

EASYkleen

WELD CLEANERS



Commissioning & Operation Manual

EASYkleen TEC Brush

Warranty

Thank you for choosing an EASYkleen Weld Cleaner. We hope it becomes a value added product for your production and fabrication needs for many years to come.

This unit has a standard 2-year parts and labour warranty (excluding external leads which are warranted for 90 days).

We also offer 10-year internal part warranty which covers any internal electrical component should it fail up to 10 years after purchase.

Warranty void if:

- The machine model number has been removed or rendered illegible
- The case or hand piece has been opened or tampered with
- The machine has been used in a way other than is instructed within its operations manual
- Non-genuine weld cleaning solution has been used
- Non-genuine weld cleaning brushes have been used
- There is no silicone sleeve covering the machines stainless bare conductor at the end of the torch
- Any liquid has entered the machine case and is the cause of electrical failure
- The machine has been wet, submerged or exposed to an excessive amount of dry debris

For any warranty claim, EASYkleen requires the customer to send an email within 24 hours of the fault to sales@easykleen.com.au with a photo of the following attached:

- Current brush being used
- The solution bottle being used
- The torch handle end where the brush screws into
- The machine itself (front/back/top/sides) including the serial number plate

Please register your unit by visiting www.easykleen.com.au and fill out the form on the warranty page.

**For full terms and conditions,
please visit our websites warranty page.**

Technical Specifications

Electrical Specifications -

Input -	110 VAC or 240 VAC, 50-60Hz (check your serial plate)
Output -	20-60 amps DC
NLV -	12-14 VDC
Duty Cycle -	100%
Power Source -	Transformer

Case and Lead Specifications -

Case Material -	High impact structural polymer
Dimensions -	300mm x 260mm x 130mm
Weight -	5kgs
Leads -	8mm ² Rubber, 3m in length

Technical Specifications -

Type of welding -	Works on spot, TIG, MIG, and stick, but ideally used on spot and TIG
Process -	Electropolishing (direct current output)
Finish achieved -	Can match any finish from 2B, No.4 (scratch/brushed), right through to a mirror finish
Thickness -	Will work on any thickness of stainless steel from 0.55mm through to 6mm thick
Grade of stainless -	Will work on all chromium steels from 304, 316, through to Duplex grades

Safety Precautions



**PVC or Nitrile gloves
required to be worn**



**Face protection
can be worn**



**Protective clothing
must be worn**



**Eye protection must
be worn**



**Enclosed footwear to
be worn at all times**



**Respirator used in
confined spaces**

Front Panel Information



ON OFF Switch

Green Indicator

Cooling Fans

Side Panel Information



Dinese panel mount (red)
Clamp

Dinese panel mount (black)
Torch Handle



IEC Power Inlet

Etching/Marking Outputs

Primary Overload

1. Commissioning

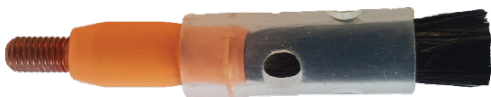
1.1 -

Attach the earth clamp and lead to the (red) dinse panel mount and attach the handle and lead to the (black) dinse panel mount. Finally, plug in the mains power cable via the IEC inlet.



1.2 -

Next is to choose your brush. Simply screw in the desired brush to the torch head.



Express Brush -

The Express brush is designed for cleaning spot welds and precision cleaning. Best used with a heat resistant bristle sleeve that reduces the splaying of bristles.



Rapid Brush -

Reduces bristle splay when used vertically and will focus cleaning power on the weld and HAZ. Use vertically /slight angle. Best used at 70 degrees to work piece.

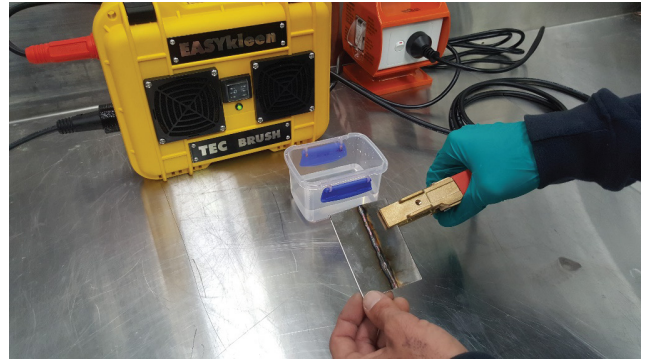


TIP-E Brush -

A longer rigid brush with a soft tip. The brush does not require a sleeve to focus the bristles. Used for accurate fine work.

