

Signature Coating TapCT

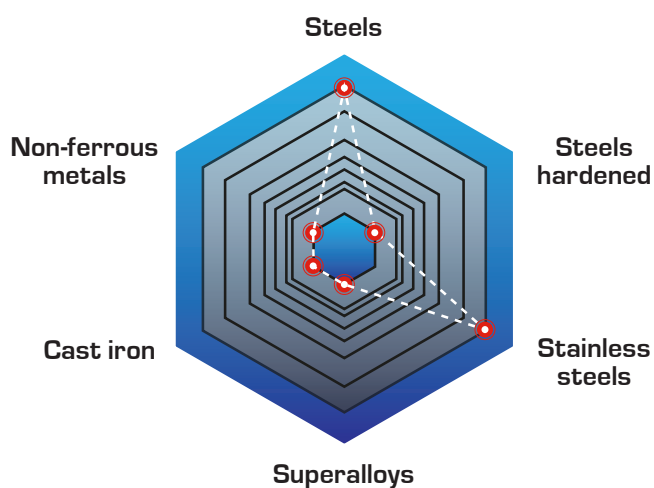
SCIL[®] coating for tap forming

TapCT is characterised by a very smooth surface thanks to the SPUTTER process SCIL[®] (SPUTTERED Coating Induced by Lateral Glow Discharge). Thus, during tap forming, the friction between the tool and the workpiece material and the sticking of the material will be reduced, and the process reliability increased. Furthermore, the excellent coating adhesion will increase the performance.

Highlights:

- High process reliability
- Lower machining torque
- High quality of the formed tap

Charakteristics in forming:

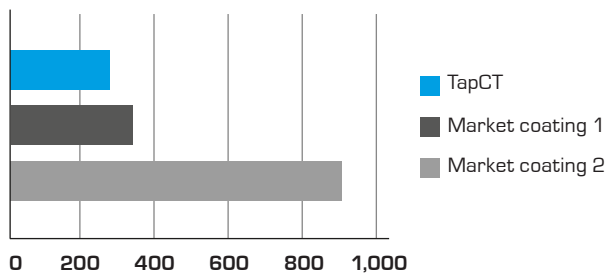


Specifications

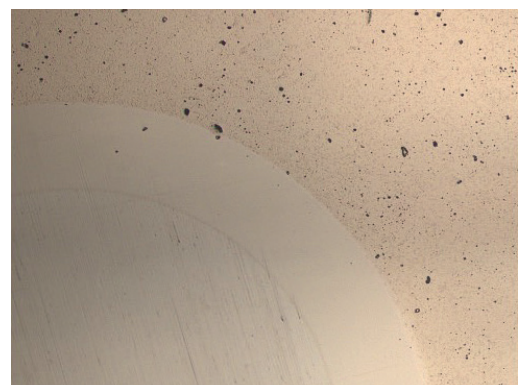
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|---|--------------------------|
| Color | silver |
| Nano-hardness [GPa] | 28–30 |
| Coefficient of friction [μ] PoD (at RT, 50% humidity) | 0.4 |
| Coating thickness [μm] | 1–5 |
| Max. service temperature [°C] | 700 |
| Coating temperature [°C] | 400–450 |
| 411 PLUS SCIL | (LGD, -, -, CrTi50 SCIL) |

Tap forming in a carbon steel:

Torque after 2,000 holes [Ncm]



Tool: HSS forming tap M6x1
 Workpiece material: carbon steel
 Coolant: emulsion
 vc = 20 mm/min; depth of the hole 9.0 mm
 Source: Asia tool manufacturer



TapCT