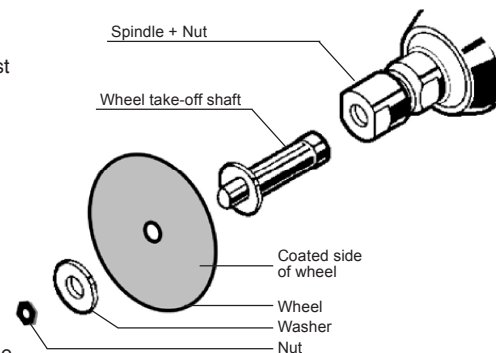
Follow the same procedure to change the spring collet, except that the nut must be completely unscrewed in order for the spring to be changed.

These procedures must be followed exactly as they are explained and illustrated.

Remove the plug from the electrical socket before doing any maintenance on this machine !

The tension rod must have the same diameter as the take-off shaft; otherwise the tension rod will be damaged.

Fit the take-off shaft into the tension rod.  
The take-off shaft must rest on the nut.



**Very important !!!**

Position spanner SW 13 on the spindle and tighten the nut with SW 19. Place the wheel on the take-off shaft. Ensure that it is properly mounted and not crooked. Put on the washer, screw on the nut and tighten with spanner SW 10.

## GENERAL SAFETY INSTRUCTIONS

**PAY ATTENTION.** Please observe these safety guidelines. Not following them can cause electrical shock, fire and/or heavy injuries. The following concept "electrical tool" concerns tools with electrical flex as also tools with build-in batteries.

**PLEASE GUARD THESE INSTRUCTIONS CAREFULLY;**

### 1. Working place.

- Keep it tidy and clean. Disorder and low light can occur accidents.
- Don't use the tool in a dangerous explosive environment, where flammable products, gases and dust are present. Electrical tools produce sparkles, that can ignite the dust or gases.
- Keep children and other persons away when using an electrical tool. With an unexpected deviation one can loose control on the tool.

### 2. Electrical safety.

- The plug and socket must be appropriate. Don't change the plug and don't use an adapter together with an earthed tool. Unchanged plug and socket decrease the risk of electrical shocks.
- avoid body contact with earthed surfaces, such as pipes, radiators, stoves and refrigerators. There is a high risk of electrical shock if your body is earthed..
- Protect the tool from rain and humidity. Water penetration can cause electrical shock.
- Don't use the flex as a handle to carry the tool, for hanging it on the wall or to pull out the plug from the socket. Keep the flex far from heat, oil, sharp edges or revolving parts of equipment. Damaged or twisted flexes increases the risk of electrical shocks.
- When working outside only use extension flexes that has been approved for outdoor use. Doing so one decreases the risk of electrical shock.

### 3. Safety of people.

- Be attentive, look what you are doing, and be ingenious when working with an electrical tool. Don't use the tool when you are tired or under the influence of drugs, alcohol or medicine. One short moment of inattention can lead to severe injuries.
- Always wear personal protection equipment, such as safety goggles, anti slip shoes, safety helmet or earmuffs, depending on the type of electrical tools in use. Doing so reduces the risks of injuries.
- Prevent the equipment from starting unexpectedly. Make sure that the switch is on "off" before plugging in. Never carry equipment that is connected with your finger on the power switch.

- Check before starting that the key and adjustment tools have been removed.
- Don't overestimate yourself. Make sure to have a secure posture and balance. Doing so, you are in better position to control the tool.
- Wear the correct clothing. Don't wear loose clothing or jewellery. Keep long hair, clothes and gloves away from revolving parts.
- If mounting fume- and or dust- extractors make sure that they are connected and used the right way. Doing so is avoiding dust-problems.

### 4. Carefully handling and use of electrical tools.

- Don't overload the tool. For every job use the appropriate electrical tool. Doing so you will obtain a better and safer result .
- Don't use an electrical tool with a defect switch. A tool with a defect switch can not be switched "off" or "on", is dangerous and must be repaired.
- Pull out the plug from the socket before you wish to change the adjustments, change some parts or putting away the tool. These measures prevent unexpected start of the tool.
- Keep unemployed electrical tools out of reach of children Don't leave this tool in hands of people not used to handle it or haven't read these instructions. Electrical tools are dangerous when used by inexperienced persons.
- Take care of your tool. Please control if every turning part can work freely and isn't blocked, or that some parts are broken or damaged. Let the tool be repaired before use. Many accidents are due to badly maintenance of electrical tools.
- Keep cutting tools clean and sharp. Doing so one gets a better grip and easier job done.
- Only use electrical tools, spares also, conform these instructions for this tool. Take also into consideration the environment and the job that has to be done. The use of electrical tools for inadequate jobs can lead to dangerous situations.

### 5. Service.

Have your tool serviced by qualified personal and repaired only with original spare parts. Than you will be sure that the safety of the tool is guaranteed.