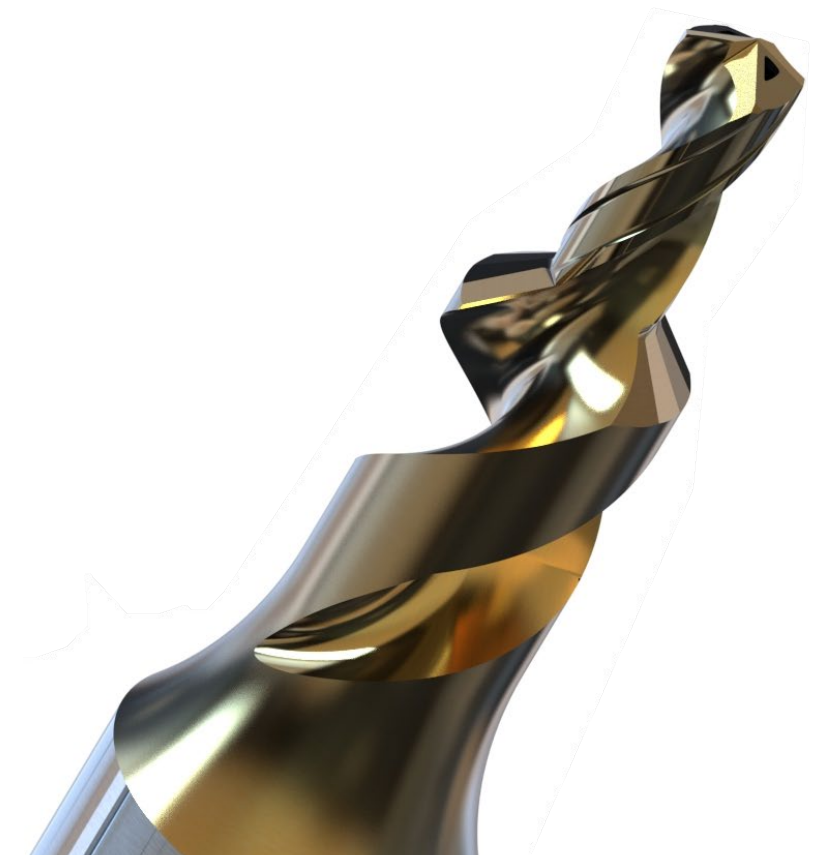
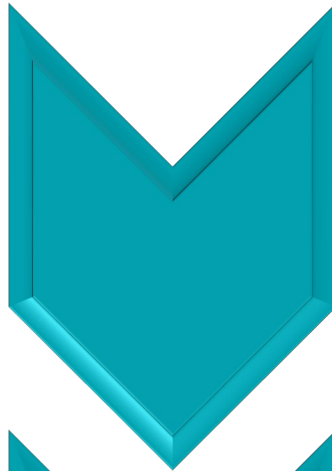
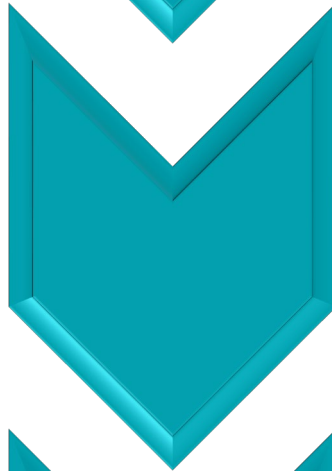


Ottimizzazione delle lavorazione su Titanio e Inox

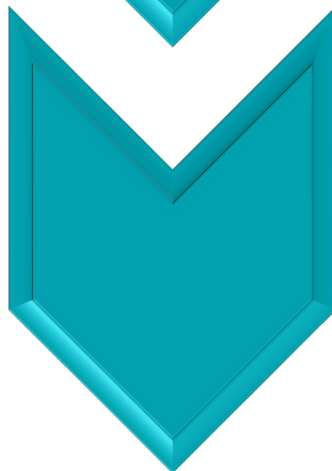




- Presentazione Louis Bélet S.A.



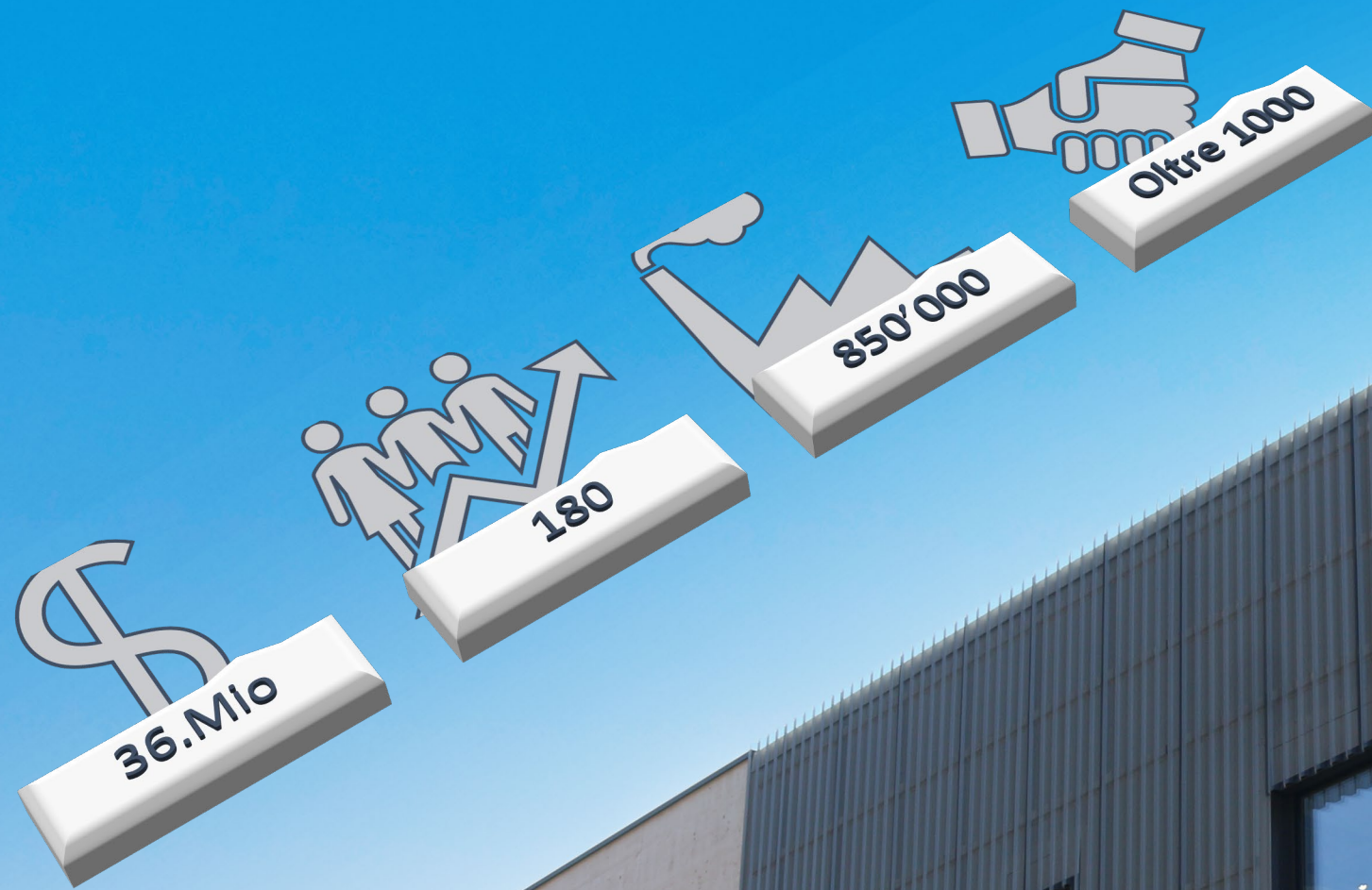
- Fresatura del titanio Gr.2 e Gr.5
- Rivestimento e raffreddamento interno
- Test comparativo di lavorazione



- Foratura dell'acciaio inox 316L
- Rivestimento, tagliente e raffreddamento interno
- Test di lavorazione

