



CUTTING TOOLS CATALOGUE 2026

Cutting tools for CNC machine shops

Turning and milling inserts · Solid end mills · Drills · Threading · Toolholders

Edition October 2026 · 195 products · 6 families



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INNOT

INNOT at a glance

INNOT designs and supplies cutting tools for CNC machine shops: turning and milling inserts, solid carbide end mills, drills, threading inserts and taps, toolholders and chucks. Every product has grades dedicated to the ISO material groups and starting cutting data, always up to date on the online data sheet.

Quote within 30 minutes

Send us the code, the drawing or a photo: we reply with price and availability. Shipping in 24/48 hours.

Free tester

Try the INNOT tool on your part and get a "before / after" report with tool life, cost per part and savings.

Custom tools

End mills and drills built to your drawing, with the right geometry and coating for your material.

Customer area

Reserved prices, quotes, orders and savings of your company, always available online.

ISO material groups

P

Steels

M

Stainless steels

K

Cast irons

N

Aluminium and non-ferrous

S

Superalloys and titanium

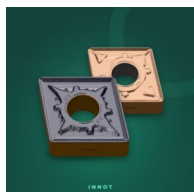
H

Hardened steels

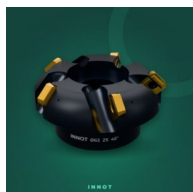
How to read the catalogue

- ★ marks the INNOT grade recommended as first choice.
- Tables show the main codes and sizes; the complete sizes are on the online data sheet.
- Each product's QR code opens the full data sheet: cutting data by material, technical drawing, grades and PDF data sheet.

The INNOT range



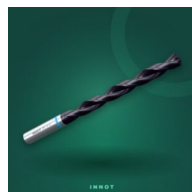
Turning Inserts
114 products



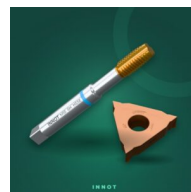
Milling Inserts
24 products



Solid Carbide End Mills
14 products



Drills
9 products



Threading
19 products



Toolholders and Chucks
15 products

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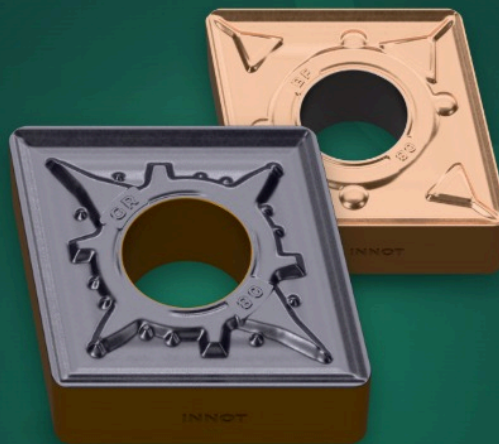
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Turning Inserts

Negative and positive inserts for external and internal turning, parting and grooving: chipbreakers from finishing to heavy roughing and INNOT CVD, PVD, cermet and uncoated grades for every ISO group.

IN THIS CHAPTER

- › CNMG / CNMA - 80° rhombic (16)
- › DNMG - 55° rhombic (13)
- › SNMG - 90° square (15)
- › TNMG - 60° triangular (14)
- › VNMG - 35° rhombic (12)
- › WNMG - 80° trigon (14)
- › CCMT - 80° rhombic (4)
- › DCMT - 55° rhombic (4)
- › SCMT - 90° square (2)
- › TCMT - 60° triangular (4)
- › VBMT / VCMT - 35° rhombic (7)
- › RCMX - Round (2)
- › Parting and grooving (7)



Negative inserts

CNMG / CNMA - 80° rhombic



CNMA

80° flat negative insert, without chipbreaker, for turning cast iron with CVD grade IT6115.

ISO materials	K
Operation	Roughing
Chipbreaker	Flat (no chipbreaker)
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMA1204	0.4 - 0.8 - 1.2 - 1.6	IT6115	Flat (no chipbreaker)
CNMA1606	0.8 - 1.2 - 1.6	IT6115	Flat (no chipbreaker)
CNMA1906	1.2 - 1.6	IT6115	Flat (no chipbreaker)



CNMG cast iron

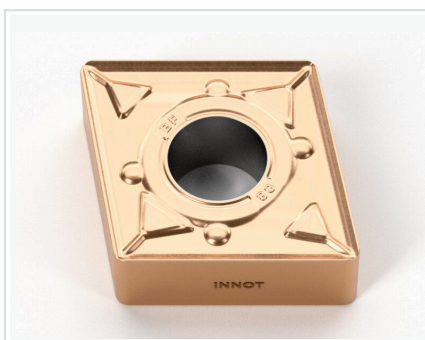
80° negative insert for turning cast iron, with universal double-sided chipbreaker and CVD grade IT6115.

ISO materials	K
Operation	Semi-finishing · Roughing
Chipbreaker	Universal cast iron
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8 - 1.2 - 1.6	IT6115	Universal cast iron
CNMG1606	0.8 - 1.2 - 1.6	IT6115	Universal cast iron
CNMG1906	1.2 - 1.6	IT6115	Universal cast iron



CNMG-BF

80° negative insert for finishing stainless steels, with BF chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Finishing
Chipbreaker	BF
INNOT grades	IT7125 · IT7225★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8	IT7125 - IT7225	BF



CNMG-BM

80° negative insert for semi-finishing stainless steels, with BM chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Semi-finishing
Chipbreaker	BM
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8 - 1.2	IT7125 - IT7225	BM



