KORLOY EXPERT

UNC805

ULTRA PERFORMANCE FOR STAINLESS & HSRA TURNING

Ultra-CVD coated UNC805 is the ultimate turning grade for high speed turning of stainless steel, titanium alloy and nickel alloy with extreme tool life.

The advanced substrate and ultra-CVD coating combines to give exceptional heat resitance whilst cutting the most difficult materials at high cutting speeds:

- Stainless Steel <250m/min.
- Duplex, 17-4PH <100m/min.
- Inconel, Nickel Alloy <60m/min.
- Titanium Alloy < 80m/min.

UNC805 is recommended for MEDIUM TO LARGE DIAMETER WORKPIECES (above ø50mm), especially where machining contact time is longer and heat generation can cause premature wear.

UNC805 - ULTRA-CVD TURNING INSERTS

GRADE		ORDER CODE UNC805	PRICE	FEED fn (mm/rev)	DEPTH OF CUT ap (mm)
ISO	RADIUS				
CCMT060204-MP	0.4	1-02-077375		0.05-0.15	0.30-1.50
CCMT060208-MP	0.8	1-02-077376		0.07-0.15	0.50-2.00
CCMT09T304-MP	0.4	1-02-077377		0.08-0.25	0.50-2.50
CCMT09T308-MP	0.8	1-02-077378		0.10-0.30	0.50-2.50
CNMG120404-MM	0.4	1-02-075644		0.10-0.40	0.50-5.50
CNMG120408-MM	0.8	1-02-069580		0.12-0.45	0.50-5.50
CNMG120412-MM	1.2	1-02-066754		0.15-0.60	0.50-5.50
CNMG120404-VP2	0.4	1-02-073980		0.05-0.30	0.10-3.00
CNMG120408-VP2	0.8	1-02-070820		0.10-0.40	0.50-4.50
CNMG120408-VP4	0.8	1-02-065941		0.15-0.35	1.00-4.00
CNMG120412-VP4	1.2	1-02-070821		0.20-0.40	1.00-4.00
DCMT070204-MP	0.4	1-02-077379		0.06-0.17	0.20-2.30
DCMT11T304-MP	0.4	1-02-074661		0.08-0.23	0.30-3.00
DCMT11T308-MP	0.8	1-02-077380		0.10-0.30	0.50-3.00
DNMG110404-MM	0.4	1-02-075645		0.08-0.35	0.50-5.00
DNMG110408-MM	0.8	1-02-075646		0.10-0.40	0.50-5.00
DNMG150604-MM	0.4	1-02-071031		0.10-0.40	0.50-6.40
DNMG150608-MM	0.8	1-02-067571		0.12-0.45	0.50-6.40
DNMG150604-VP2	0.4	1-02-070822		0.05-0.30	0.10-3.00
DNMG150608-VP2	0.8	1-02-070824		0.10-0.40	0.50-4.50
SNMG120404-MM	0.4	1-02-075648		0.10-0.40	0.50-6.40
SNMG120408-MM	0.8	1-02-071032		0.12-0.45	0.50-6.40
SNMG120412-MM	1.2	1-02-066750		0.15-0.60	0.50-6.40
SNMG120408-VP4	0.8	1-02-070825		0.15-0.35	1.00-4.00
SNMG120412-VP4	1.2	1-02-070826		0.20-0.40	1.00-4.00
TNMG160404-MM	0.4	1-02-074647		0.10-0.40	0.50-4.80
TNMG160408-MM	0.8	1-02-074648		0.12-0.45	0.50-4.80
VBMT160404-MP	0.4	1-02-065878		0.08-0.20	0.30-2.00
VBMT160408-MP	0.8	1-02-065879		0.10-0.25	0.50-2.30
VBMT160412-MP	1.2	1-02-065880		0.10-0.35	0.50-2.30
VCMT160404-MP	0.4	1-02-077381		0.10-0.25	0.50-2.30
VCMT160408-MP	0.8	1-02-077382		0.10-0.35	0.50-2.30
VNMG160404-MM	0.4	1-02-075651		0.10-0.40	0.50-4.80
VNMG160404-VP2	0.4	1-02-077372		0.05-0.30	0.10-3.00
VNMG160408-VP2	0.8	1-02-071838		0.10-0.45	0.50-4.50
WNMG060404-MM	0.4	1-02-077373		0.08-0.35	0.50-4.00
WNMG060408-MM	0.8	1-02-075653		0.10-0.40	0.50-4.00
WNMG080404-MM	0.4	1-02-075654		0.10-0.40	0.50-4.00
WNMG080408-MM	0.8	1-02-067283		0.12-0.45	0.50-4.00
WNMG080412-MM	1.2	1-02-066752		0.15-0.60	0.50-4.00
WNMG080404-VP2	0.4	1-02-077374		0.10-0.45	0.10-3.00
WNMG080408-VP2	0.8	1-02-070827		0.12-0.50	0.50-4.50
WNMG080412-VP2	1.2	1-02-070828		0.05-0.30	0.50-4.50
WNMG080408-VP4	0.8	1-02-067282		0.15-0.35	1.00-4.00
WNMG080412-VP4	1.2	1-02-070829		0.20-0.40	1.00-4.00

RECOMMENDED CUTTING CONDITIONS

Material Group	Material	Surface Speed (m/min)
Stainless Steel	Austenitic Stainless (e.g.316)	150-220
	Martensitic Stainless (e.g.404)	150-250
	Duplex	120-160
	17-4PH	50-110
HRSA's	Inconel, Nickel Alloy	30-60
	Titanium, Ti-Alloy	40-80

1ST CHOICE FOR HIGH SPEED TURNING OF STAINLESS STEEL & HRSA's. EXTREME CUTTING SPEEDS & TOOL LIFE!

CHIP BREAKER GUIDE

MM

First choice chip breaker for stainless steel and duplex continuous turning. Wide chip pockets for stable chip evacuation at high depth of cuts and high feeds.

Depth of cut: 0.5-5.5mm
Feed rate: 0.12-0.45mm/rev

MP

Dedicated chip breaker for positive geometry inserts, excellent performance and surface finish for stainless, inconel and titanium alloy turning.

Depth of cut: 0.3-3.0mm
Feed rate: 0.05-0.3mm/rev

VP2

Medium to finish turning of inconel, nickel alloys and titanium. Positive chip breaker geometry ensures low cutting resistance and stable chip control.

Depth of cut: 0.5-4.0mm
Feed rate: 0.05-0.4mm/rev

VP4

First choice for medium to heavy duty cutting of inconel. High hardness and resistant rake angle prevent notch wear in roughing of rugged surfaces

Depth of cut: 1.0-4.5mm
Feed rate: 0.15-0.4mm/rev