Azienda familiare dal 1948





LB LOUIS BELET
SWISS cutting tools

LB LOUIS BELET
SWISS cutting tools



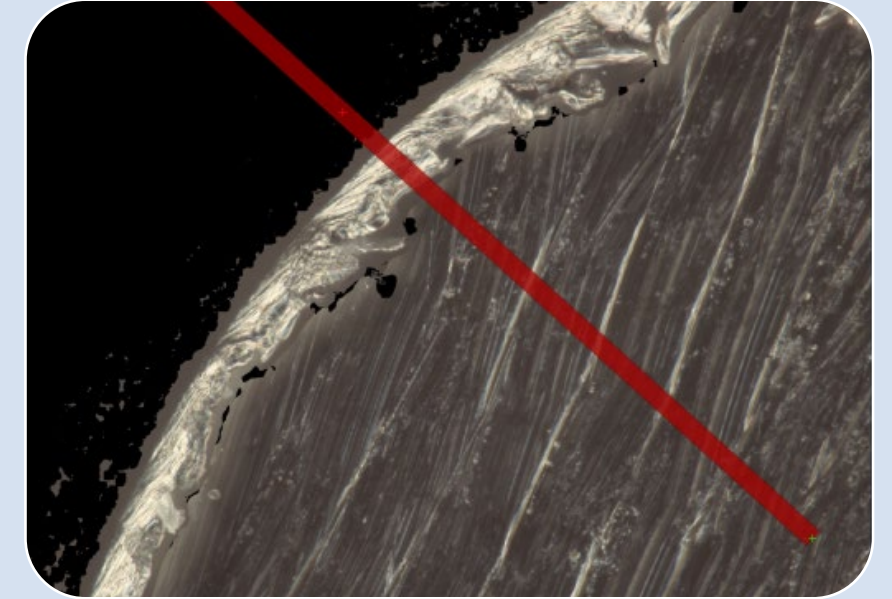




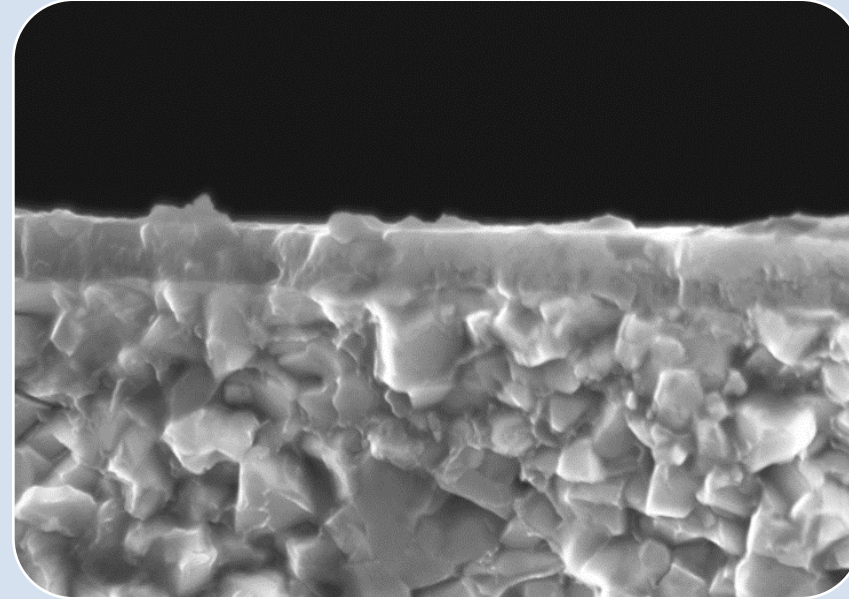
Aumento
della durata
dell'utensile



Finitura
superficiale



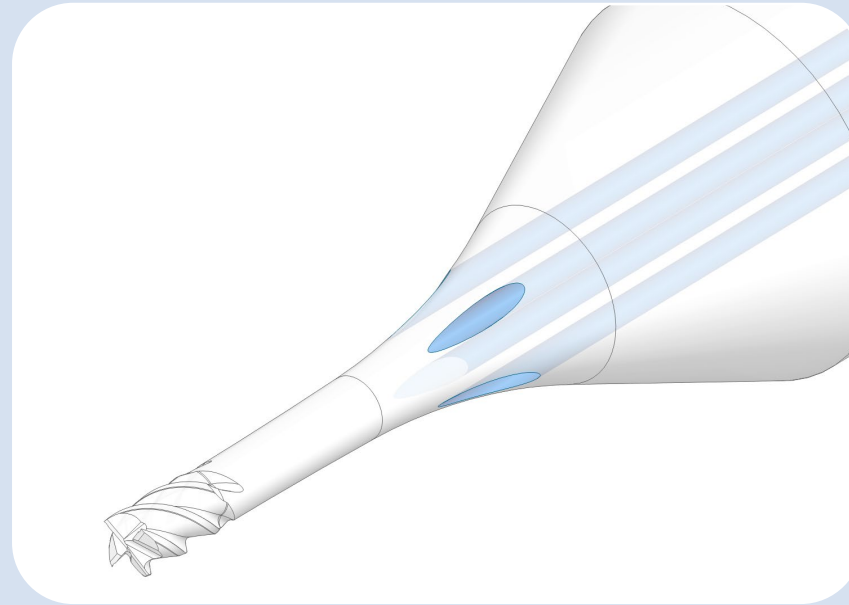
Formazione
di bave



Sviluppo e
produzione
rivestimento
MARC

Marc
(Nitruro di
Titanio)
Spessore 0.5 μm

Rivestimento su
micro utensile
da $\varnothing 0.2 \text{ mm}$



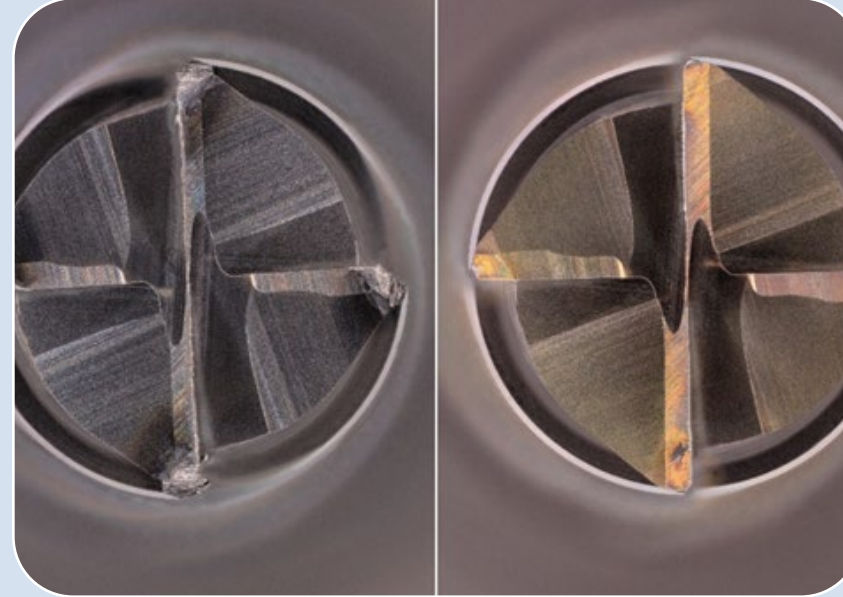
Definizione e sviluppo dei fori di lubrificazione su Micro-frese

Fori di lubrificazione su diametro fresa $\varnothing 0.2\text{mm}$

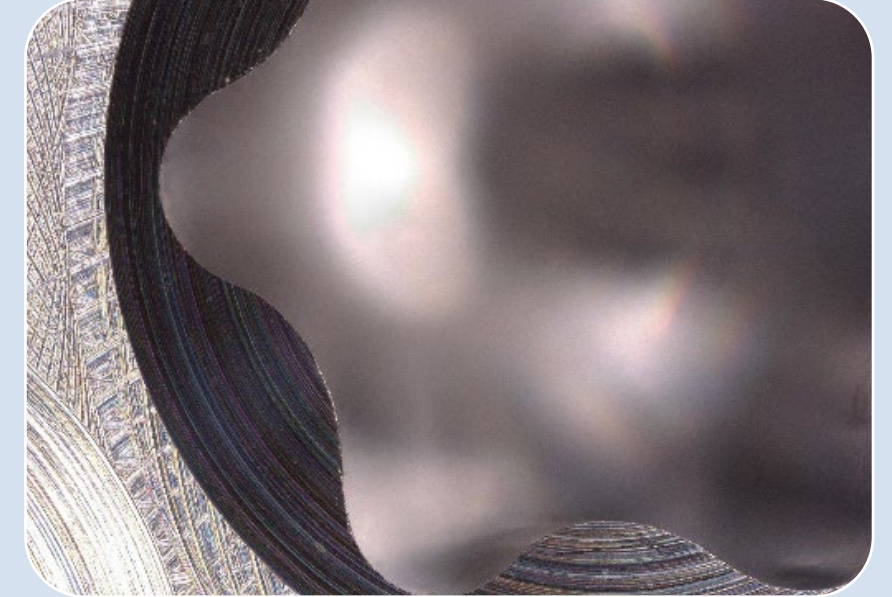
Lavorazioni Blasomil GT15 dai 20 ai 120 bars



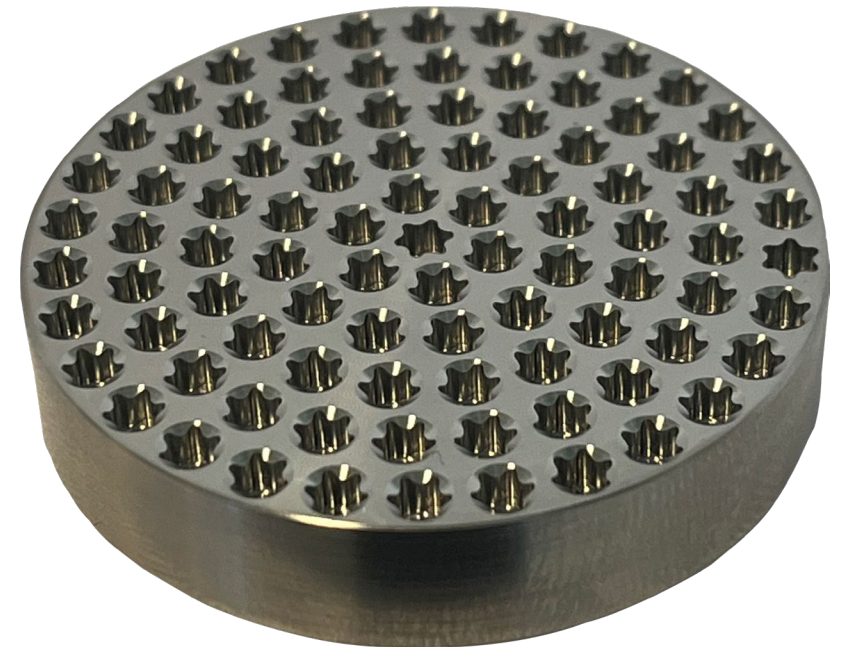
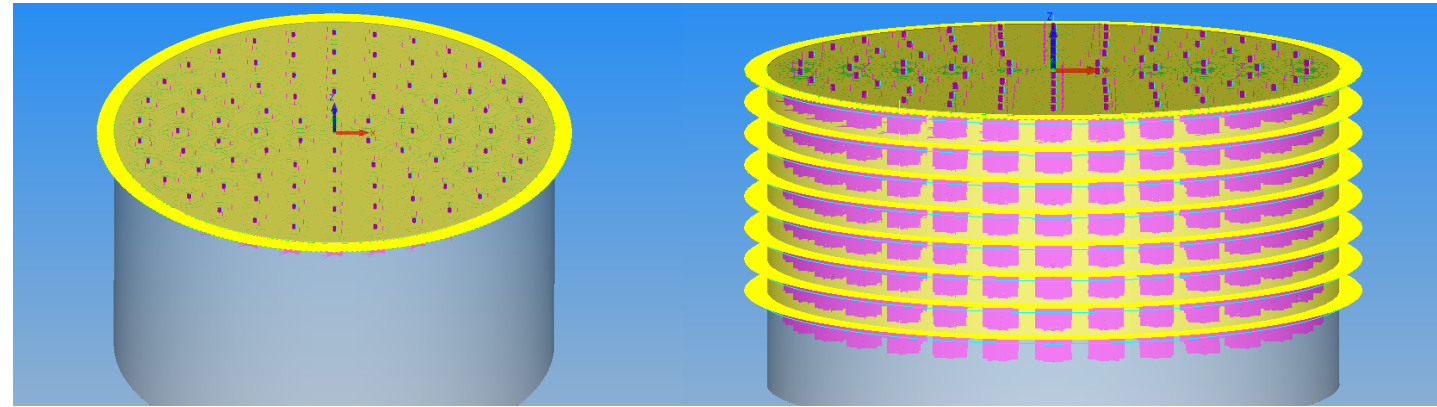
Impronta TORX-
T15- Materiale
Titanio Gr.2 e
Gr.5



Frese
senza e con
Rivestimento



Confronto con e
senza
lubrificazione
interna



	Piano	Foro Ø2.30	Sgrossatura TORX	Finitura TORX
Vc	300 m/min	300 m/min	85 m/min	85 m/min
n	31831 giri/min	47746 giri/min	54113 giri/min	54113 giri/min
Vf	7639 mm/min(0.06)	1528 mm/min (0.008)	1082 mm/min(0.005)	866 mm/min(0.004)



