

01

How to Protect **Fastening Clamps** for Welding Tools

Welding environments are very aggressive. Particularly in arc welding, sparks adhere to any elements of the tool, which become damaged in the end. To prevent any of these damages, any pneumatic clamp installed on a welding tool must be protected. Below we explain how to protect fastening clamps for welding tools and how to perform maintenance.

With a thorough and frequent maintenance, standard clamps installed on welding tools can work properly for years. However, while possible, it is not recommended to use standard clamps in environments with dust, dirt or welding sparks.

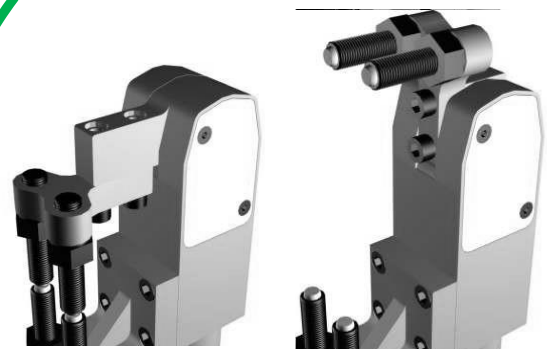
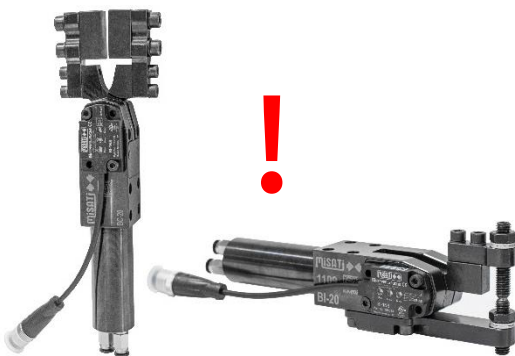
When the work environment of clamps is particularly aggressive, we recommend protecting them in three ways: with 1) the appropriate type of clamp, 2) a non-stick surface coating and 3) a rear protection.



1. L-Arm Clamps

In arc welding applications, totally protected clamps must be used so that any sparks cannot go inside. If they penetrate into the internal mechanism of the clamp, these sparks will affect the proper functioning of the clamp, which may even get blocked.

- The mechanism from type "I" and type "C" clamps is exposed to the outside.
- On the other hand, type "L" clamps are **completely airtight** in both clamping and rest positions.



2. Non-stick Surface Coating

If the clamps of a welding tool are coated with a non-stick surface treatment, welding sparks will not adhere.

Misati offers an anti-spatter treatment consisting of a fluoropolymer (Teflon). It is only necessary to add the code EE-Ø4 to the reference of the requested clamp.

This treatment has, moreover, other advantages: resistance to oxidation, to high temperatures and to chemical solvents, as well as a low friction coefficient.



3. Rear Protection (ref. PTA-...)

In order for BLN-... clamps to be totally airtight, the back of the clamp must also be protected. The solution is to add an accessory to the clamp: the rear protection ref. PTA-...



Preventive maintenance

Just like with other elements of the tool, to ensure the correct functioning and a long working life of clamps, a preventive maintenance should always be performed. The more aggressive the work environment of a clamp is, the more frequent its maintenance should be.

Maintenance instructions for clamps are available at www.misati.com.

