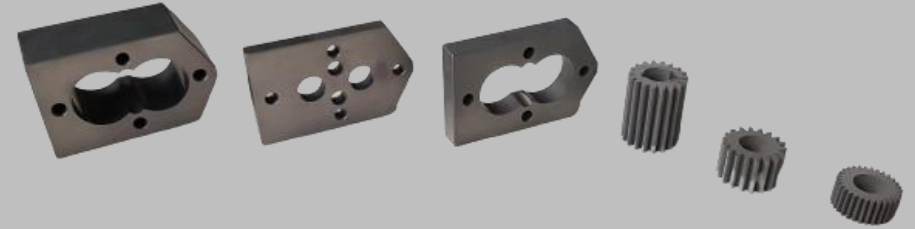
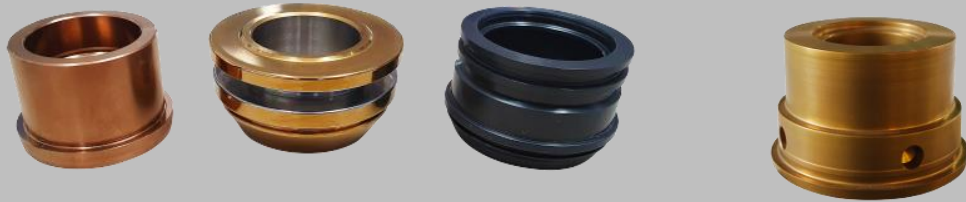


Beschichtungsportfolio Surovon GmbH

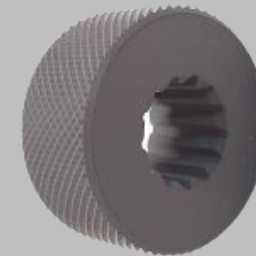
CVD-Beschichtung auf Stahlwerkzeugen
Schichtdicke zwischen 5-8 μm



Pumpenteile aus 1.4112
Beschichtung TiC



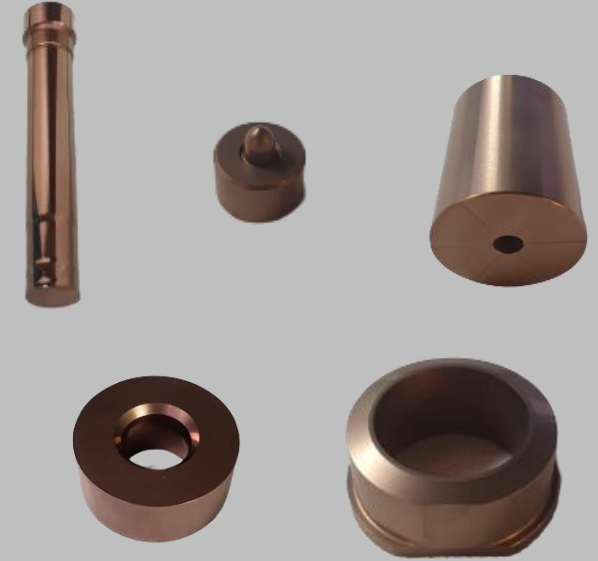
Verschliessrollen/ köpfe aus: Stellite, 1.2379, 1.4528
Beschichtung CVD-TiN, TiC, TiCN, Al₂O₃



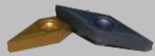
Spannrad aus 1.3343
Beschichtung TiC

Beschichtungsportfolio Surovon GmbH

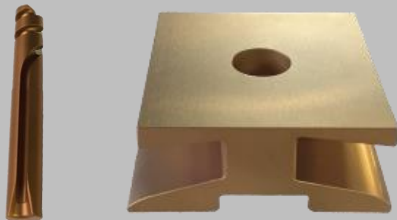
Wir bieten Hartmetallbeschichtungen in 5 verschiedenen Varianten an, je nach Kundenwunsch können wir unsere Beschichtungsparameter flexibel anpassen



Hartmetallwerkzeuge
CVD-TiCN beschichtet
Schichtdicke 3-5 μm



Hartmetall Wendeschneidplatten
CVD-TiN oder CVD-Al₂O₃ beschichtet
Schichtdicke 2-3 μm oder 6-8 μm