M3520d3.00



M3520d2.00



1450d0.50



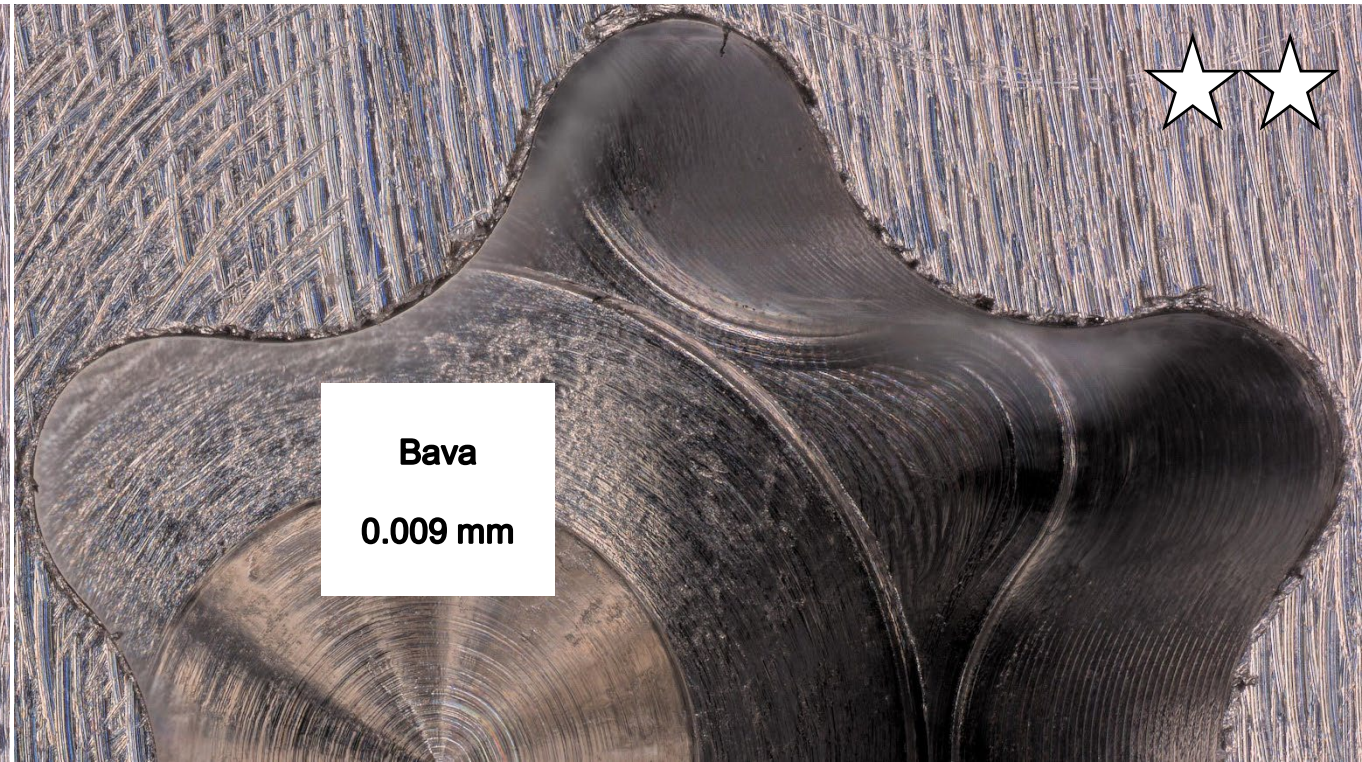
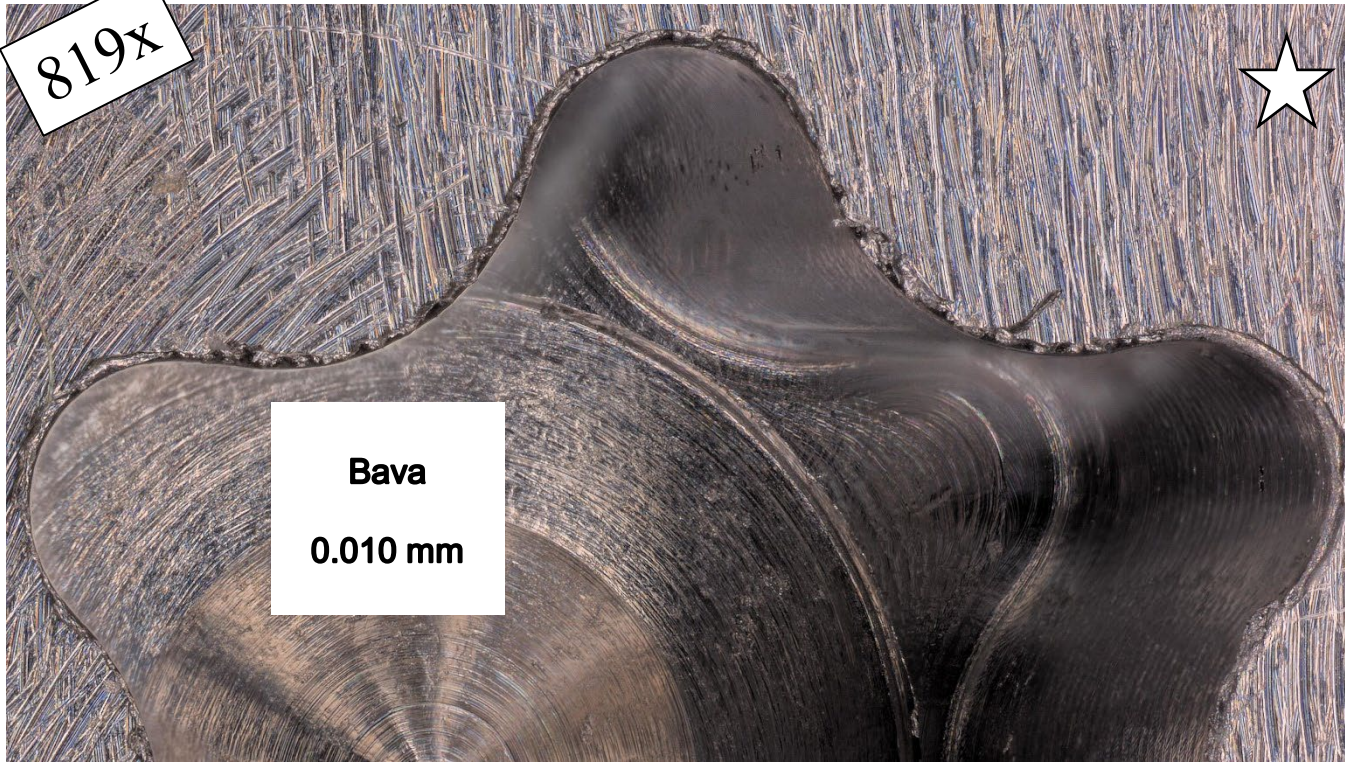
1450d0.50

Senza rivestimento

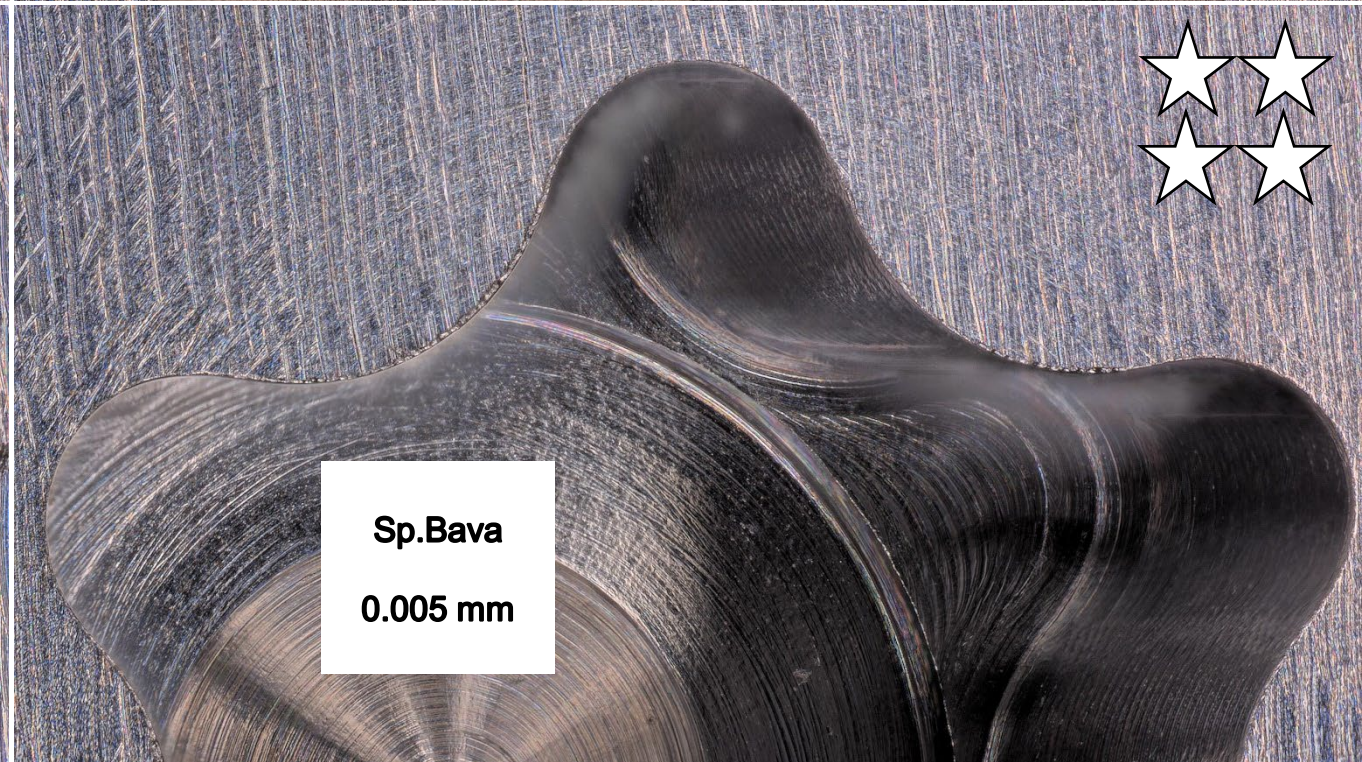
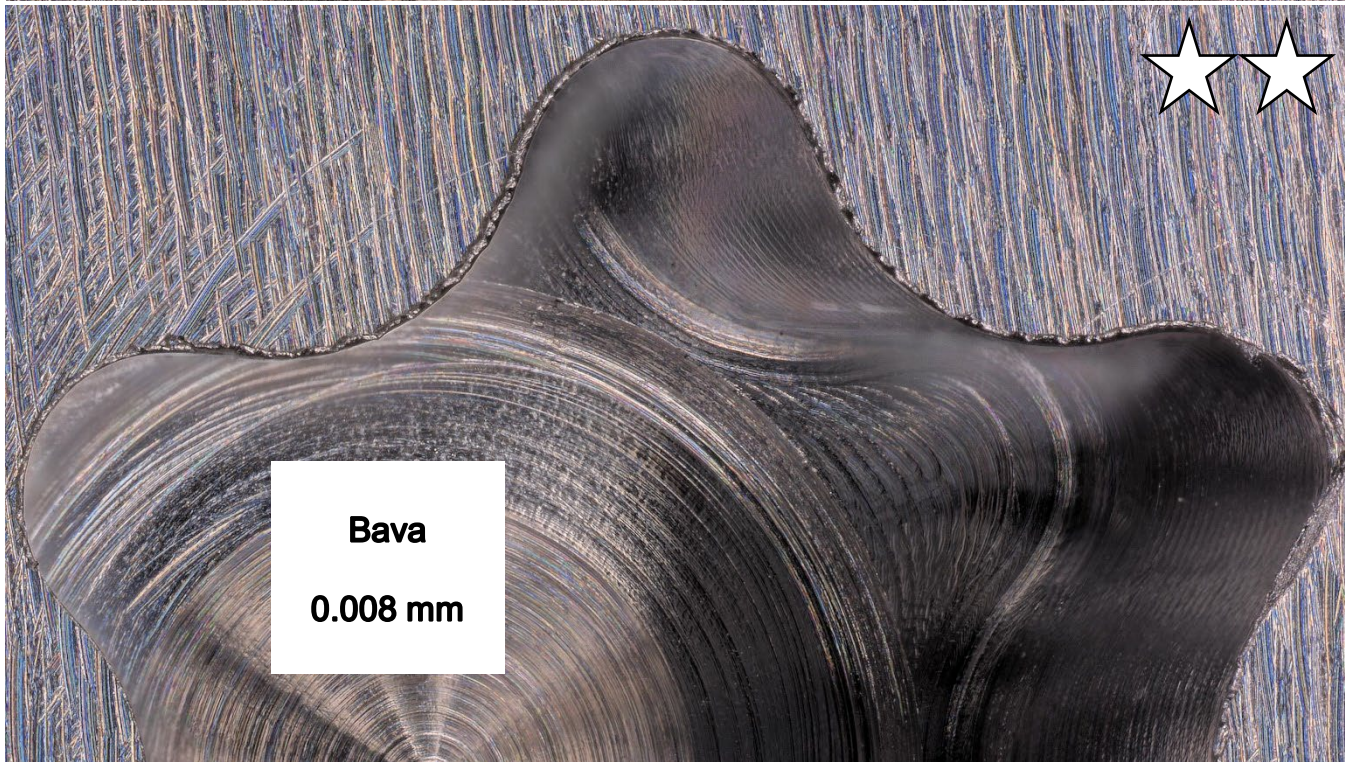
Con rivestimento

