ISOJET-6 CARBON BRUSH
Weld Cleaner
Extremely Fast Stainless Steel Weld Finishing

Thank you for choosing the Isojet-6 Carbon Brush weld cleaning and polishing machine. The machine can also be used to permanently mark Stainless Steel using the correct electrolyte and stencil. The fluctuating wave, dual electronics and unique brushes give a much faster cleaning speed.

Assembly

Normal cleaning - connect brush handle lead into the positive (+) panel socket on machine case. Set to A/C
Polishing - Connect brush handle lead into the positive (-) panel socket on machine case. Set to D/C

Attach Brush - Select brush for job and carefully screw onto handle
(Use a separate brush for cleaning and etching or damage may occur.)

Attach the earth clamp to the work piece - Clamp does not have to be right next to the area to be cleaned as long as there is a good electrical connection to that area.

Consult the MSDS before using the equipment.
Use in a well ventilated area.

How to use

Turn on Isojet-6 - Turn on the main ON/OFF switch, which is the rocker switch at the rear of the machine.

Pour a small amount of Weld Cleaning Solution (TIG-ECO for TIG welds or Isol-C for MIG welds) into the re-sealable plastic dipping container that will allow brush to be fully soaked. Ensure brush is completely dipped in solution when first soaked so all bristles particularly at the top are wet with solution. Ensure brush always remains saturated with solution.

Move the brush along the weld/HAZ in a constant motion and only in a gentle back and forth motion if weld profile requires. Do not splay the bristles. Vapour created from application is predominately water but as temperature increases vapours may be created which is irritating to eyes so ensure good ventilation.

TIG-ECO can be rinsed off with water. Neutralise Isol-C with dilute Mainclean on the work piece while the acid is still wet, then wash with water. Ensure no residue solution is left on the work piece. Do not dry solution in sunlight.

Cleaning solution will slowly degrade by re-dipping the brush as it contains contamination from metal and ions cleaned from the weld e.g. Iron, chromium, carbon and fibers from the brush so should be renewed regularly.

If the machine does not operate the thermal overload may have tripped (light on front panel) turn off main switch and unplug from supply then allow machine to cool off. If it trips again immediately when power is re-introduced consult your distributor.

Always dispose of used solution in accordance with local regulations.

Personnel operating this equipment should be thoroughly familiar with the machine operations. These operating instructions should be read thoroughly, understood and reviewed regularly to maintain safety standards

The unit must be isolated from the electrical supply when not in use.
Only use the machine in the condition in which it is supplied and for the purpose for which it is designed.

Guidance for safe use

- Please read the entire manual for best practice and to get the most out of the Isojet-6 Carbon Brush Weld Cleaner.

- Never use machine without silicon heat sleeve on the stainless steel connector that extends from handle as it will arc on work piece and damage the electronics

- Do not touch the brush when machine is connected to power supply. Do not touch the brush or unscrew brush immediately after use as it will be hot

- Never touch the work piece near the weld/polished area just after it has been polished as it will still be hot

- Do not block air flow from the cover at rear and front of the machine

- Do not wrap or tie brush bristles to reduce splaying of the bristles

Care of the Isojet-6 Carbon Brush machine

- Clean up your machine after each day's use. Rinse thoroughly in clean water all components that come into contact with weld cleaning solution.

- Ensure brush is unscrewed from stainless steel connector after use. After using the brush remove any iron and weld cleaning solution from the bristles by rinsing thoroughly with water. The brush can be soaked for a short time in a neutraliser.

- Ensure all leads are disconnected and stored carefully. Clean the clamp regularly to ensure best connection

- Ensure any unused weld cleaning solution in your dipping container is sealed and stored appropriately

- Make sure that the wand is not in contact with tools, materials, tables, etc. that it operates when unattended. This will cause an overload or short.

- Electromagnetic fields can interfere with pacemakers, please avoid operating the machine if this applies!

Use of the brushes

The brushes are specially designed for use with the Isojet-6 cleaner

- Do not tilt when screwing onto wand as cross threading may occur.
- Turn the thread smoothly and slowly – tighten by hand only.
- Check for oxidation and clean if necessary.
- If the machine has not been used for some time remove the brush and rinse thoroughly.
- Dragging the brush is preferred to pushing – this will give longer life from the brush.

The most effective use of the brush is when it's soaked in solution and the brush is moved gradually across the weld in a continuous motion.

Do not excessively splay bristles as this increases current and may trip the overload. Only the end of the brush is live and cleaning. The speed is reduced when brushes are laid on their sides.

The brush can be used down to 1 cm but note that it will hold less solution so speed will be reduced. If the brush has deteriorated unevenly consider trimming the bristles with very sharp scissors to reduce arcing of brush due to irregular connection with work piece.

The rate of deterioration is a function of heat and current carried by the brush. The heat and current fluctuate depending on the amount of solution used and heat created. The heat created is dependant on the gauge of stainless, weld profile and time spent cleaning the weld.