

Replacing the hot nozzle tip

Hot nozzle tips are exposed to mechanical wear and chemical corrosion, and sometimes also to mechanical damage caused by errors in use and handling.

Most hot nozzles are fitted with screw-in tips. On such nozzles the tip can be replaced using the procedure described below. Only some special nozzles are fitted with different tips, e.g. soldered tips, for which the replacement procedure differs. If you send us the serial number of the hot nozzle, we will inform you about the type of tip.



► Protective equipment and tools required for tip replacement



- safety goggles
 - gloves
 - cordless screwdriver
 - marker
 - flashlight
 - combination pliers
 - stainless steel wire brushes (flat and round)
 - torque wrench
 - adapter for torque wrench
 - socket wrench * for the hot nozzle tip
 - replacement tip *
- * table on the next page

► Socket wrench

The socket wrench must be clean and free of damage.

Tip with three flow channels

The socket wrench must fit well onto the ridges of the tip. It must cover the flow channels of the tip, thereby ensuring that the tightening torque is transferred to the area of the tip below the flow channels. A poor fit of the wrench on the tip causes deformation or breakage of the tip.

Tip with six flow channels

The socket wrench must fit well over its entire height over all bearing surfaces of the tip.



► Clamping of the hot nozzle

Clamping the hot nozzle in the vice must prevent any twisting of the material tube in the nozzle body. The flexible section of the nozzle body must be pressed onto the material tube.

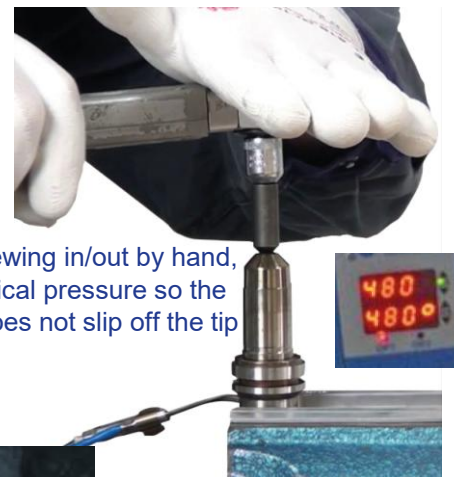
Any twisting of the material tube would destroy the hot nozzle!



material tube of the nozzle

► Removing the old tip

- First heat and clean the nozzle, i.e. remove material from the material tube and the tip.
- Thoroughly clean the annular gap between the material tube and the tip.
- Once the nozzle has cooled, spray the annular gap with a lubricant spray (e.g. Multi Gliss).
- After the lubricant takes effect, heat the nozzle to 480°C, fit the wrench onto the tip and unscrew it immediately.



when screwing in/out by hand, apply vertical pressure so the wrench does not slip off the tip

Important:

Socket wrench must be cold to draw heat from the hot tip and ease removal.

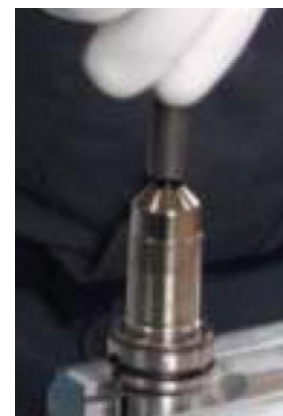
When loosening/tightening, apply vertical pressure so the wrench does not slip off the tip.



pull the hot, unscrewed tip out with pliers

► Mounting the new tip

- Clean the thread and seating surface for the new tip in the material tube. Screwing in and seating the new tip must be possible without catching, with minimal torque (by hand). It is advisable to check the seating of the tip with a marking-blue impression.
- Heat the nozzle to 480°C, insert the new tip and screw it in immediately, evenly and not too slowly, at the specified torque.



Basic information* for cleaning and changing screw-in tips

* Due to possible technical changes or special designs, we recommend that you send us the serial number of the nozzle before changing the tips, so that we can verify the validity of the data given for your specific hot nozzle.

tip size	Thread	tip Ø internal	tip Ø external	tip Ø fit
3	M3,5 x 0,35	1,6 mm	3,6 mm	3,0 mm
4	M4,7 x 0,50	2,2 mm	4,8 mm	4,0 mm
5	M6 x 0,75	3,0 mm	6,1 mm	5,0 mm
6	M7 x 0,75	4,0 mm	7,5 mm	6,1 mm
8	M10 x 0,75	5,5 mm	10,2 mm	9,0 mm
10/12	M14 x 1,00	7,0 mm	14,2 mm	12,2 mm

tip size	Tip code and tip tightening torque						code for socket wrench
	standard tip		wear-resistant to S65		wear-resistant to S75		
3	118.085	1,5 Nm	-	-	-	-	817.691
4	118.651	5,0 Nm	118.582	3,6 Nm	118.663	3,6 Nm	817.693
5	118.645	9,0 Nm	118.583	6,5 Nm	118.664	6,5 Nm	817.695
6	118.650	12,0 Nm	118.584	8,5 Nm	118.665	8,5 Nm	817.697
8	-	-	118.841	28,0 Nm	118.837	28,0 Nm	SW9
10/12	-	-	118.777	45.0 Nm	118.697	45.0 Nm	SW14

Do you need more information? Contact us!