Titanio Gr2

819x



Titanio Gr5



Senza Rivestimento

Rivestimento MARC

Titanio Gr2



Titanio Gr5



M3520d2.00



Senza Rivestimento

Rivestimento MARC

Titanio Gr2



Titanio Gr5



1450d0.50

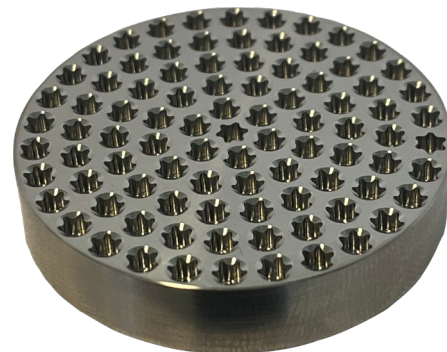




Sgrossatura TORX

Finitura TORX

	Sgrossatura TORX	Finitura TORX
Vc	85 m/min	85 m/min
n	54113 g/min	54113 g/min
Vf	1082 mm/min	866 mm/min



1450Hd0.50



1450Hd0.50

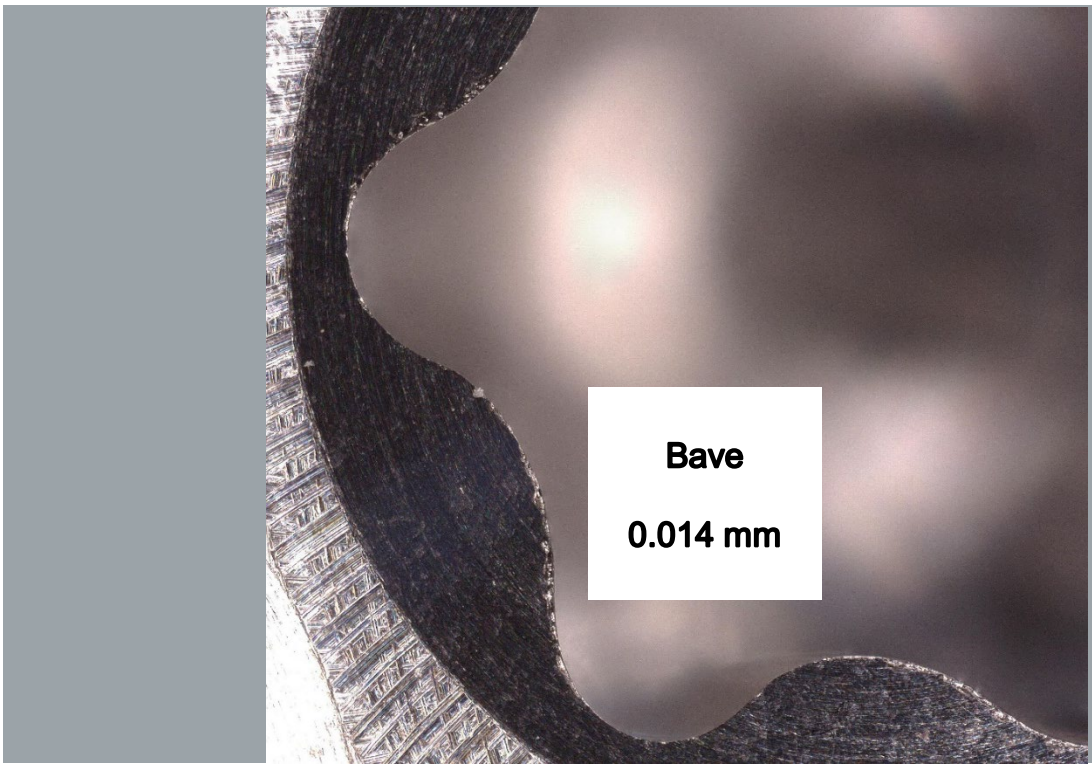
Senza Rivestimento

Titanio Gr2

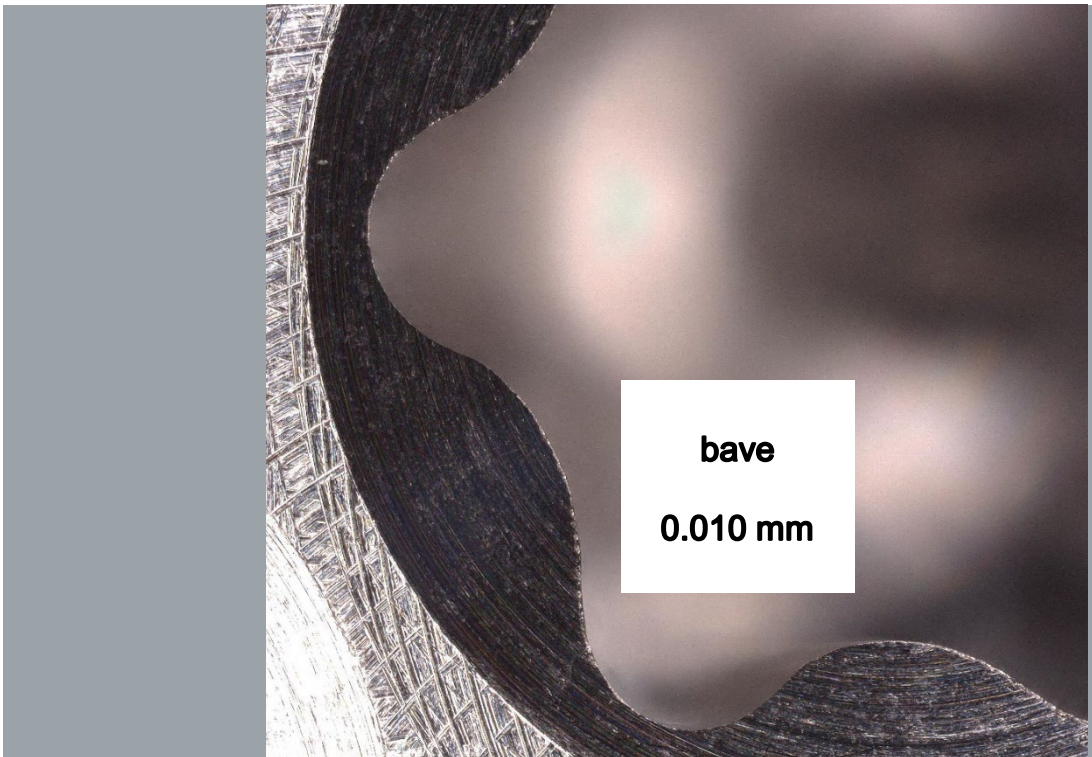
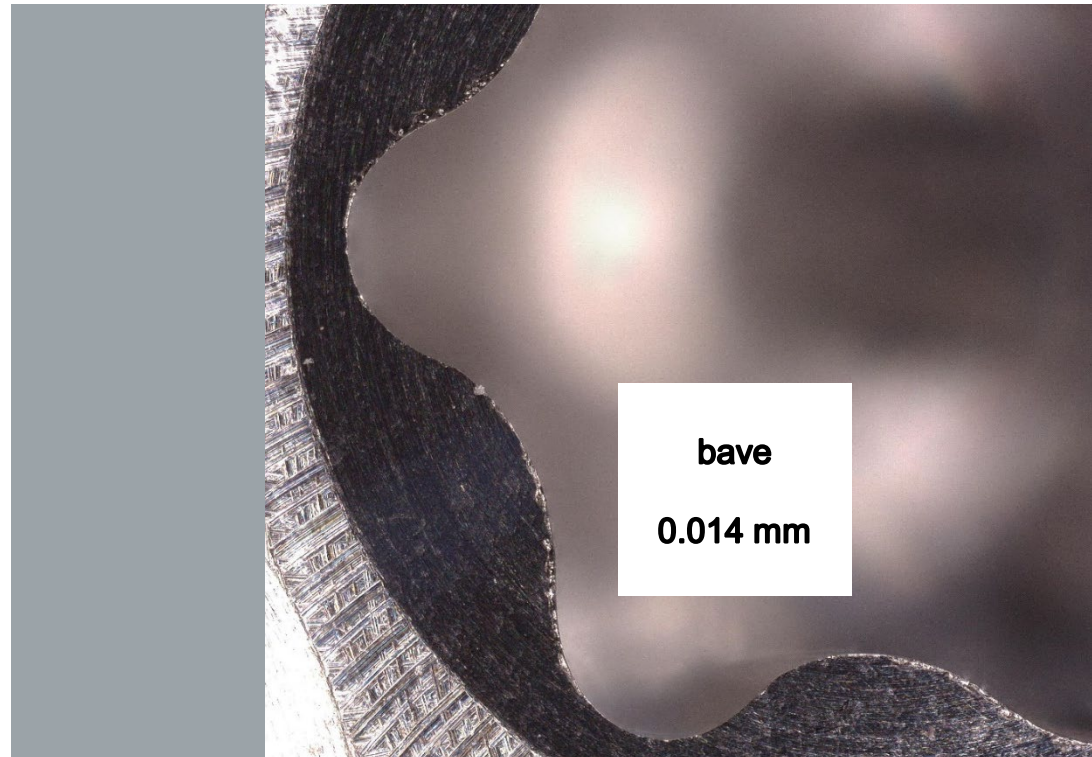
Con Rivestimento