CNMG-BR

80° negative insert for roughing stainless steels, with BR chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Roughing
Chipbreaker	BR
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.8 - 1.2	IT7125 - IT7225	BR
CNMG1606	0.8 - 1.2 - 1.6	IT7125 - IT7225	BR
CNMG1906	1.2 - 1.6	IT7125 - IT7225	BR



CNMG-GC

80° negative insert for finishing steels with excellent surface quality, with GC chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GC
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GC



CNMG-GF

80° negative insert for finishing steels, with GF chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GF
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GF



CNMG-GM

80° negative insert for semi-finishing steels, with GM chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Semi-finishing
Chipbreaker	GM
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GM
CNMG1606	0.8 - 1.2 - 1.6	IT8105 - IT8115 - IT8125 - IT8225	GM
CNMG1906	0.8 - 1.2 - 1.6	IT8105 - IT8115 - IT8125 - IT8225	GM



CNMG-GQ

80° negative insert for finishing and semi-finishing of steels, with GQ chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	GQ
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GQ



CNMG-GR

80° negative insert for roughing steels, with GR chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Roughing
Chipbreaker	GR
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GR
CNMG1606	0.8 - 1.2 - 1.6	IT8105 - IT8115 - IT8125 - IT8225	GR
CNMG1906	0.8 - 1.2 - 1.6	IT8105 - IT8115 - IT8125 - IT8225	GR



CNMG-HQ

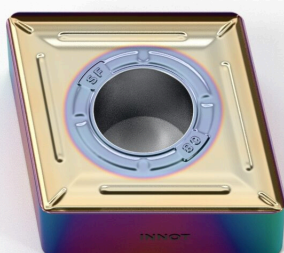
80° negative cermet insert for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C ★ · ITC10 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8	ITC10 - IT115C	HQ



CNMG-SF

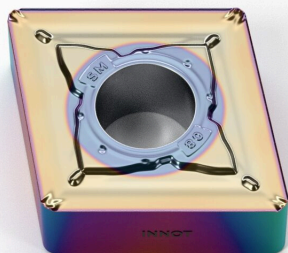
80° negative insert for finishing superalloys and titanium, with SF chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Finishing
Chipbreaker	SF
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8 - 1.2	IT7115 - IT9205 - IT9215	SF



CNMG-SM

80° negative insert from semi-finishing to roughing of superalloys and titanium, with SM chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Semi-finishing · Roughing
Chipbreaker	SM
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8 - 1.2	IT7115 - IT9205 - IT9215	SM



CNMG-ZR

80° negative insert for turning ductile cast iron, with ZR chipbreaker and CVD grade IT6215.

ISO materials	K
Operation	Finishing · Semi-finishing · Roughing
Chipbreaker	ZR
INNOT grades	IT6215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMG1204	0.4 - 0.8 - 1.2	IT6215	ZR



CNMM-GX

80° negative insert for heavy roughing of steels, with GX chipbreaker and INNOT CVD grades. For the deepest cuts and the highest feeds.

ISO materials	P
Operation	Heavy-duty machining
Chipbreaker	GX
INNOT grades	IT8115 ★ · IT8125 · IT8135 · IT8225 ★
Nose radii	0.8 · 1.2 · 1.6 · 2.4 · 3.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMM1906	0.8 - 1.2 - 1.6 - 2.4	IT8115 - IT8125 - IT8225 - IT8135	GX
CNMM2507	1.6 - 2.4 - 3.2	IT8115 - IT8125 - IT8225 - IT8135	GX
CNMM2509	1.6 - 2.4 - 3.2	IT8115 - IT8125 - IT8225 - IT8135	GX



CNMM-GZ

80° negative insert for heavy roughing of steels, with GZ chipbreaker and INNOT CVD grades. Large depths of cut and high feeds.

ISO materials	P
Operation	Heavy-duty machining
Chipbreaker	GZ
INNOT grades	IT8115★ · IT8125 · IT8135 · IT8225★
Nose radii	0.8 · 1.2 · 1.6 · 2.4 · 3.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CNMM1606	1.6	IT8115 - IT8125 - IT8225 - IT8135	GZ
CNMM1906	0.8 - 1.2 - 1.6 - 2.4	IT8115 - IT8125 - IT8225 - IT8135	GZ
CNMM2509	2.4 - 3.2	IT8115 - IT8125 - IT8225 - IT8135	GZ

DNMG - 55° rhombic



DNMA

55° flat negative insert, without chipbreaker, for turning cast iron with CVD grade IT6115.

ISO materials	K
Operation	Roughing
Chipbreaker	Flat (no chipbreaker)
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMA1504	0.4 - 0.8 - 1.2	IT6115	Flat (no chipbreaker)
DNMA1506	0.4 - 0.8 - 1.2	IT6115	Flat (no chipbreaker)



DNMG cast iron

55° negative insert for turning cast iron, with universal double-sided chipbreaker and CVD grade IT6115.

