

Signature Coating TapCT

SCIL® coating for tap forming

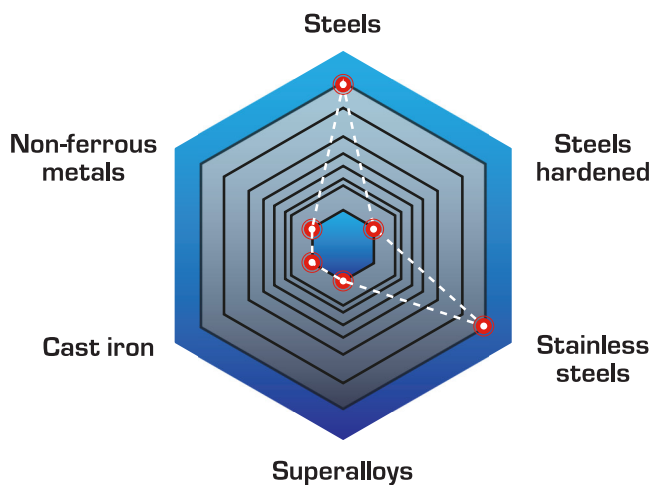


TapCT is characterized by a very smooth surface thanks to the SPUTTER process SCIL® (SPUTTERED Coating Induced by Lateral Glow Discharge). Thus, during tap forming, the friction between the tool and the workpiece material and the sticking of the material will be reduced, and the process reliability increased.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

Highlights:

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

Characteristics in forming:

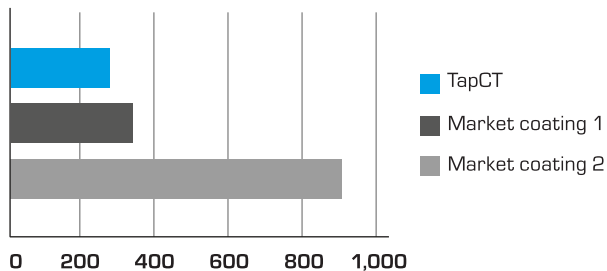


Specifications

Color	Silver / Grey
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 G3 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 9.0mm
 Source: Asia tool manufacturer



Calo: TapCT