

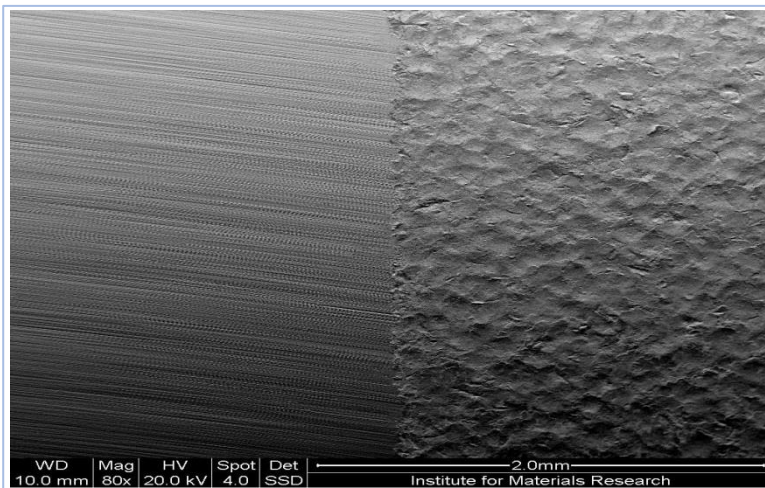


## SURCO /// SURFACE COATING FOR RUBBER + TPE MOLDS

SURCO is the trade name for a surface treatment technique developed by Surtechno. It combines textures for optical reasons with an improvement of the vulcanization or plastic injection process of rubber and rubberlike plastics.

The roughness of the structures can range from Ra 1 to 7  $\mu\text{m}$  while the gloss level can be adjusted according to customer requirements. Due to the positive effect of the surface treatment on material flow and demolding properties, SURCO techniques are used for optical as well as for pure functional reasons.

### MOLD STEEL /// ENLARGEMENT 80x



Before SURCO treatment



After SURCO treatment



*Densified micro cracks = less contamination*

## PROPERTIES AND BENEFITS

- Proved and released in automotive applications for years
- Gloss level can be influenced (matt, satin...)
- 10% increase of surface hardness
  - Increase of corrosion resistance
  - Extended mold lifetime
  - Improved resistance to thermal and mechanical wear
- Less contamination by eliminating micro cracks and undercuts
- Easy to clean in combination with a laser- or dry ice systems
- Decrease of friction between material and steel
  - Less sticking, better product release
  - Improved material flow
  - Lower cycle times





## SURCO /// FROM SAMPLE PARTS TO MASS PRODUCTION

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The SURCO surface treatment is customizable regarding gloss level, structure and even color tonality. Depending on the compound, the injection point and the customers' tolerance range a SURCO treatment can last up to 100.000 injection cycles. In order to ensure a constant quality of the finished part in mass production it is very important that the mold is cleaned regularly (e.g. once a month with a laser- or dry ice system).

The process to maturity phase:

1. Send us 5 kg of your injection material
2. On a sample mold we can develop 5 different SURCO types with your compound – **for free!**
3. Once the SURCO type is selected you can send us your molds / inserts or we visit your company with the SURCO truck for an “in-house” treatment (is recommended when you have several molds for the SURCO treatment at the same time)

## REFERENCE PROJECTS

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