

## How to repair small surface defects of the piston rod surface

1. The rod surface must be checked carefully in order to identify rough spots or small spikes or ridges. The rings seen in the photographs that we have received seem smoother than the rest of the rod surface, and therefore they should not bring any problem.
2. a non exhaustive list of the causes of the roughness is the following:
  - a. rust
  - b. scratches
  - c. bumps happened during delivery (only for long rods)
  - d. welding spatter attached to the rod due to welding occurred near the piston on site
  - e. spray of grinding due to grinding that took place near the rod on site.
  - f. Sandpaper with too coarse sand paper. For example in case of more pieces piston assembly.
3. to identify the defective areas, clean the rod surface carefully from oil and any kind of dirt with a clean cloth and then inspect by hand the roughness and the presence of bumps or ridges. Mark any defect found with a marker. The simple visual analysis is not sufficient either for the tricky situation of inspecting a round rod in the shaft and for the uniformity of colour of the surface of the piston rod. For the visual analysis of the rod in the shaft a small mirror can be of great help.
4. smooth thoroughly all the flaws with fine sandpaper **FEPA** P320 -P400 (Fédération Européenne des Fabricants de Produits Abrasifs).

Recheck the rod surface to make sure that everything is fine.