

Ease of maintenance of CTS S.p.A. cylinders

CTS S.p.A. Type 4 cylinders are made of a non-structural plastic liner wrapped in a structural composite layer made of resin-impregnated carbon fibre. The cylinders are then protected with caps and sleeves, according to the desired characteristics of the finished product and its intended use.

CTS S.p.A. cylinders have also another feature that makes them unique in their class: the replaceable nozzle into which the valve is screwed.

Furthermore, the layered design of CTS S.p.A. cylinders makes them particularly easy to inspect and maintain.

The sleeves and caps that cover the composite layer have remarkable resistance to impacts, hot and cold thermal cycles, corrosive agents and flame exposure. Their mechanical properties are, of course, incomparable to the properties of the composite material layer, but they are a clear indicator for assessing any damage of the cylinder such as corrosion, scratches or burns that may have degraded the cylinder coatings without affecting the composite layer and, therefore, the safety of the product.

The damaged sleeves and caps can easily be replaced with few simple steps. A label, matching the visible one, is also applied and bonded directly to the composite layer to allow unambiguous identification of the cylinder and its data even after the removal of the coating. This allows the replacement of the cylinder coating without removing the cylinder from its service.

The replaceable internal nozzle allows a better internal inspection, since it can be unscrewed in order to make, for example, an endoscope evaluation. After careful technical assessment, if the component is damaged, it can be replaced again without removing the cylinder from its service, which, however, is unavoidable for other cylinders on the market, in case of damage to the valve thread, as it is made as a unique piece with the cylinder body and, therefore, not replaceable.

Instructions for the replacement of the internal nozzle and of the surface coatings (sleeves and caps) may be requested from CTS S.p.A. at any time by writing to info@ctscyl.com.

CTS S.p.A. would like to stress that any inspection, assessment and/or maintenance of the cylinders, although extremely straightforward, must always be carried out by experienced, trained and authorized personnel.