1.3 -

Attach the clamp to the work piece you wish to clean. You can attach the clamp anywhere on the workpiece, as long as there's good connection.



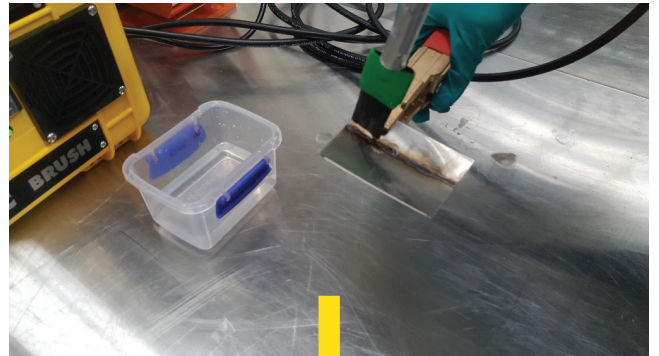
1.4 -

Dip the chosen brush into the weld cleaning solution. Wipe off any excess on the side of the container

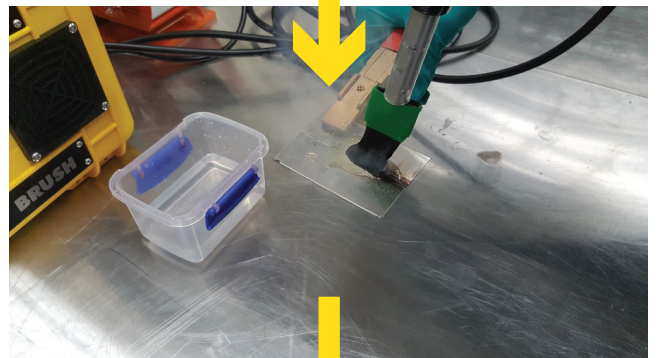


1.5 -

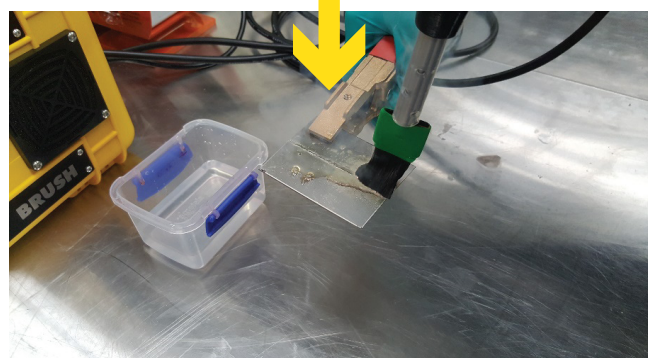
Apply the soaked brush to the weld to be cleaned/polished.



Use a smooth motion with minimal pressure for best results.



Re-dip the brush if more solution is required.

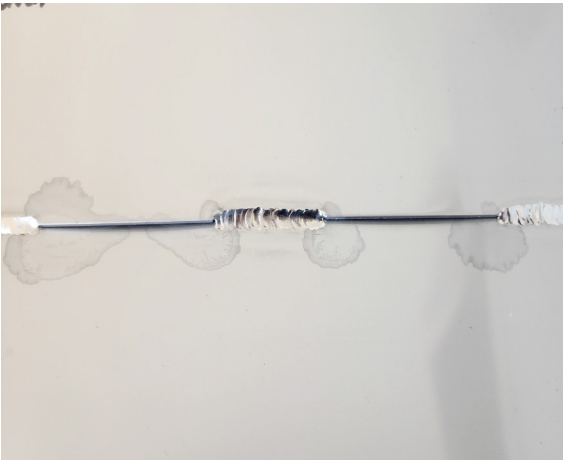


2. Clean Up & Neutralisation

After the weld has been cleaned, we need to clean up and remove the spent weld cleaning solution to prevent staining.

We want to completely remove the spent solution through water wash off and physically wiping down, coupled with the use of the neutraliser, which is particularly important when a part is not fully welded (stitched), or where there are gaps that the solution can get stuck in.