Hartmetallwerkzeuge
CVD-TiN beschichtet
Schichtdicke 6-8 μm

Hartmetallstempel
CVD- Al₂O₃ beschichtet
Schichtdicke 8-10 μm



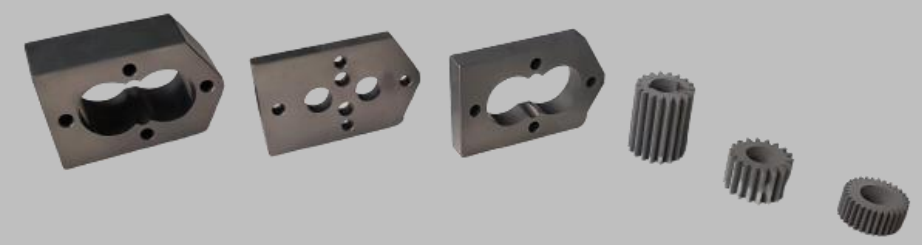


Beschichtungsportfolio Surovon GmbH

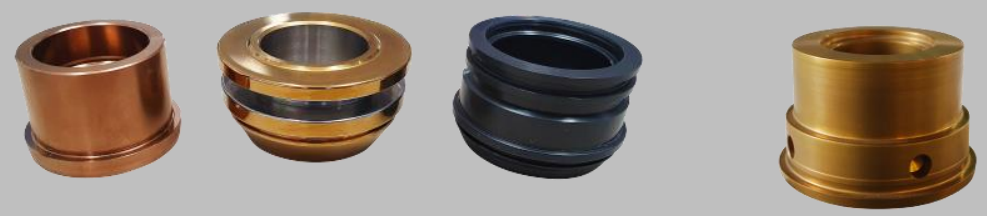
	CVD-TiN	CVD-TiC	CVD-TiCN	CVD-Al2O3
Reibungskoeffizient gegen Stahl	0.6	0.15	0.4	0.25
Härte HV	Ca. 2200 ±300	3500 ±300	2600 ±300	3000 ±300
Schichtdicke auf HM (mm)	2-3 oder 6-8	3-5	3-5	6-10
Schichtdicke auf Stahl (ym)	5-8	5-8	5-8	5-8
Farbe	Goldgelb	Metallisch grau	Braun/violett	Dunkelgrau/schwarz
Anwendungsbereich	Stanzen, Umformen, Zerspanen	Ziehen, Stanzen, Pressen, Umformen	Stanzen, Führen, Umformen, Zerspanen	Stanzen, Führen, Umformen, Zerspanen
Weitere Eigenschaften	Gute elektrische Eigenschaften, spez. El. Widerstand =25ym Ohm/cm	Gute Gleiteigenschaften, Geringe Neigung zu Kaltverschweissung, Hervorragend geeignet für die Verarbeitung von rostfreien Edelstählen	Hoher Reibungskoeffizient	Chemische Stabilität und Oxydationsbeständigkeit, Elektrischer Isolator, Hohe Wärmehärtebeständigkeit

CVD- coating service

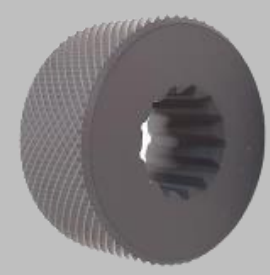
CVD-coating on Steel Tool
thickness between 5-8 μm



Pump Parts 1.4112
Coating TiC



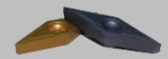
Seaming Tools: Stellite, 1.2379, 1.4528
Coatings CVD-TiN, TiC, TiCN, Al₂O₃



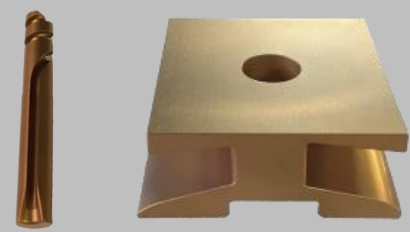
Tension wheel mat. 1.3343
coating TiC

CVD- coating service

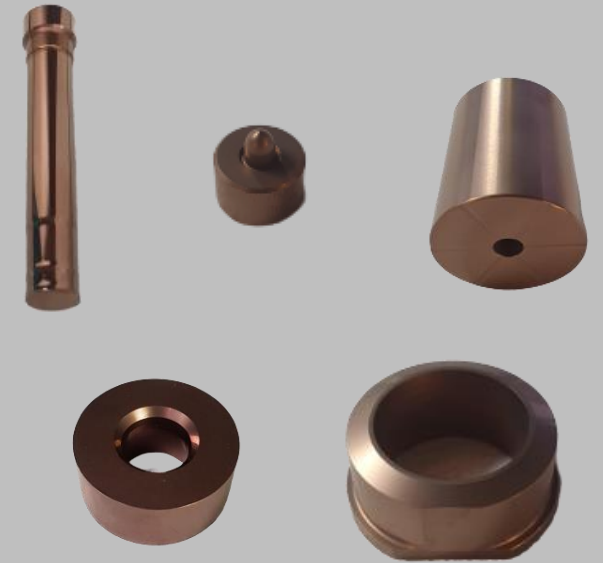
We offer 5 coatings on carbide tools,
depending on customer requirements



Carbide inserts
CVD-TiN or CVD-Al₂O₃ or
Layer thickness 2-3µm or 6-8 µm



Carbide Tools
CVD-TiN coated
Layer thickness 6-8 µm



Carbide Tools
CVD-TiCN coated
Layer thickness 3-5 µm

Carbide Rod
CVD- Al₂O₃ coated
Layer thickness 8-10 µm





CVD- coating service

	CVD-TiN	CVD-TiC	CVD-TiCN	CVD-Al2O3
Coefficient of friction against steel	0.6	0.15	0.4	0.25
Hardness VHN	Ca. 2200 ±300	3500 ±300	2600 ±300	3000 ±300
Layer thickness on carbide (ym)	2-3 or 6-8	3-5	3-5	6-10
Layer thickness on steel (ym)	5-8	5-8	5-8	5-8
Colour	Golden yellow	Metallic grey	Brown/ purple	Dark grey/ black
Areas of application	Punch, reshape, machining	draw, punch, press, reshape	punch, carry, reshape, machining	punch, carry, reshape, machining
Further properties	Good electrical properties, spec. El. resistance =25ym Ohm/cm	Good sliding properties, Low tendency to cold welding, ideally suited for the processing of stainless steels	High coefficient of friction, high hardness	Chemical stability and resistance to oxidation, Electrical isolator, High heat resistance