ISO materials	K
Operation	Semi-finishing · Roughing
Chipbreaker	Universal cast iron
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8 - 1.2	IT6115	Universal cast iron
DNMG1506	0.4 - 0.8 - 1.2	IT6115	Universal cast iron



DNMG-BF

55° negative insert for finishing stainless steels, with BF chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Finishing
Chipbreaker	BF
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8	IT7125 - IT7225	BF
DNMG1506	0.4 - 0.8	IT7125 - IT7225	BF



DNMG-BM

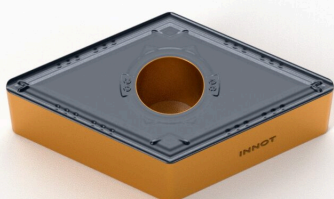
55° negative insert for semi-finishing stainless steels, with BM chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Semi-finishing
Chipbreaker	BM
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8 - 1.2	IT7125 - IT7225	BM
DNMG1506	0.4 - 0.8 - 1.2	IT7125 - IT7225	BM



DNMG-GC

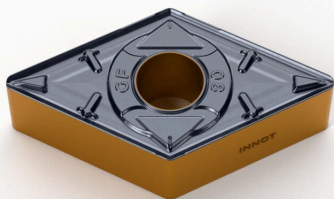
55° negative insert for finishing steels with excellent surface quality, with GC chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GC
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GC
DNMG1506	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GC



DNMG-GF

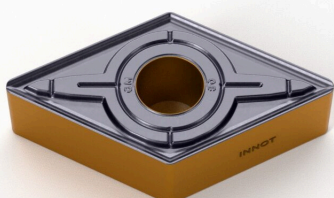
55° negative insert for finishing steels, with GF chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GF
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GF
DNMG1506	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GF



DNMG-GM

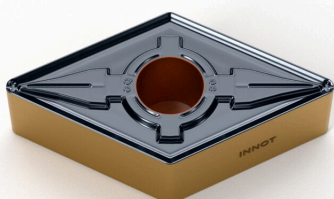
55° negative insert for semi-finishing steels, with GM chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Semi-finishing
Chipbreaker	GM
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1104	1.2	IT8105 - IT8115 - IT8125 - IT8225	GM
DNMG1504	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GM
DNMG1506	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GM



DNMG-GQ

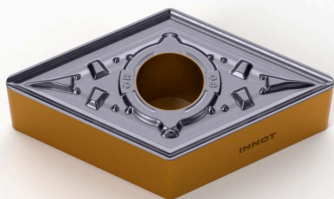
55° negative insert for finishing and semi-finishing of steels, with GQ chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	GQ
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GQ
DNMG1506	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GQ



DNMG-GR

55° negative insert for roughing steels, with GR chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Roughing
Chipbreaker	GR
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1506	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GR



DNMG-HQ

55° negative cermet insert for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C ★ · ITC10 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8	ITC10 - IT115C	HQ



DNMG-SF

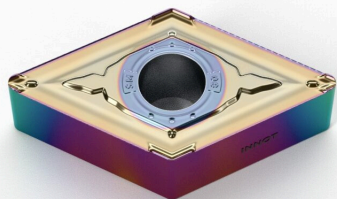
55° negative insert for finishing superalloys and titanium, with SF chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Finishing
Chipbreaker	SF
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8	IT7115 - IT9205 - IT9215	SF
DNMG1506	0.4 - 0.8	IT7115 - IT9205 - IT9215	SF



DNMG-SM

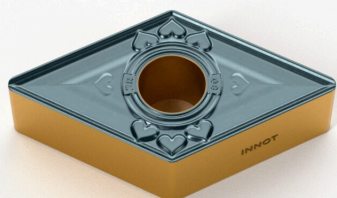
55° negative insert from semi-finishing to roughing of superalloys and titanium, with SM chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Semi-finishing · Roughing
Chipbreaker	SM
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8 - 1.2	IT7115 - IT9205 - IT9215	SM
DNMG1506	0.4 - 0.8 - 1.2	IT7115 - IT9205 - IT9215	SM



DNMG-ZR

55° negative insert for turning ductile cast iron, with ZR chipbreaker and CVD grade IT6215.

ISO materials	K
Operation	Finishing · Semi-finishing · Roughing
Chipbreaker	ZR
INNOT grades	IT6215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DNMG1504	0.4 - 0.8 - 1.2	IT6215	ZR
DNMG1506	0.4 - 0.8 - 1.2	IT6215	ZR

SNMG - 90° square



SNMA

90° flat negative square insert, without chipbreaker, for turning cast iron with CVD grade IT6115.

ISO materials	K
Operation	Roughing
Chipbreaker	Flat (no chipbreaker)
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMA1204	0.4 - 0.8 - 1.2	IT6115	Flat (no chipbreaker)
SNMA1506	0.8 - 1.2 - 1.6	IT6115	Flat (no chipbreaker)
SNMA1906	1.2 - 1.6	IT6115	Flat (no chipbreaker)



SNMG cast iron

90° negative square insert for turning cast iron, with universal double-sided chipbreaker and CVD grade IT6115.

ISO materials	K
Operation	Semi-finishing · Roughing
Chipbreaker	Universal cast iron
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4 - 0.8 - 1.2	IT6115	Universal cast iron
SNMG1506	0.8 - 1.2 - 1.6	IT6115	Universal cast iron
SNMG1906	1.2 - 1.6	IT6115	Universal cast iron



SNMG-BF

90° negative square insert for finishing stainless steels, with BF chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Finishing
Chipbreaker	BF
INNOT grades	IT7125 · IT7225★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4 - 0.8	IT7125 - IT7225	BF



SNMG-BM

90° negative square insert for semi-finishing stainless steels, with BM chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Semi-finishing
Chipbreaker	BM
INNOT grades	IT7125 · IT7225★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4 - 0.8 - 1.2	IT7125 - IT7225	BM



SNMG-BR

90° negative square insert for roughing stainless steels, with BR chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Roughing
Chipbreaker	BR
INNOT grades	IT7125 · IT7225★
Nose radii	0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.8 - 1.2	IT7125 - IT7225	BR
SNMG1506	1.2	IT7125 - IT7225	BR
SNMG1906	1.6	IT7125 - IT7225	BR



SNMG-GF

90° negative square insert for finishing steels, with GF chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GF
INNOT grades	IT8105★ · IT8115 · IT8125 · IT8225★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GF