Some examples of staining are pictured below to show you what it looks like if sufficient clean-up is not completed -



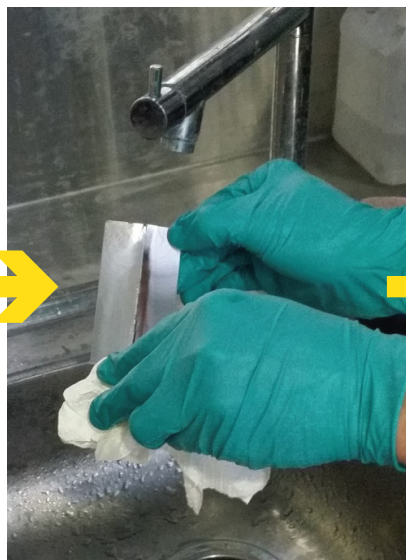
Residual weld cleaning solution leeching either side of lap welds due to insufficient clean up



Extreme example of staining due to the weld cleaning solution residue not being completely removed/neutralised

2.1 -

Use a combination of water (tap, hose, pressure washer) and/or paper towels to remove the bulk of the spent weld cleaning solution.



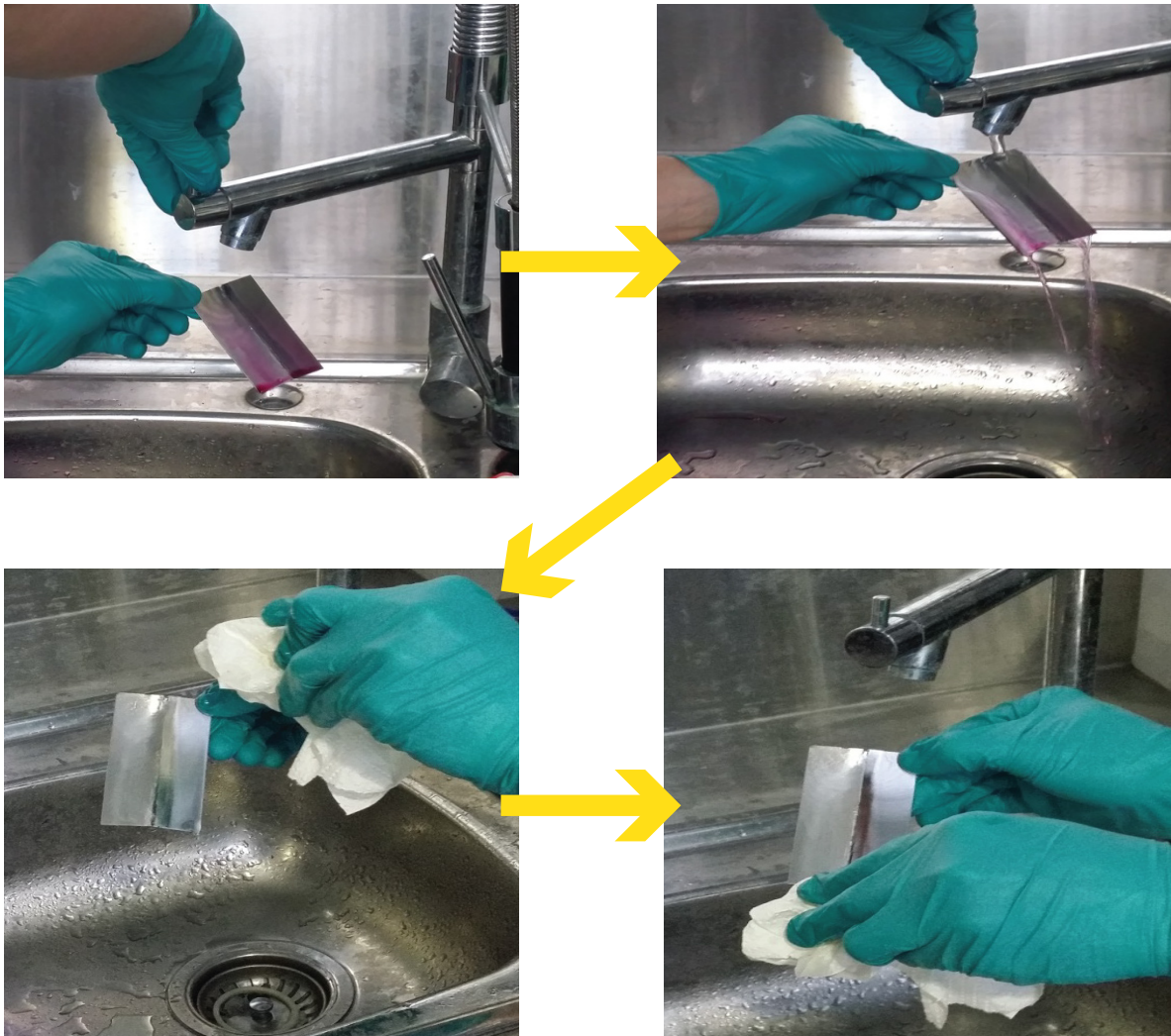
2.2 -

Spray the neutraliser to neutralise any remaining weld cleaning solution. It may bubble/fizz, but once the piece runs purple, that indicates that any weld cleaning solution left behind has been completely neutralised.



2.3 -

Finally, wash off the neutraliser either by a tap, hose or pressure cleaner then wipe dry or allow to air dry



3. Maintenance

These machines require little maintenance. When used correctly and the small amount of maintenance adhered to, these machines will have excellent service life.

3.1 -

Brush/Torch handle -

Unscrew brush after each days use and wash brush out with running water. Wipe/wash torch at thread end to remove any solution residue, pay particular attention to the internal thread where the brush screws in.



Copper phosphate (a blue coloured di-electric) produced from the brush not being washed down. This will corrode the brush lug and also the thread which can lead to intermittent connection (no power output).

3.2 -

Clamp -

Similar to the brush, the clamp will corrode and produce copper phosphate which can lead to intermittent connection. Make sure the clamp is washed down after each days use to ensure it provides good electrical connection. A wire brush can be used to periodically clean the clamp teeth also.



Copper phosphate (a blue coloured di-electric) produced from the clamp not being washed down. This will corrode the clamp teeth and cable lug which can lead to intermittent connection (no power output).

3.3 -

Depending on the environment which this unit is housed, other maintenance may be required such as periodically cleaning/vacuuming the fan covers and giving the case a wipe down to remove any build-up of debris.

4. Do's & Don'ts

Please follow these do's and don'ts, along with all other information provided within this manual to get the most out of your EASYkleen unit.

4.1 -

Do -

- Read and adhere to manual
- Use only genuine solution and brush consumables for the best results and to keep the warranty intact