senza IK

5x



Con IK

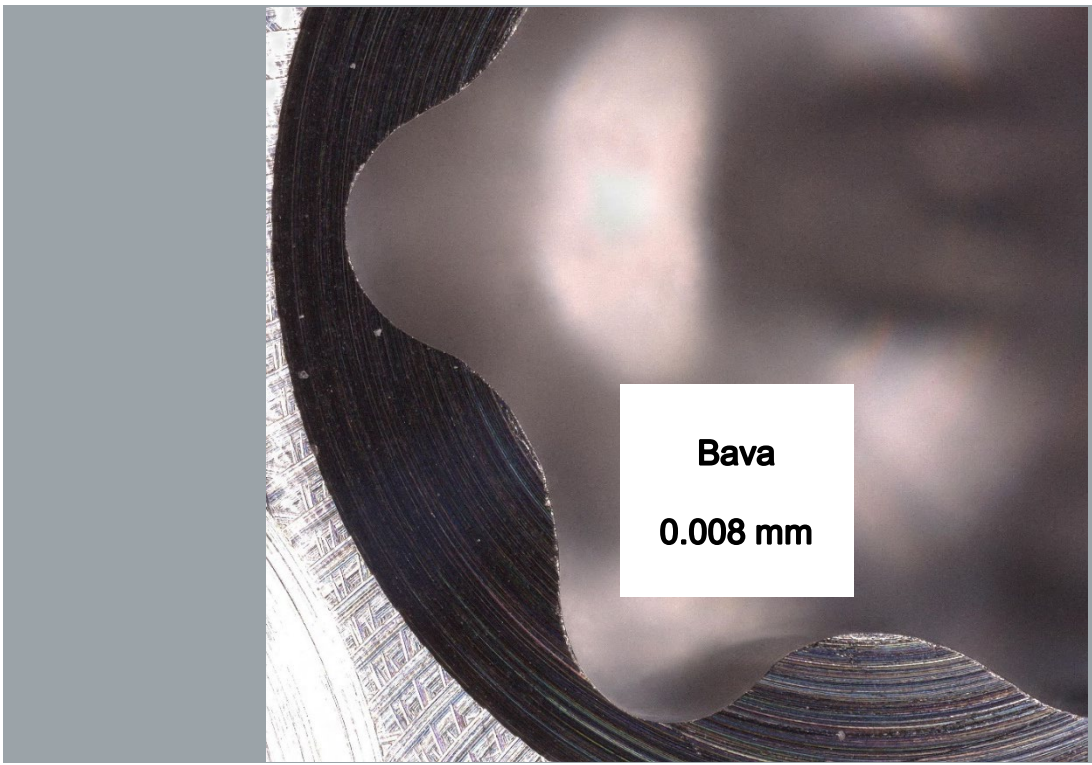
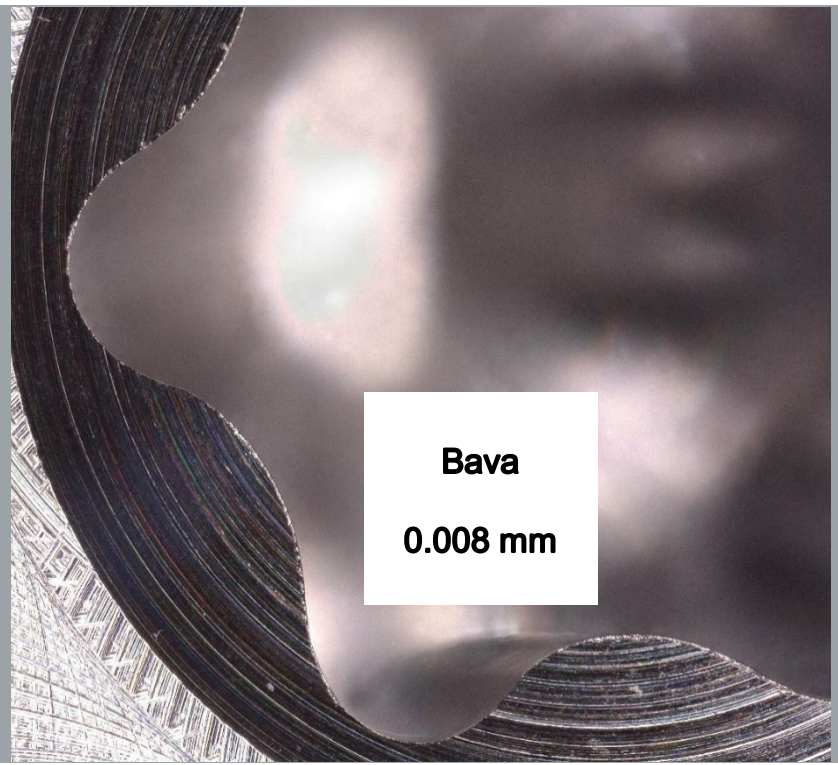


Senza Rivestimento

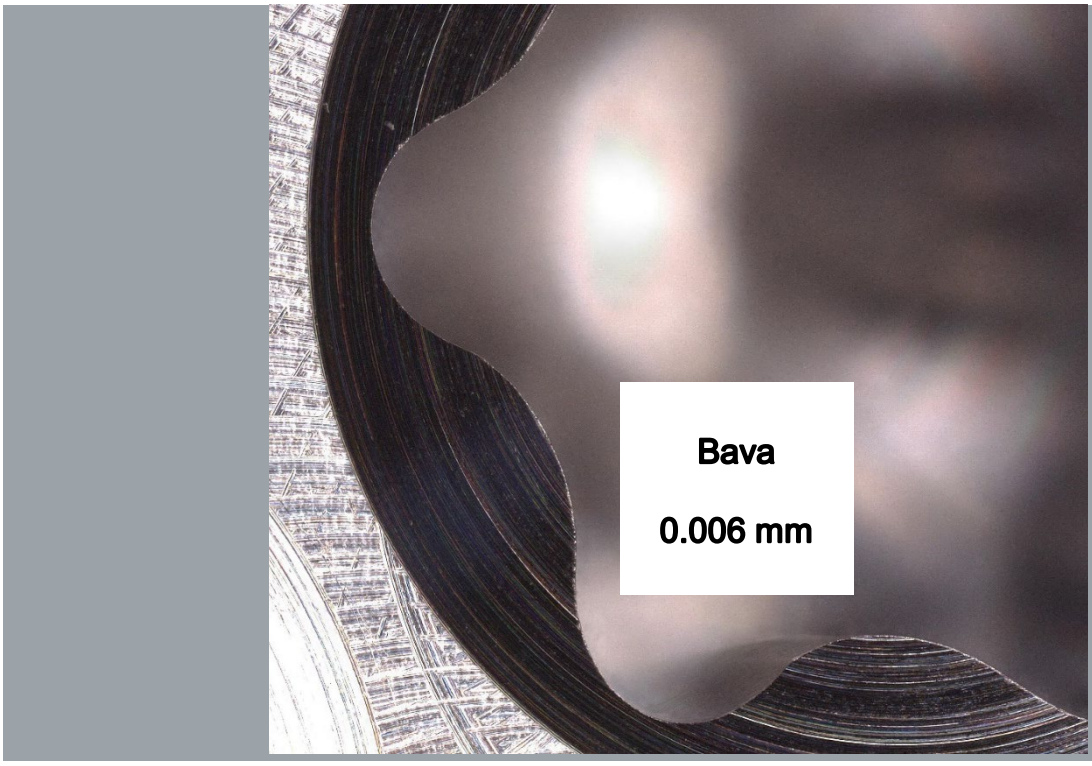
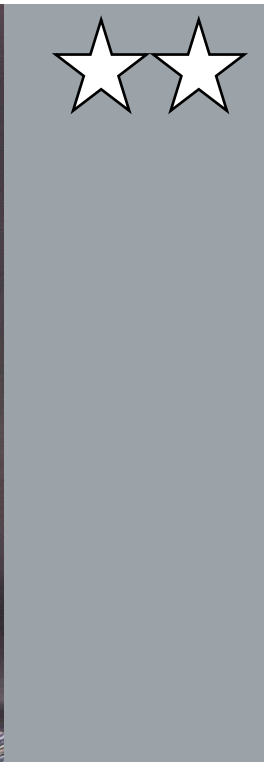
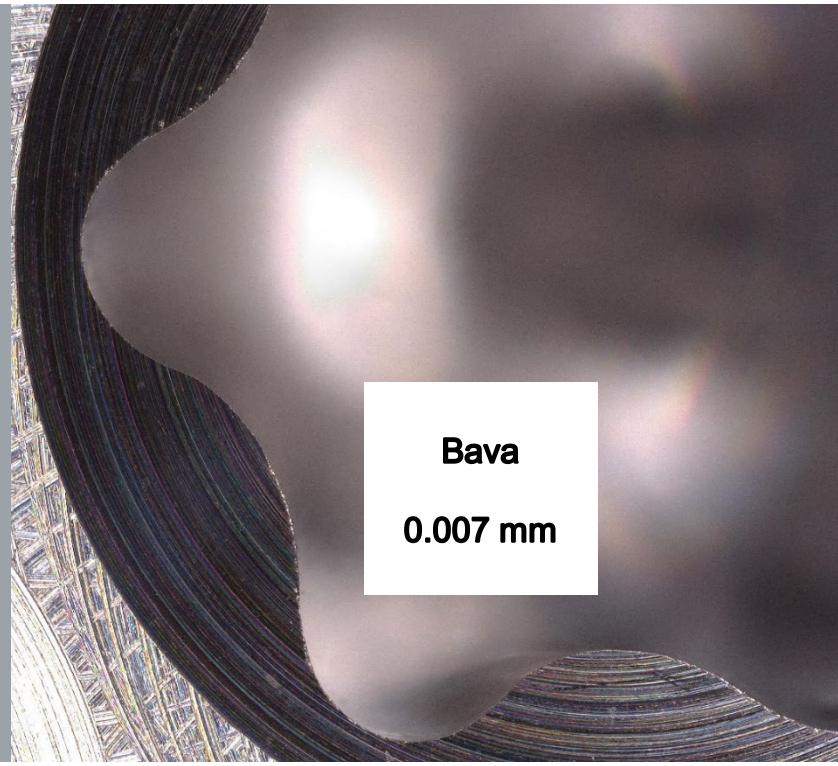
Titanio Gr 5

