READ THIS BEFORE USING:

REFER TO MSDS FOR FULL SAFETY PROCEDURES

SAFETY GUIDELINES

RETROPOL RAPID-CLEAN BRUSH uses an acidic ELECTROLYTE which contains a combination of phosphoric & citric acids in dilutions which are generally considered not to be dangerous, but may be hazardous.

EYE PROTECTION MUST BE USED AT ALL TIMES whilst using this product as the cornea may be permanently damaged if this product splashes into the eye. WASH EYES IMMEDIATELY UNDER RUNNING WATER IF EYE CONTACT OCCURS AND SEEK MEDICAL TREATMENT.

Short term skin contact is generally safe as long as it is thoroughly washed off skin immediately. Some people may however experience redness of skin upon contact – if this happens, immediately wash affected area with water, removing contaminated clothing if required.

The electrolyte is an excellent conductor of electricity. For this reason, it is strongly advised to prevent spillage onto your body or work area. If spillage occurs, immediately desist using product until spill has been cleaned. Refer to MSDS for spillage clean-up procedure.

<u>ELECTRICITY CAN KILL! RISK OF ELECTRIC SHOCK!</u> – NEVER ALLOW ANY PART OF YOUR BODY TO COME INTO CONTACT WITH THE ELECTRIC CIRCUIT.

THIS PRODUCT IS **NOT TO BE CONSUMED** – IN CASE OF INGESTION REFER TO FIRST AID POISONING ADVICE CONTAINED IN MATERIAL SAFETY DATA SHEET. NOT TO BE USED IN ANY MANNER OTHER THAN THAT FOR WHICH IT WAS INTENDED.

DISCLAIMER:

WHEN USING WELDERS WITH ADVANCED FUNCTIONS, HIGH FREQUENCY START, ARC FORCE, HOT START AND RAMPING MUST BE DISABLED. A CONSTANT UNCHANGING CURRENT IS A NECESSITY FOR THIS SYSTEM OF WELD CLEANING. DO NOT ATTEMPT TO USE A MACHINE WITH ANY OF THESE FUNCTIONS IF THEY CAN NOT BE DISABLED – RETROPOL ELECTROPOLISHING SYSTEMS WILL NOT BE LIABLE FOR ANY DAMAGE WHATSOEVER, AS A RESULT OF USING ANY OF OUR PRODUCTS. CHECK WITH YOUR WELDING MACHINE MANUFACTURER AS TO ITS SUITABILITY FOR USE WITH THIS SYSTEM.

OPERATING INSTRUCTIONS:

Please familiarise yourself with these instructions fully before use – it's not a difficult process, but there are a few tips that will allow you to make the most of the system & give you the best overall results.

- ENSURE TIG WELDER AMPERAGE IS AT MINIMUM SETTING and that welder is set for DC ELECTRODE NEGATIVE (same as for welding stainless steel)
- 2. Carefully pour approx 25 50ml of electrolyte into a suitable plastic container (a small clear HDPE plastic cup is useful). Use small amounts until you become more familiar with system, to prevent wastage.
- Insert carbon fibre brush (copper end) into the threaded hole on one end of the adapter, then insert other end of adapter (thin rod) into TIG TORCH as you would a tungsten electrode & secure by tightening backing cap of tig torch.
- 4. Securely connect earth clamp from welder to workpiece.
- 5. Increase TIG WELDER current setting to 5 15 AMPS.
- 6. DIP the end of the carbon fibre brush into electrolyte cup, ensuring bristles are well saturated. You are now ready for weld cleaning.
- 7. Gently apply the tip of the brush to the workpiece & slowly progress across the treatment area. Don't stop moving. Heat will be generated by this process & electrolyte will evaporate off in the steam. Continually add more electrolyte as needed by re-dipping brush into electrolyte. This also aids in cooling the brush, which aids in a longer life for the brush. Electro-polishing is 'wet work' a dry brush will spark lots and clean very little.
- 8. Adjust welder current setting as required thicker work pieces require higher current, with 20 30 Amps being the upper limit. Above this setting, brush life will be dramatically reduced. Continue until desired finish is achieved.
- 9. With a clean damp soft cotton cloth, wipe over workpiece to remove remaining excess of electrolyte, being cautious not to directly touch any hot surfaces. Thoroughly rinse cloth in clean water and wipe over workpiece again to remove final traces of electrolyte. If possible, rinsing of workpiece under running water and drying with a clean soft cotton cloth will give optimum results.

RETROPOL'S RAPID-CLEAN BRUSH ADAPTER IS GUARANTEED FOR LIFE. If for any reason it fails to successfully conduct, return it to place of purchase & we will repair or replace it for free.