- Make sure conductor sleeve is always covering the stainless steel conductor above where the brush screws in. Replace if required
- Follow the maintenance advice
- Follow the correct clean up procedure to avoid the chance of any staining
- Wear correct PPE at all times when using this machine

4.2 -

Don'ts -

- Touch the brush when machine is connected to power supply.
- Touch or unscrew the brush immediately after use as it will be hot
- Touch the work piece near the weld/polished area just after it has been polished as it will still be hot.
- Use handle parallel or overhead, as solution may run back down handle. We offer a flexible extender for these situations.
- Wrap or tie brush bristles to stop splaying of the bristles
- Use any consumables other than supplied by EASYkleen Pty Ltd
- Use the machine in any other way than outlined in this manual

5. Troubleshooting

We occasionally have to speak with end users regarding issues that arise. The vast majority of issues relate to connection, or lack thereof. Just like you, we want your machine up and running with the least possible hassle. So if any issues do arise, please refer to the below first -

5.1 -

The first thing to find out is –

When the unit is switched to on, does the green light next to the ON OFF switch illuminate, and can you hear/feel the fans running?

If the light illuminates and the fans are running, but you are getting no “cleaning power at the brush”, there is a very good chance that there is an external connection issue somewhere.

These connection issues will most likely be at either the brush or the clamp.

5.2 -

Things to try/test –

Unscrew brush and check the thread (clean if need to). Screw back in and try again.

Have a look at the clamp teeth and cable lug. Is there a blue build up (copper phosphate)? This will inhibit connection. Wire brush the teeth, wash with water and try again. Also check where the cable lug attaches.

Are the dinse connectors secured correctly? Also check for and corrosion/debris.

5.3 -

Incorrect polarity -

The other issue that may arise (usually first time users) is the user gets a black stain on their work piece. This is usually because the clamp and handle are around the wrong way (reverse polarity). The red tagged lead (clamp) must go into the red tagged dinse panel mount and obviously the brush lead into the other.

Manufactured By

EASYkleen
WELD CLEANERS

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