KORLOY EXPERT

CERMET

HIGH SPEED TURNING OF STEEL WITH LOW CUT DEPTH

Uncoated Cermet grades are ideal for turning carbon and alloysteel where a small cut depth is required. The uncoated geometry enables a sharper cutting edge which enables a superior surface finish.

Cermet is ideal for high cutting speeds:

- Carbon Steel <400m/min.
- Alloy Steel <350m/min.
- Sintered Ferrous Alloy <300m/min.

Grade CN1500 (P15) is ideal for high speed continuous turning applications.

Grade CN2500 (P25) is ideal for high feed and intermittent cutting operations due to the tougher substrate.

CERMET UNCOATED TURNING INSERTS

GRADE		ORDER CODE		PRICE	FEED fn (mm/rev)	DEPTH OF CUT ap (mm)
ISO	RADIUS	CN1500	CN2500			
CCMT060202-MP	0.2	1-03-020717	1-03-021257		0.04-0.12	0.20-1.50
CCMT060204-MP	0.4	1-03-020718	1-03-020965		0.05-0.15	0.30-1.50
CCMT09T302-MP	0.2	1-03-020599	1-03-021258		0.08-0.23	0.40-2.40
CCMT09T304-MP	0.4	1-03-020497	1-03-020967		0.07-0.22	0.10-2.00
CCMT09T308-MP	0.8	1-03-020498	1-03-020969		0.08-0.23	0.30-3.00
CCMT060204-VL	0.4	1-03-020070	1-03-021363		0.04-0.10	0.08-0.90
CCMT09T304-VL	0.4	1-03-019013	1-03-021365		0.05-0.10	0.10-1.00
CNMG120404-VB	0.4	1-03-020462	1-03-020932		0.15-0.35	0.30-2.00
CNMG120408-VB	0.8	1-03-019019	1-03-020936		0.15-0.45	0.50-2.00
CNMG120404-VQ	0.4	1-03-019189	1-03-020875		0.05-0.30	0.80-4.00
CNMG120408-VQ	0.8	1-03-019022	1-03-020937		0.08-0.40	0.80-4.00
DCMT070202-MP	0.2	1-03-020719	1-03-021259		0.04-0.12	0.12-1.80
DCMT070204-MP	0.4	1-03-020720	1-03-020975		0.05-0.15	0.30-1.80
DCMT11T302-MP	0.2	1-03-020600	1-03-021261		0.04-0.15	0.30-2.00
DCMT11T304-MP	0.4	1-03-020495	1-03-020977		0.08-0.20	0.50-2.30
DCMT11T308-MP	0.8	1-03-020496	1-03-020979		0.10-0.30	0.50-2.30
DCMT070204-VL	0.4	1-03-020072	1-03-021369		0.04-0.10	0.08-0.90
DCMT11T304-VL	0.4	1-03-019112	1-03-021372		0.05-0.10	0.10-1.00
DCMT11T308-VL	0.8	1-03-020073	1-03-021374		0.08-0.15	0.10-1.00
DNMG150604-VB	0.4	1-03-020465	1-03-021579		0.10-0.35	0.30-2.00
DNMG150608-VB	0.8	1-03-020059	1-03-021582		0.15-0.45	0.50-2.00
DNMG110404-VQ	0.4	1-03-020068	-		0.05-0.30	0.50-3.50
DNMG150604-VQ	0.4	1-03-020065	1-03-021580		0.05-0.30	0.80-4.00
DNMG150608-VQ	0.8	1-03-019221	1-02-058489		0.08-0.40	0.80-4.00
TCMT16T304-MP	0.4	1-03-020603	1-03-021263		0.08-0.20	0.30-2.50
TCMT16T308-MP	0.8	1-03-020604	1-03-021264		0.10-0.30	0.50-2.50
TCMT16T304-VL	0.4	1-03-021359	1-03-021386		0.05-0.20	0.30-1.50
TCMT16T308-VL	0.8	1-03-021360	1-03-021388		0.05-0.20	0.30-1.50
TNMG160404-VB	0.4	1-03-020474	1-03-020940		0.10-0.35	0.30-1.50
TNMG160408-VB	0.8	1-03-020463	1-03-020942		0.15-0.45	0.50-7.00
TNMG160404-VQ	0.4	1-03-019172	1-03-020886		0.05-0.30	0.80-3.50
TNMG160408-VQ	0.8	1-03-019174	1-03-020943		0.08-0.40	0.80-3.50
VBMT160404-MP	0.4	1-03-020601	1-03-021091		0.08-0.20	0.30-2.00
VBMT160408-MP	0.8	1-03-020602	1-03-021092		0.10-0.25	0.50-2.30
VBMT160404-VL	0.4	1-03-019025	1-03-020956		0.05-0.20	0.30-1.50
VBMT160408-VL	0.8	1-03-020069	1-03-020960		0.10-0.20	0.30-1.50
VNMG160404-VB	0.4	1-03-021600	1-03-020949		0.10-0.35	0.30-1.50
VNMG160408-VB	0.8	1-03-021603	1-03-020953		0.15-0.45	0.50-2.00
VNMG160404-VQ	0.4	1-03-019255	1-03-020950		0.10-0.40	0.50-3.50
VNMG160408-VQ	0.8	1-03-019257	1-03-020954		0.12-0.45	0.50-3.50
WNMG080404-VQ	0.4	1-03-021604	1-03-020891		0.05-0.30	0.50-4.00
WNMG080408-VQ	0.8	1-03-020768	1-03-021282		0.08-0.40	0.80-4.00

RECOMMENDED CUTTING CONDITIONS

Material Group	Material	Surface Speed (m/min)	
		CN1500	CN2500
Steel	Low Carbon Steel	150-400	130-350
	Alloy Steel	150-350	130-300
	Pre-Hardened Steel	120-300	100-250

1ST CHOICE HIGH SPEED TURNING OF STEEL WITH LOW CUT DEPTHS. EXCEPTIONAL SURFACE ROUGHNESS!

CHIP BREAKER GUIDE

VQ

First choice chip breaker for medium to finish turning with negative inserts. Excellent chip control up to 3mm depth of cut, with very good surface roughness due to hard cutting edge.

Depth of cut: 1.0-4.0mm

Feed rate: 0.10-0.4mm/rev

VB

First choice chip breaker for finishing with negative inserts with small depth of cut. Ideal for copy turning with excellent chip control. Exceptional surface roughness.

Depth of cut: 0.5-2.0mm

Feed rate: 0.15-0.45mm/rev

MP

First choice chip breaker for medium to finishing with positive inserts. Excellent chip control up to 3mm depth of cut, with very good surface roughness due to hard cutting edge.

Depth of cut: 0.3-3.0mm

Feed rate: 0.05-0.3mm/rev

VL

First choice chip breaker for finishing with positive inserts. High cutting rake provdes exceptional surface roughness.

Depth of cut: 0.2-1.5mm

Feed rate: 0.10-0.35mm/rev