SNMG-GM

90° negative square insert for semi-finishing steels, with GM chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Semi-finishing
Chipbreaker	GM
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GM
SNMG1906	1.2 - 1.6	IT8105 - IT8115 - IT8125 - IT8225	GM



SNMG-GQ

90° negative square insert for finishing and semi-finishing of steels, with GQ chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	GQ
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	1.2	IT8105 - IT8115 - IT8125 - IT8225	GQ



SNMG-GR

90° negative square insert for roughing steels, with GR chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Roughing
Chipbreaker	GR
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GR
SNMG1506	0.8 - 1.2 - 1.6	IT8105 - IT8115 - IT8125 - IT8225	GR
SNMG1906	0.8 - 1.2 - 1.6	IT8105 - IT8115 - IT8125 - IT8225	GR



SNMG-HQ

90° negative square cermet insert for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C★ · ITC10★
Nose radii	0.4 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4	ITC10 - IT115C	HQ



SNMG-SF

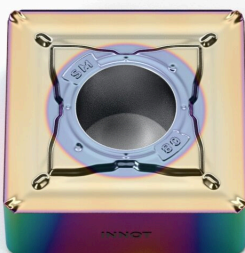
90° negative square insert for finishing superalloys and titanium, with SF chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Finishing
Chipbreaker	SF
INNOT grades	IT7115 · IT9205★ · IT9215★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4 - 0.8 - 1.2	IT7115 - IT9205 - IT9215	SF



SNMG-SM

90° negative square insert from semi-finishing to roughing of superalloys and titanium, with SM chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Semi-finishing · Roughing
Chipbreaker	SM
INNOT grades	IT7115 · IT9205★ · IT9215★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4 - 0.8 - 1.2	IT7115 - IT9205 - IT9215	SM



SNMG-ZR

90° negative square insert for turning ductile cast iron, with ZR chipbreaker and CVD grade IT6215.

ISO materials	K
Operation	Finishing · Semi-finishing · Roughing
Chipbreaker	ZR
INNOT grades	IT6215★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMG1204	0.4 · 0.8 · 1.2	IT6215	ZR



SNMM-GX

90° negative square insert for heavy roughing of steels, with GX chipbreaker and INNOT CVD grades. For the deepest cuts and the highest feeds.

ISO materials	P
Operation	Heavy-duty machining
Chipbreaker	GX
INNOT grades	IT8115★ · IT8125 · IT8135 · IT8225★
Nose radii	0.8 · 1.2 · 1.6 · 2.4 · 3.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMM1906	0.8 · 1.2 · 1.6 · 2.4	IT8115 · IT8125 · IT8225 · IT8135	GX
SNMM2507	1.6 · 2.4 · 3.2	IT8115 · IT8125 · IT8225 · IT8135	GX
SNMM2509	1.6 · 2.4 · 3.2	IT8115 · IT8125 · IT8225 · IT8135	GX



SNMM-GZ

90° negative square insert for heavy roughing of steels, with GZ chipbreaker and INNOT CVD grades. Large depths of cut and high feeds.

ISO materials	P
Operation	Heavy-duty machining
Chipbreaker	GZ
INNOT grades	IT8115★ · IT8125 · IT8135 · IT8225★
Nose radii	0.8 · 1.2 · 1.6 · 2.4 · 3.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SNMM1506	1.2	IT8115 · IT8125 · IT8225 · IT8135	GZ
SNMM1906	0.8 · 1.2 · 1.6 · 2.4	IT8115 · IT8125 · IT8225 · IT8135	GZ
SNMM2509	2.4 · 3.2	IT8115 · IT8125 · IT8225 · IT8135	GZ

TNMG - 60° triangular



TNMA

60° flat negative triangular insert, without chipbreaker, for turning cast iron with CVD grade IT6115.

ISO materials	K
Operation	Roughing
Chipbreaker	Flat (no chipbreaker)
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMA1604	0.4 - 0.8 - 1.2	IT6115	Flat (no chipbreaker)
TNMA2204	0.8 - 1.2 - 1.6	IT6115	Flat (no chipbreaker)



TNMG cast iron

60° negative triangular insert for turning cast iron, with universal double-sided chipbreaker and CVD grade IT6115.

ISO materials	K
Operation	Semi-finishing · Roughing
Chipbreaker	Universal cast iron
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8 - 1.2	IT6115	Universal cast iron
TNMG2204	0.8 - 1.2 - 1.6	IT6115	Universal cast iron



TNMG-BF

60° negative triangular insert for finishing stainless steels, with BF chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Finishing
Chipbreaker	BF
INNOT grades	IT7125 · IT7225★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8	IT7125 - IT7225	BF



TNMG-BM

60° negative triangular insert for semi-finishing stainless steels, with BM chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Semi-finishing
Chipbreaker	BM
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8 - 1.2	IT7125 - IT7225	BM



TNMG-BR

60° negative triangular insert for roughing stainless steels, with BR chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Roughing
Chipbreaker	BR
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.8 - 1.2	IT7125 - IT7225	BR



TNMG-GC

60° negative triangular insert for finishing steels with excellent surface quality, with GC chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GC
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GC



TNMG-GF

60° negative triangular insert for finishing steels, with GF chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GF
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GF



TNMG-GM

60° negative triangular insert for semi-finishing steels, with GM chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Semi-finishing
Chipbreaker	GM
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GM
TNMG2204	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GM



TNMG-GQ

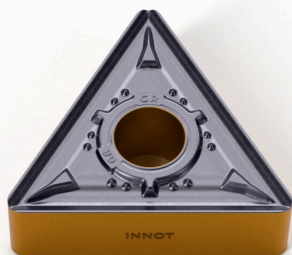
60° negative triangular insert for finishing and semi-finishing of steels, with GQ chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	GQ
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GQ



