

How to double the service life of your Mixer T on an Elcometer Abrasive Blast Machine

From major components to the smallest details, every aspect of an Elcometer Abrasive Blast Machine, is manufactured to industry leading specifications, and uses high quality components.

This focus on performance and durability extends from the air intake, all the way through to the Mixer T, where the high pressure air mixes with the abrasive media.

Many Mixer T's on the market are essentially a flange, and T-piece, welded together. Often, they are misaligned when welded, and if a Mixer T is misaligned even slightly, this disrupts the flow of air, and can change the angle at which the high pressure air and abrasive media exit the T. This means you could quickly wear through your Mixer T, hex nipple, pot coupling, or even hose coupling.

An Elcometer Mixer T is different. As it is precision machined from a single block of hard wearing tool steel, this ensures it is perfectly square, precisely aligning with the bottom of the abrasive media valve, and the hex nipples at either side.

This ensures the air and abrasive flows efficiently into the blast hose.

And, since it is made from ultra-hard wearing machined tool steel, an Elcometer Mixer T lasts longer than traditional steel versions. What's more, when it starts to wear out, you can simply rotate it by 180° to double the service life.

So, how do you do it?

Please note, before we get started, while this video is intended as a guide: before carrying out any replacement or maintenance of any part of the Abrasive Blast Machine, or any item within the Abrasive Blast System, please read and understand Section 1 of the Elcometer Abrasive Blast Machine Instruction Manual, which is free to view and download from the Elcometer website.

First, depressurise the abrasive blast machine, bleed all air supply lines to the machine, and disconnect it from the compressor.

If an Elcometer Shut Off Valve is fitted, then close it to prevent any further abrasive falling down into the Mixer T. If a Shut Off Valve is not fitted, ensure the blast machine is less than half full, removing abrasive if necessary, and then carefully tip the abrasive blast machine on its back, making sure no abrasive media flows through the exhaust port.

Now, using a spanner or wrench, undo the swivel nut that connects the pusher line to the Mixer T.

From here, you can remove the Mixer T from the blast machine in one of two ways.

One method, once the pusher line has been disconnected, is to use a spanner or wrench to undo the hex nipples at either side of the Mixer T, with the blast machine securing the Mixer T in place as you remove them.

Then loosen, remove, and carefully store the four flange bolts that connect the Mixer T to the abrasive media valve. This allows you to rotate the Mixer T 180°.

Alternatively, you could remove the four flange bolts first, remove the Mixer T from under the blast machine, and then unscrew the hex nipples. While this method will give you more room when unscrewing the hex nipples, without the blast machine holding the Mixer T securely, you may need a vice to do it this way.

Once the Mixer T has been rotated 180°, refit and fully tighten the hex nipples, and four flange bolts, in whichever order you prefer; applying any additional PTFE tape to the hex nipples where necessary.

Finally, reposition the pusher line, and fully re-tighten the swivel nut that connects it to the Mixer T.

And just like that, your Mixer T service life has been doubled.

For more information on the Elcometer Blast Machines, Valves, ancillary equipment, Personal Protection Equipment, and our complete range of spare and replacement parts - please follow the link to our YouTube Channel or visit our website.