Con Rivestimento

Senza IK



Con IK



Senza rivestimento

Rivestimento MARC

1450Hd0.50

Senza IK

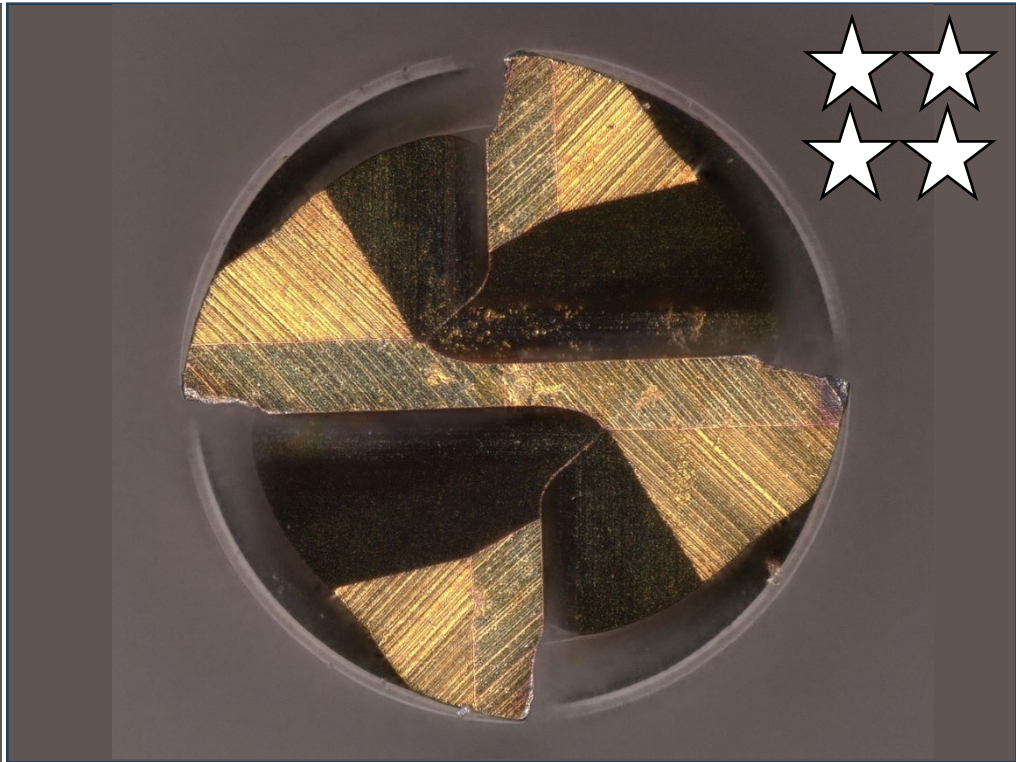
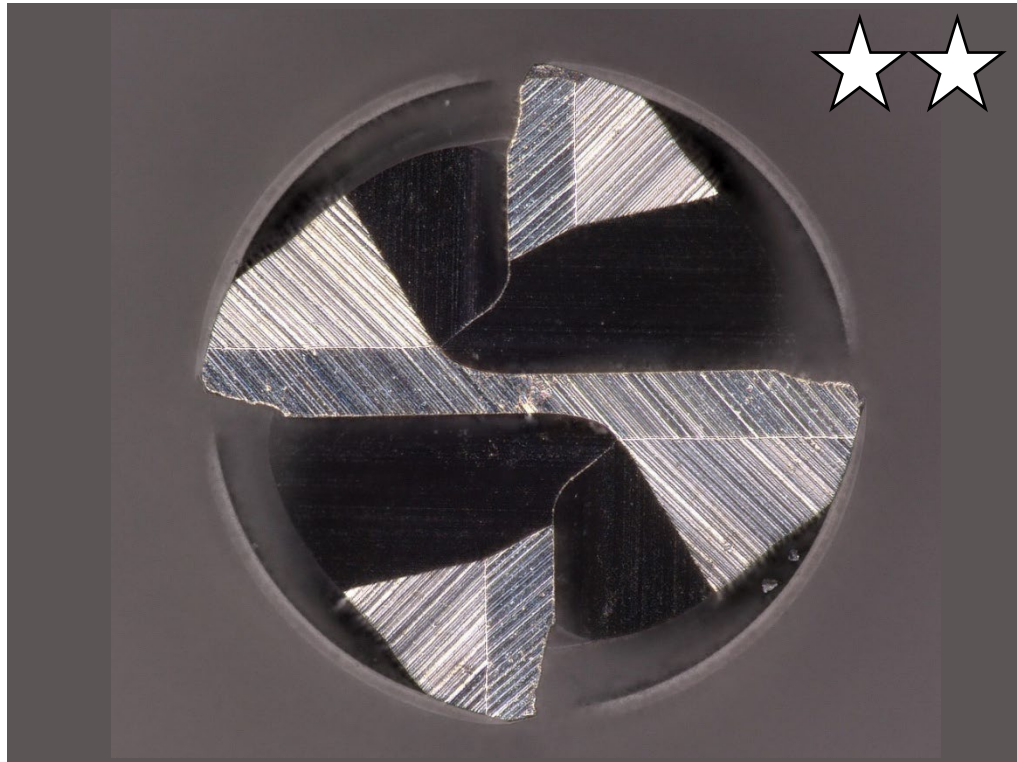
1. Fresa rotta dopo n.5 pcs



Titanio Gr2



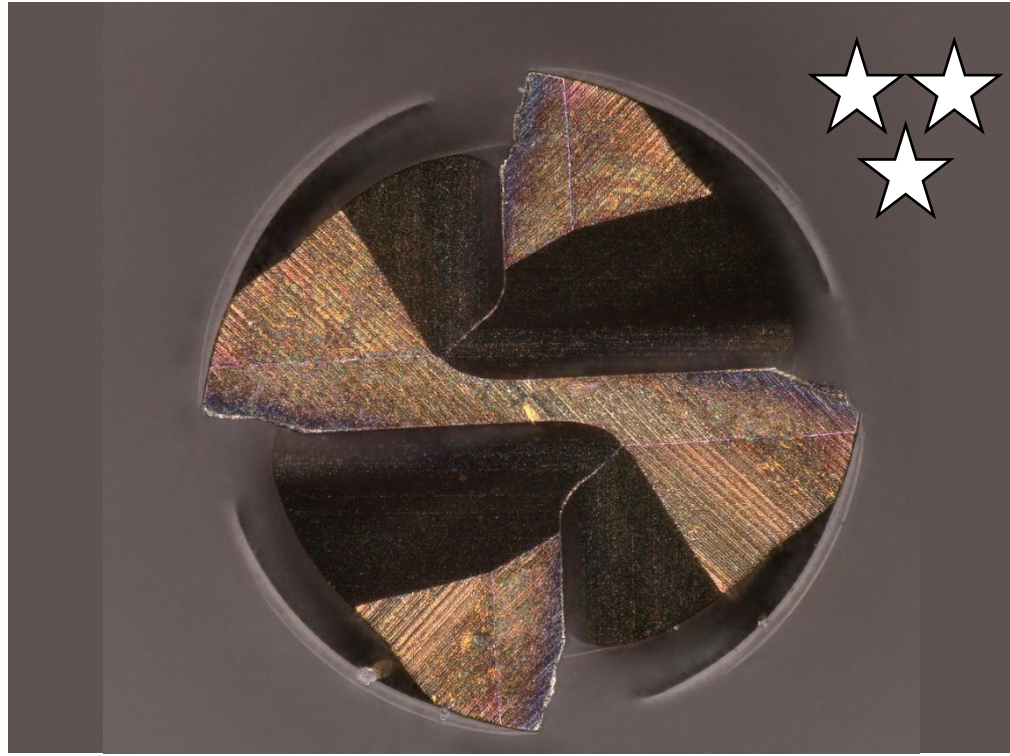
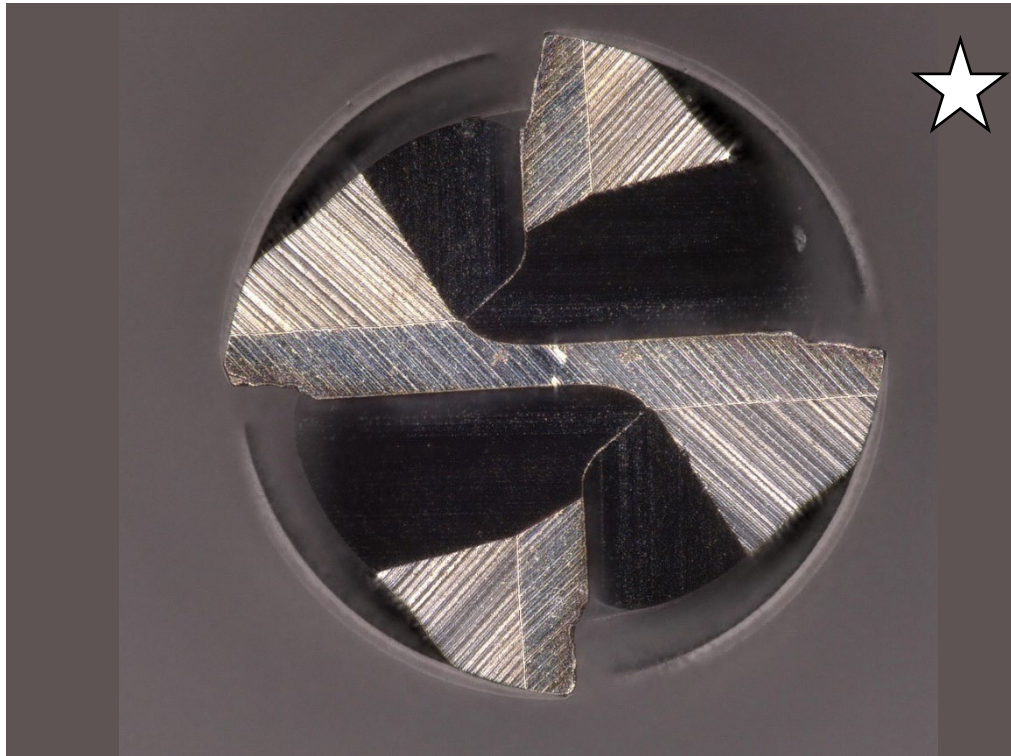
con IK