TNMG-GR

60° negative triangular insert for roughing steels, with GR chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Roughing
Chipbreaker	GR
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GR



TNMG-HQ

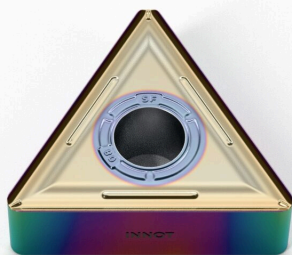
60° negative triangular cermet insert for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C ★ · ITC10 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8	ITC10 - IT115C	HQ



TNMG-SF

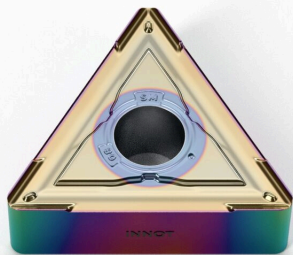
60° negative triangular insert for finishing superalloys and titanium, with SF chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Finishing
Chipbreaker	SF
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8	IT7115 - IT9205 - IT9215	SF



TNMG-SM

60° negative triangular insert from semi-finishing to roughing of superalloys and titanium, with SM chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Semi-finishing · Roughing
Chipbreaker	SM
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8 - 1.2	IT7115 - IT9205 - IT9215	SM



TNMG-ZR

60° negative triangular insert for turning ductile cast iron, with ZR chipbreaker and CVD grade IT6215.

ISO materials	K
Operation	Finishing · Semi-finishing · Roughing
Chipbreaker	ZR
INNOT grades	IT6215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TNMG1604	0.4 - 0.8 - 1.2	IT6215	ZR

VNMG - 35° rhombic



VNMA

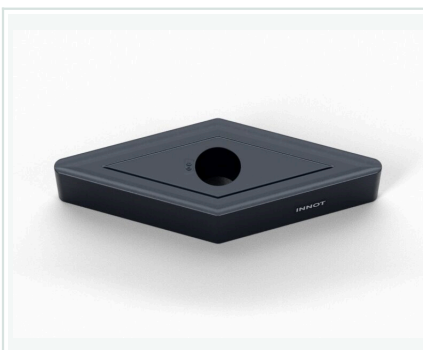
35° flat negative rhombic insert, without chipbreaker, for turning cast iron with CVD grade IT6115.

ISO materials	K
Operation	Roughing
Chipbreaker	Flat (no chipbreaker)
INNOT grades	IT6115 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMA1604	0.4 - 0.8	IT6115	Flat (no chipbreaker)



VNMG cast iron

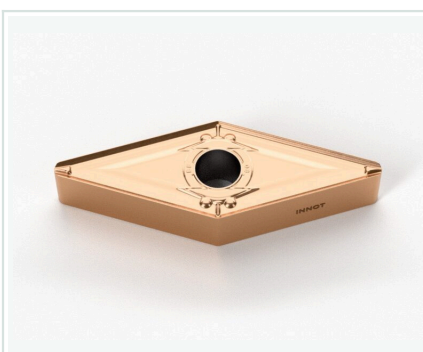
35° negative rhombic insert for turning cast iron, with universal double-sided chipbreaker and CVD grade IT6115.

ISO materials	K
Operation	Semi-finishing · Roughing
Chipbreaker	Universal cast iron
INNOT grades	IT6115 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8	IT6115	Universal cast iron



VNMG-BF

35° negative rhombic insert for finishing stainless steels, with BF chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Finishing
Chipbreaker	BF
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8	IT7125 - IT7225	BF



VNMG-BM

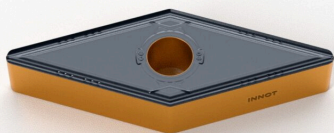
35° negative rhombic insert for semi-finishing stainless steels, with BM chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Semi-finishing
Chipbreaker	BM
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8 - 1.2	IT7125 - IT7225	BM



VNMG-GC

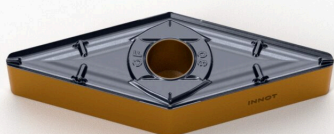
35° negative rhombic insert for finishing steels with excellent surface quality, with GC chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GC
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GC



VNMG-GF

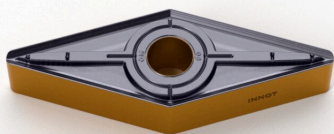
35° negative rhombic insert for finishing steels, with GF chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GF
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.2 - 0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GF



VNMG-GM

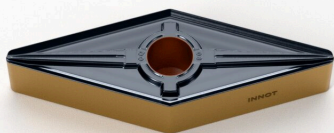
35° negative rhombic insert for semi-finishing steels, with GM chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Semi-finishing
Chipbreaker	GM
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GM



VNMG-GQ

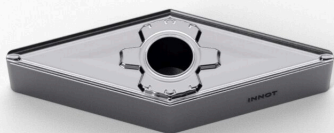
35° negative rhombic insert for finishing and semi-finishing of steels, with GQ chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	GQ
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GQ



VNMG-HQ

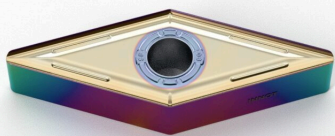
35° negative rhombic cermet insert for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C ★ · ITC10 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8	ITC10 - IT115C	HQ



VNMG-SF

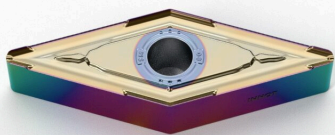
35° negative rhombic insert for finishing superalloys and titanium, with SF chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Finishing
Chipbreaker	SF
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8	IT7115 - IT9205 - IT9215	SF



VNMG-SM

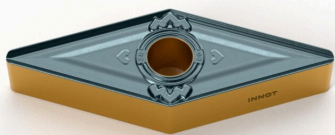
35° negative rhombic insert from semi-finishing to roughing of superalloys and titanium, with SM chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Semi-finishing · Roughing
Chipbreaker	SM
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8	IT7115 - IT9205 - IT9215	SM



VNMG-ZR

35° negative rhombic insert for turning ductile cast iron, with ZR chipbreaker and CVD grade IT6215.

