

## **FAQ – Frequently Asked Questions: Retropol Electropolishing Systems**

### **Where can I order Retropol from ?**

You can order Retropol directly from us. Email is the easiest way, just let us know what you want to order, and where you would like it delivered to. Alternatively, check our website front page to see if we have a re-seller near you.

### **How long does a brush last ?**

My answer to that is 'how long is a piece of string ?'

Seriously though, it depends on how you use your brush. If used according to the Operating Instructions, you should get a very good service life out of your brushes. In my last stainless steel manufacturing job, we cleaned over 700 stainless steel legs, each having 200mm of weld, and we did it with only 3 brushes. That's over 460 metres of weld per brush! Keep the brush cool by frequent dipping into the electrolyte and you will find your brush lasts longer and the job becomes easier.

### **Do I need to use the Neutralizer?**

Well yes you do need to use the neutralizer if you want optimum results. Any electrolyte remaining on the surface of the metal being treated, will turn the surface hazy-white over time. It may take anywhere from a few days to a few weeks, but it will happen. The electrolyte is sticky, and rinsing the job under water after weld cleaning will not remove all of the electrolyte. The neutralizer helps here in two ways: Firstly, the neutralizer neutralizes any remaining acidic electrolyte, preventing the electrolyte from acting further upon the treated surface. Secondly, the neutralizer contains special ingredients which help 'lift' the remaining electrolyte from the surface of the treated area, making the final rinsing much simpler.

### **How do I use the Neutralizer ?**

I have found the easiest way to ensure good results is to follow the 'Two Cloth' method. This method involves using two damp giant super-wipes (typical kitchen cloths, eg Chux), preferably of different colours. I use the pink and green ones. The pink cloth is used only for wiping up the excess electrolyte from the job after weld cleaning. After doing this, I spray the neutralizer onto the treated area to neutralise any remaining electrolyte (you can see the chemical reaction as the combination of neutralizer and electrolyte creates thousands of tiny bubbles). When the bubbling ceases, all the remaining electrolyte has been neutralized. Then I use my green cloth to wipe up the neutraliser that has been sprayed onto the job. After this, a good rinse under a hose, or fast flowing tap, gets rid of any remaining neutralizer and the job is done.

### **Will my tig welder be suitable for use with Retropol ?**

Good question. If your welder is capable of scratch or lift start DC tig welding, and has a suitable welding circuit voltage, then yes, it will almost certainly be suitable for use with Retropol. There are a few welders I have come across which are not suitable though. These machines typically have in-built special functions which prevent them from being suitable for use with Retropol. Arc Force, High Frequency Start, Ramping and Pulse are some of those functions. If your welder has those functions and they can not be disabled, then unfortunately that machine is not suitable for use with Retropol. Please read the disclaimer in the Operating Instructions, available from the Technical Info page of our website, for more information.

By 'suitable welding circuit voltage' in the above paragraph, I am referring to the voltage rating data which should be given on each welding machine. Retropol works best with lower circuit voltages, as lower circuit voltages spark much less. Less sparking means longer brush life. Tig welding machines come with a wide range of weld circuit voltages, it could be anything from as low as 9 volts to in excess of 70 volts. As a general rule only, I would say that under 25 volts is very suitable, from 25 to 35 volts may be suitable, and over 35 volts may not be very suitable for use with the Retropol system. The reason I say that as a general rule only, is because there are so many different types of tig welders out there, with wildly differing characteristics, that it is impossible for me to say for certain whether that particular machine will be suitable for using the Retropol system.

If you want me to recommend a tig welder to you, then for sure, I can do that – I recommend the Fronius Transpocket range of machines. Fronius manufacture the best welding machines that I have ever used in my near 30 years of metal working life, and that extends to Mig welding machines as well. In my opinion, Fronius sets the standard everyone else tries to follow.