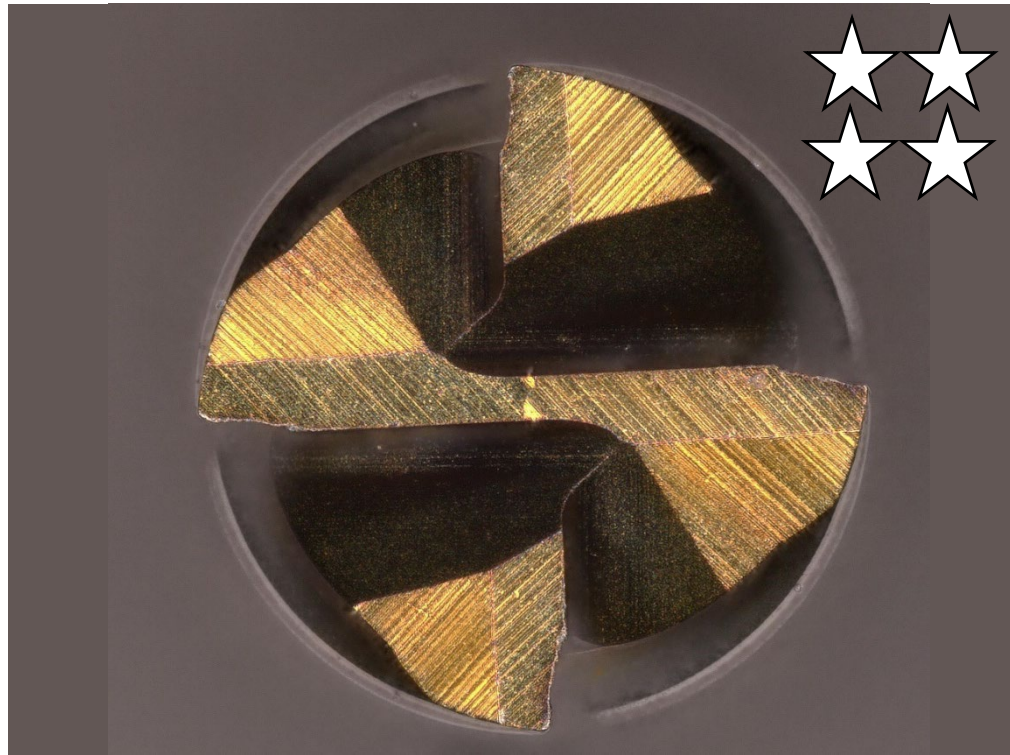
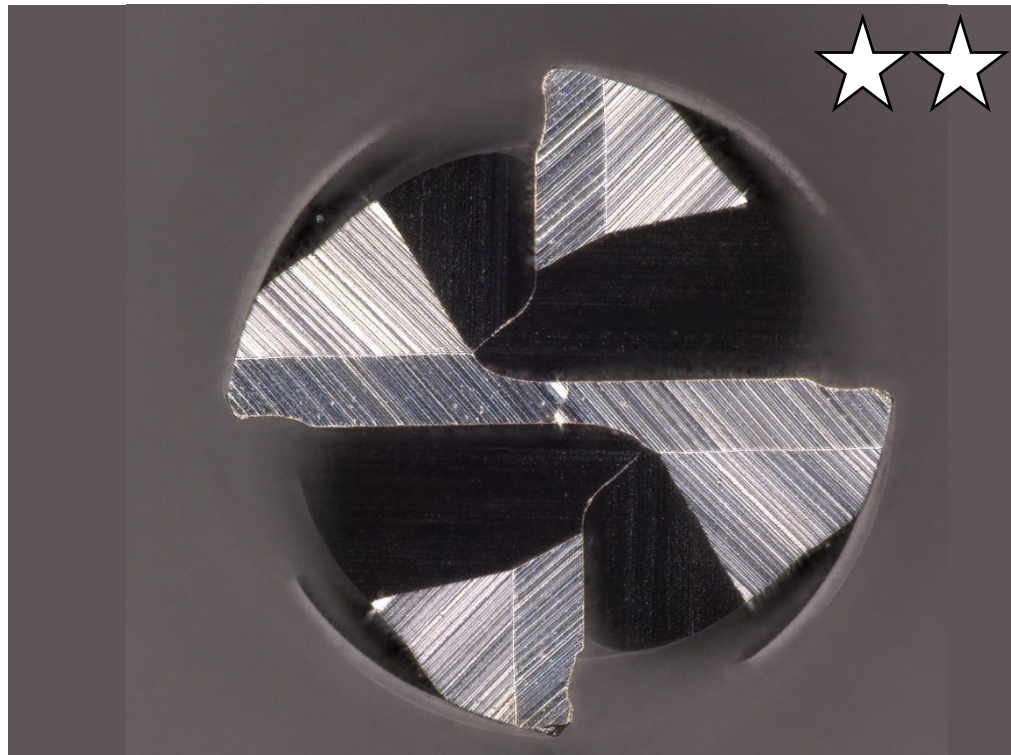
Senza rivestimento

Rivestimento MARC

Senza IK



Con IK



1450Hd0.50

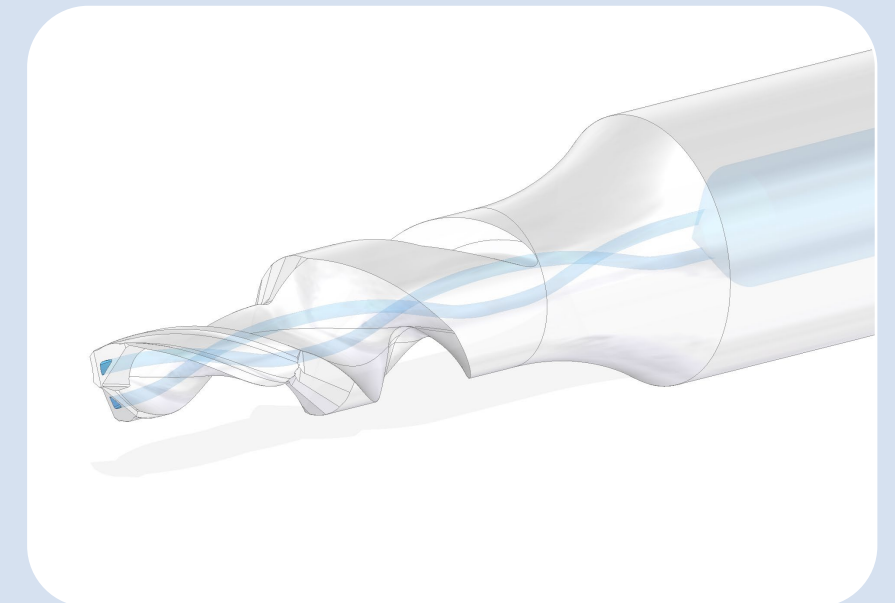
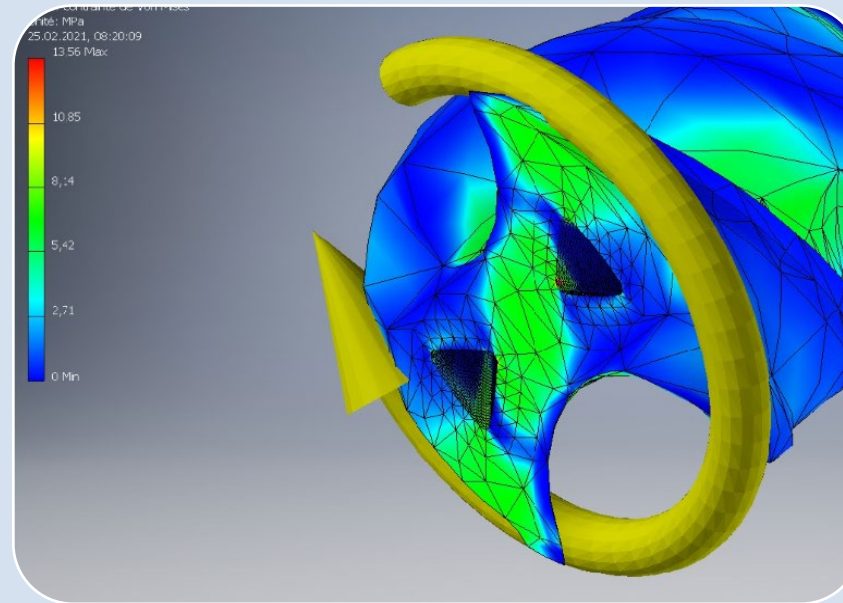
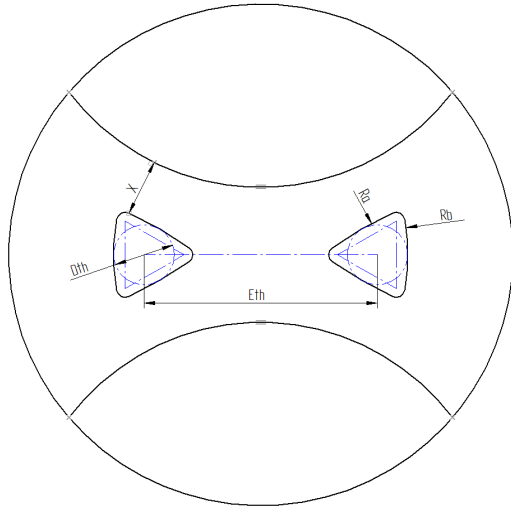
Titanio Gr 5



Punta 10xd
376H

Punta Pilota
2.5xd 336H

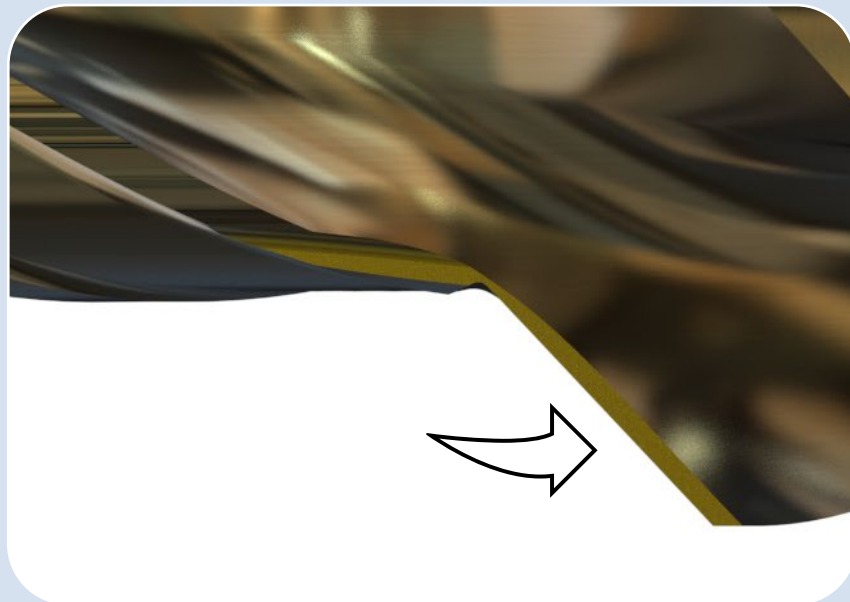




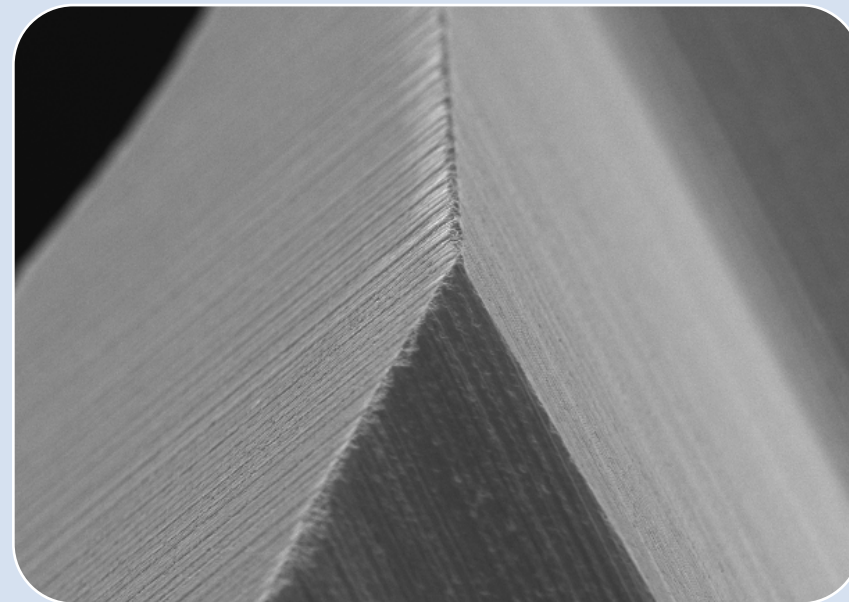
Sviluppo dei fori di lubrificazione speciali