ISO materials	K
Operation	Finishing · Semi-finishing · Roughing
Chipbreaker	ZR
INNOT grades	IT6215 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VNMG1604	0.4 - 0.8	IT6215	ZR

WNMG - 80° trigon



WNMA

80° flat negative trigon insert, without chipbreaker, for turning cast iron with CVD grade IT6115.

ISO materials	K
Operation	Roughing
Chipbreaker	Flat (no chipbreaker)
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNMA0604	0.4 - 0.8	IT6115	Flat (no chipbreaker)
WNMA0804	0.4 - 0.8 - 1.2 - 1.6	IT6115	Flat (no chipbreaker)



WNMG cast iron

80° negative trigon insert for turning cast iron, with universal double-sided chipbreaker and CVD grade IT6115.

ISO materials	K
Operation	Semi-finishing · Roughing
Chipbreaker	Universal cast iron
INNOT grades	IT6115★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNMG0804	0.4 - 0.8 - 1.2	IT6115	Universal cast iron



WNMG-BF

80° negative trigon insert for finishing stainless steels, with BF chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Finishing
Chipbreaker	BF
INNOT grades	IT7125 · IT7225★
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNMG0804	0.2 - 0.4 - 0.8	IT7125 - IT7225	BF



WNUMG-BM

80° negative trigon insert for semi-finishing stainless steels, with BM chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Semi-finishing
Chipbreaker	BM
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNUMG06T3	1.2	IT7125 - IT7225	BM
WNUMG0604	1.2	IT7125 - IT7225	BM
WNUMG0804	0.4 - 0.8 - 1.2	IT7125 - IT7225	BM



WNUMG-BR

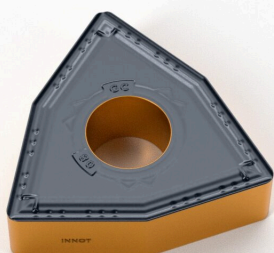
80° negative trigon insert for roughing stainless steels, with BR chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Roughing
Chipbreaker	BR
INNOT grades	IT7125 · IT7225 ★
Nose radii	0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNUMG0804	0.8 - 1.2	IT7125 - IT7225	BR



WNUMG-GC

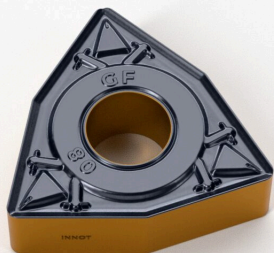
80° negative trigon insert for finishing steels with excellent surface quality, with GC chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GC
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNUMG0804	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GC



WNMG-GF

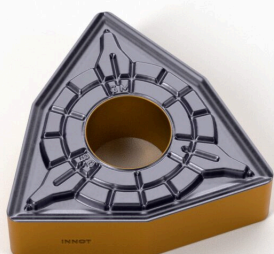
80° negative trigon insert for finishing steels, with GF chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing
Chipbreaker	GF
INNOT grades	IT8105 ★ · IT8115 · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNMG0604	0.8	IT8105 - IT8115 - IT8125 - IT8225	GF
WNMG0804	0.4 - 0.8	IT8105 - IT8115 - IT8125 - IT8225	GF



WNMG-GM

80° negative trigon insert for semi-finishing steels, with GM chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Semi-finishing
Chipbreaker	GM
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNMG0804	0.4 - 0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GM



WNMG-GQ

80° negative trigon insert for finishing and semi-finishing of steels, with GQ chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	GQ
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 · 1.6 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNMG0604	1.2	IT8105 - IT8115 - IT8125 - IT8225	GQ
WNMG0804	0.4 - 0.8 - 1.2 - 1.6	IT8105 - IT8115 - IT8125 - IT8225	GQ



WNUMG-GR

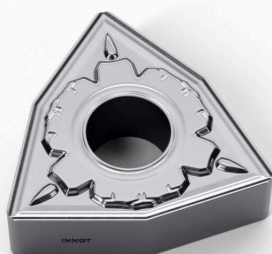
80° negative trigon insert for roughing steels, with GR chipbreaker and INNOT CVD grades.

ISO materials	P
Operation	Roughing
Chipbreaker	GR
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNUMG0804	0.8 - 1.2	IT8105 - IT8115 - IT8125 - IT8225	GR



WNUMG-HQ

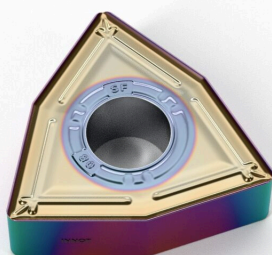
80° negative trigon cermet insert for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C ★ · ITC10 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNUMG0804	0.4 - 0.8	ITC10 - IT115C	HQ



WNUMG-SF

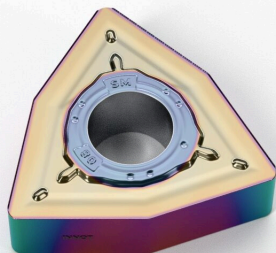
80° negative trigon insert for finishing superalloys and titanium, with SF chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Finishing
Chipbreaker	SF
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNUMG0804	0.4 - 0.8	IT7115 - IT9205 - IT9215	SF



WNMG-SM

80° negative trigon insert from semi-finishing to roughing of superalloys and titanium, with SM chipbreaker and INNOT PVD grades.

ISO materials	S
Operation	Semi-finishing · Roughing
Chipbreaker	SM
INNOT grades	IT7115 · IT9205 ★ · IT9215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNMG0804	0.4 - 0.8 - 1.2	IT7115 - IT9205 - IT9215	SM



WNMG-ZR

80° negative trigon insert for turning ductile cast iron, with ZR chipbreaker and CVD grade IT6215.

ISO materials	K
Operation	Finishing · Semi-finishing · Roughing
Chipbreaker	ZR
INNOT grades	IT6215 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
WNMG0804	0.4 - 0.8 - 1.2	IT6215	ZR

Positive inserts

CCMT - 80° rhombic



CCGT-AK

Ground 80° positive insert (CCGT) for turning aluminium, with AK chipbreaker and INNOT uncoated carbide grades.

ISO materials	N
Operation	Finishing
Chipbreaker	AK
INNOT grades	ITK10★ · ITK20
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CCGT0602	0.2 - 0.4	ITK10 - ITK20	AK
CCGT09T3	0.2 - 0.4 - 0.8	ITK10 - ITK20	AK
CCGT1204	0.4 - 0.8	ITK10 - ITK20	AK



CCMT-HQ

80° positive cermet insert (CCMT) for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C★ · ITC10★
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CCMT0602	0.4	ITC10 - IT115C	HQ
CCMT09T3	0.2 - 0.4 - 0.8	ITC10 - IT115C	HQ
CPMH0903	0.8	ITC10 - IT115C	HQ



CCMT-TF

80° positive insert (CCMT) for finishing steels, stainless steels and superalloys, with TF chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M S
Operation	Finishing
Chipbreaker	TF
INNOT grades	IT7125 · IT7225★ · IT8115★ · IT8125 · IT8225★ · IT9205★ · IT9215
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CCMT0602	0.2 - 0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF
CCMT09T3	0.2 - 0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF
CCMT1204	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF



CCMT-TM

80° positive insert (CCMT) for semi-finishing of steels and stainless steels, external and boring, with TM chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M
Operation	Semi-finishing
Chipbreaker	TM
INNOT grades	IT7125 · IT7225★ · IT8115★ · IT8125 · IT8225★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
CCMT0602	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM
CCMT09T3	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM
CCMT1204	0.4 - 0.8 - 1.2	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM

DCMT - 55° rhombic



DCGT-AK

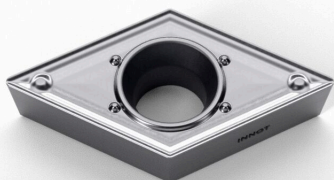
Ground 55° positive insert (DCGT) for turning aluminium, with AK chipbreaker and INNOT uncoated carbide grades.

ISO materials	N
Operation	Finishing
Chipbreaker	AK
INNOT grades	ITK10 · ITK20
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DCGT0702	0.2 - 0.4	ITK10 - ITK20	AK
DCGT11T3	0.2 - 0.4 - 0.8	ITK10 - ITK20	AK



DCMT-HQ

55° positive cermet insert (DCMT) for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C · ITC10
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DCMT0702	0.2 - 0.4 - 0.8	ITC10 - IT115C	HQ
DCMT11T3	0.2 - 0.4 - 0.8	ITC10 - IT115C	HQ



DCMT-TF

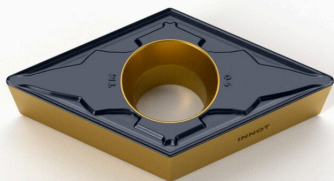
55° positive insert (DCMT) for finishing steels, stainless steels and superalloys, with TF chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M S
Operation	Finishing
Chipbreaker	TF
INNOT grades	IT7125 · IT7225 · IT8115 · IT8125 · IT8225 · IT9205 · IT9215
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DCMT0702	0.2 - 0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF
DCMT11T3	0.2 - 0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF



DCMT-TM

55° positive insert (DCMT) for semi-finishing of steels and stainless steels, external and boring, with TM chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M
Operation	Semi-finishing
Chipbreaker	TM
INNOT grades	IT7125 · IT7225 ★ · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
DCMT0702	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM
DCMT11T3	0.4 - 0.8 - 1.2	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM

SCMT - 90° square



SCMT-TF

90° positive square insert (SCMT) for finishing steels, stainless steels and superalloys, with TF chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M S
Operation	Finishing
Chipbreaker	TF
INNOT grades	IT7125 · IT7225 ★ · IT8115 ★ · IT8125 · IT8225 ★ · IT9205 ★ · IT9215
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SCMT09T3	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF
SCMT1204	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF



SCMT-TM

90° positive square insert (SCMT) for semi-finishing of steels and stainless steels, external and boring, with TM chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M
Operation	Semi-finishing
Chipbreaker	TM
INNOT grades	IT7125 · IT7225 ★ · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
SCMT09T3	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM
SCMT1204	0.4 - 0.8 - 1.2	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM

TCMT - 60° triangular



TCGT-AK

Ground 60° positive triangular insert (TCGT) for turning aluminium, with AK chipbreaker and INNOT uncoated carbide grades.