FEM-
Calcolo

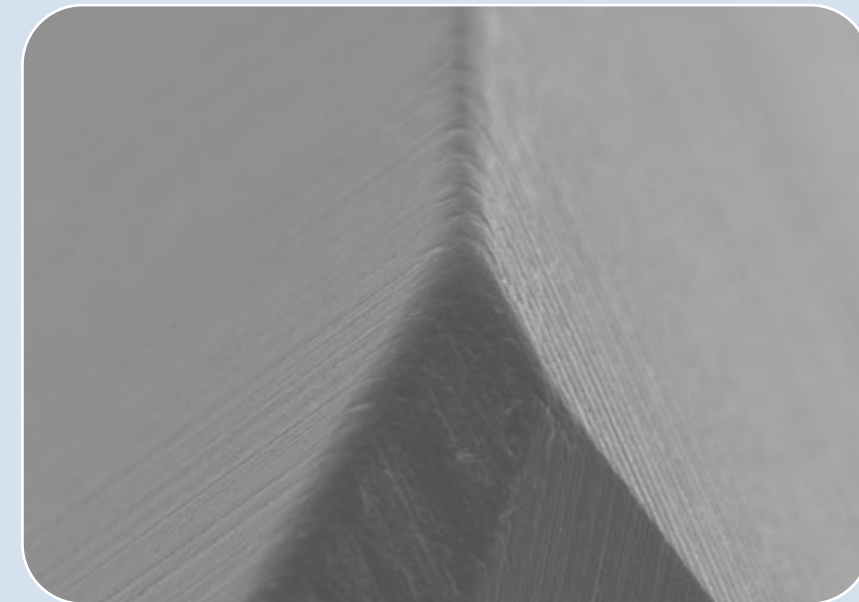
Passo definito dei fori con camera nel gambo



Rinforzo del
tagliente



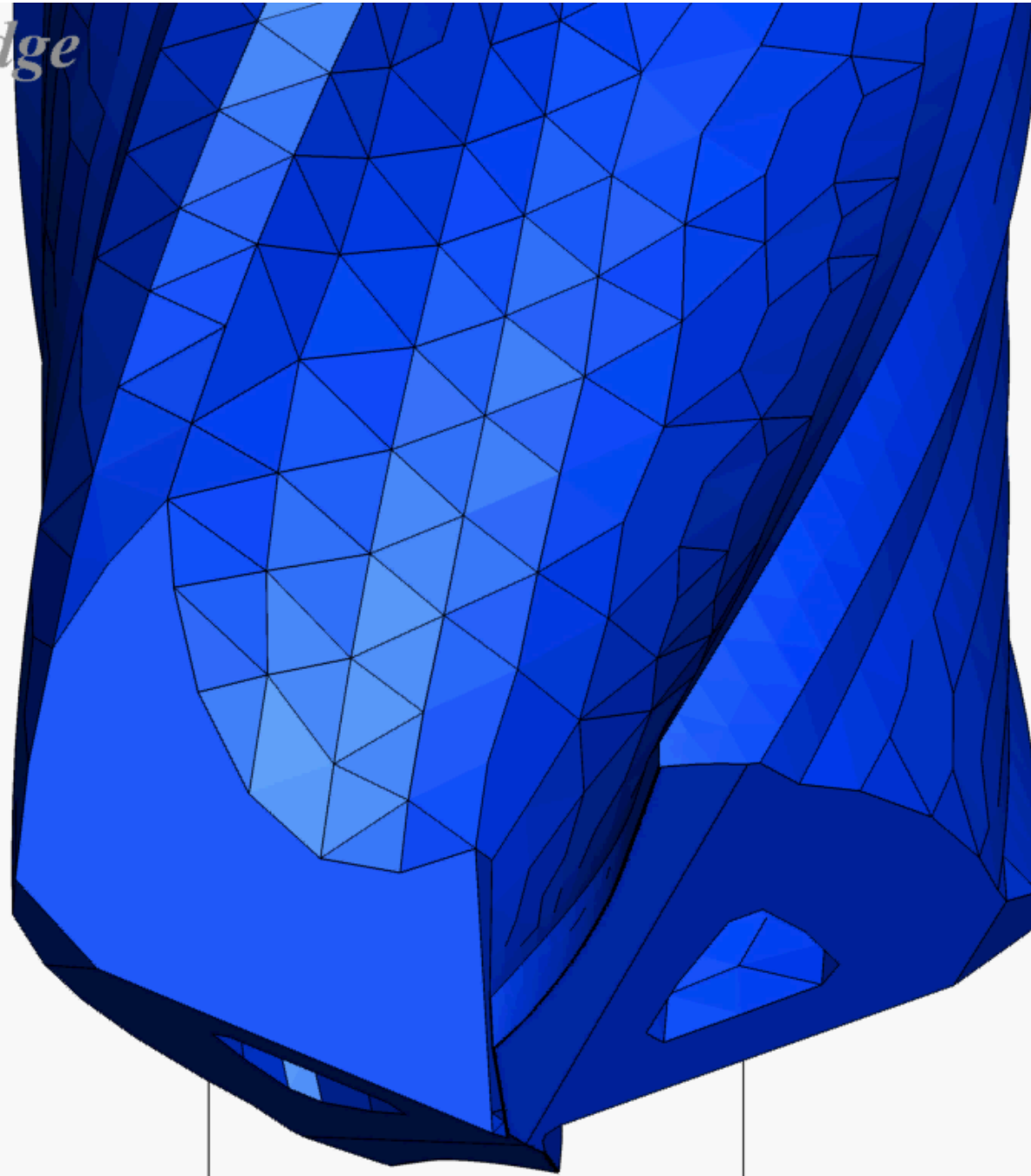
Tagliente dopo la
rettifica



Tagliente dopo il
trattamento

Third Wave AdvantEdge

Project Name: V28



Project Name: V28



336H d1.75x3.5

Inox 316L 1.4435

$V_c = 80\text{m/min}$

$V_f = 650\text{mm/min}$

Prof.: 10mm

Pres.: 120bars

Blaser GT15



376H d1.75x10

Dimensioni

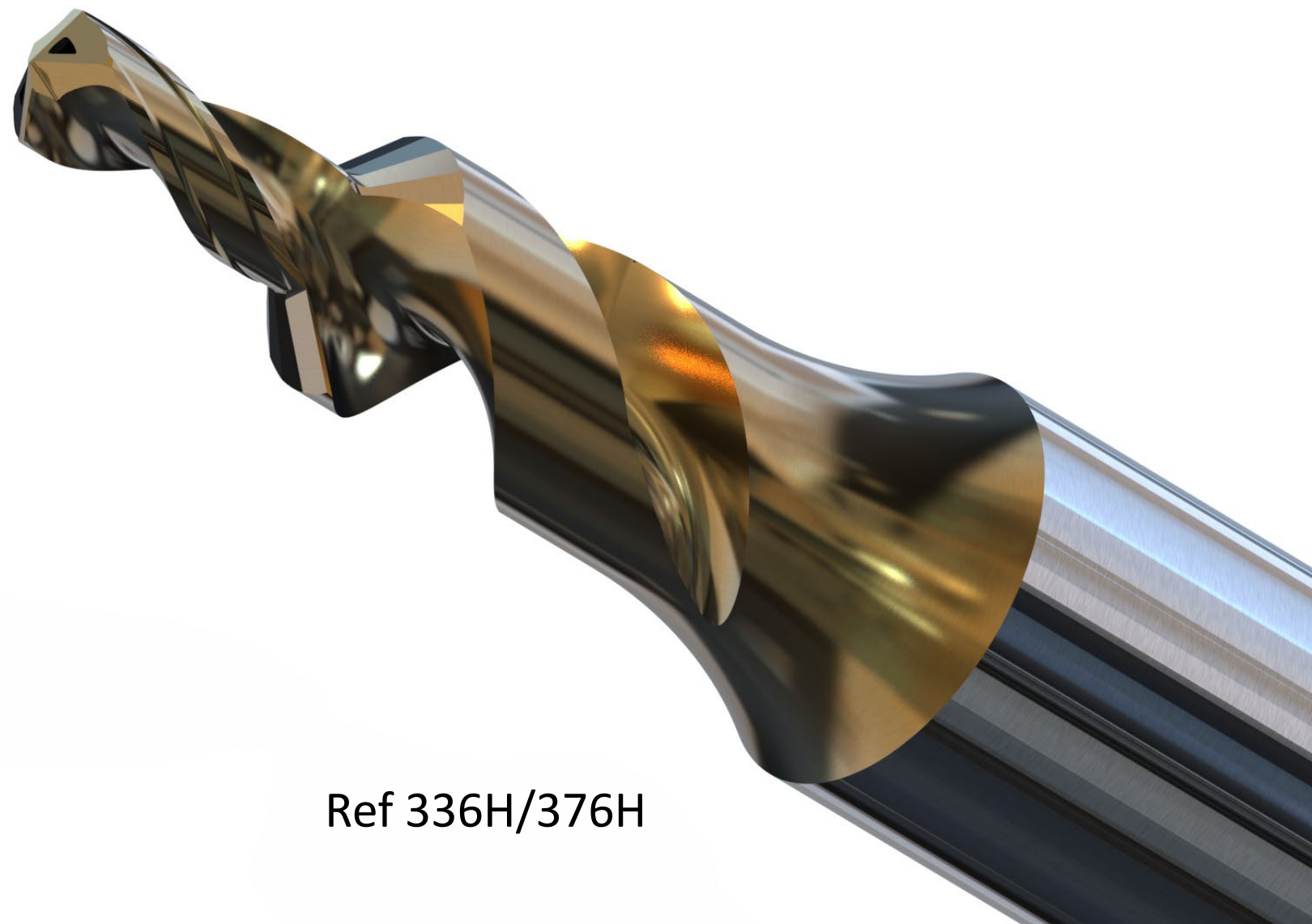
- $d1 = \text{Ø}0.80$ a 3.00
- Versione speciale

Qualità

- Circolarità
- Tolleranza
- Deviazione
- Finitura

Risultati

- 2,5 piu veloce
- Durata x2



Ref 336H/376H



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