ISO materials	N
Operation	Finishing
Chipbreaker	AK
INNOT grades	ITK10 · ITK20
Nose radii	0.4 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TCGT0902	0.4	ITK10 - ITK20	AK
TCGT1102	0.4	ITK10 - ITK20	AK
TCGT16T3	0.4	ITK10 - ITK20	AK



TCMT-HQ

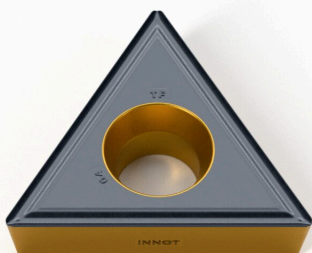
60° positive triangular cermet insert (TCMT) for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C · ITC10
Nose radii	0.4 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TCMT1102	0.4	ITC10 - IT115C	HQ



TCMT-TF

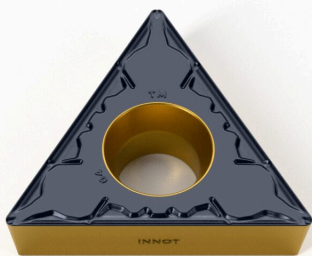
60° positive triangular insert (TCMT) for finishing steels, stainless steels and superalloys, with TF chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M S
Operation	Finishing
Chipbreaker	TF
INNOT grades	IT7125 · IT7225 · IT8115 · IT8125 · IT8225 · IT9205 · IT9215
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TCMT1102	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF
TCMT16T3	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF



TCMT-TM

60° positive triangular insert (TCMT) for semi-finishing of steels and stainless steels, external and boring, with TM chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M
Operation	Semi-finishing
Chipbreaker	TM
INNOT grades	IT7125 · IT7225 ★ · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
TCMT1102	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM
TCMT16T3	0.4 - 0.8 - 1.2	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM

VBMT / VCMT - 35° rhombic



VBGT-AK

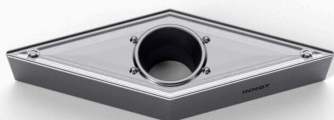
Ground 35° positive rhombic insert (VBGT) for turning aluminium, with AK chipbreaker and INNOT uncoated carbide grades.

ISO materials	N
Operation	Finishing
Chipbreaker	AK
INNOT grades	ITK10 ★ · ITK20
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VBGT1604	0.2 - 0.4 - 0.8	ITK10 - ITK20	AK



VBMT-HQ

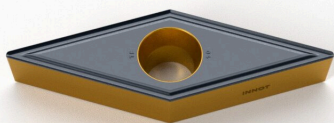
35° positive rhombic cermet insert (VBMT) for finishing and semi-finishing of steels with high surface quality.

ISO materials	P
Operation	Finishing · Semi-finishing
Chipbreaker	HQ
INNOT grades	IT115C ★ · ITC10 ★
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VBMT1103	0.4 - 0.8	ITC10 - IT115C	HQ
VBMT1604	0.4 - 0.8	ITC10 - IT115C	HQ



VBMT-TF

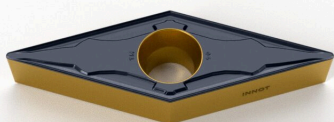
35° positive rhombic insert (VBMT) for finishing steels, stainless steels and superalloys, with TF chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M S
Operation	Finishing
Chipbreaker	TF
INNOT grades	IT7125 · IT7225★ · IT8115★ · IT8125 · IT8225★ · IT9205★ · IT9215
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VBMT1103	0.2 - 0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF
VBMT1604	0.2 - 0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF



VBMT-TM

35° positive rhombic insert (VBMT) for semi-finishing of steels and stainless steels, external and boring, with TM chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M
Operation	Semi-finishing
Chipbreaker	TM
INNOT grades	IT7125 · IT7225★ · IT8115★ · IT8125 · IT8225★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VBMT1103	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM
VBMT1604	0.4 - 0.8 - 1.2	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM



VCGT-AK

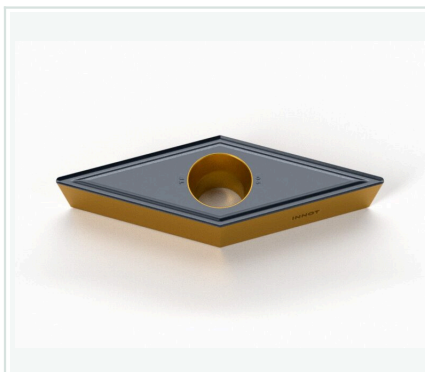
Ground 35° positive rhombic insert (VCGT) for turning aluminium, with AK chipbreaker and INNOT uncoated carbide grades.

ISO materials	N
Operation	Finishing
Chipbreaker	AK
INNOT grades	ITK10★ · ITK20
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VCGT1103	0.2 - 0.4	ITK10 - ITK20	AK
VCGT1604	0.2 - 0.4 - 0.8	ITK10 - ITK20	AK



VCMT-TF

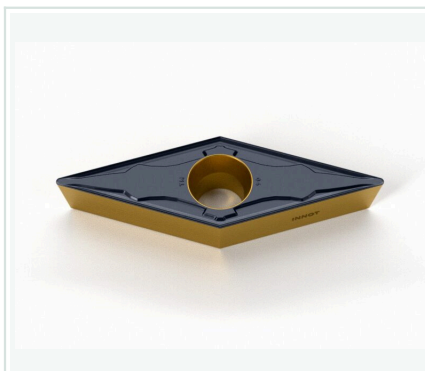
35° positive rhombic insert (VCMT) for finishing steels, stainless steels and superalloys, with TF chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M S
Operation	Finishing
Chipbreaker	TF
INNOT grades	IT7125 · IT7225 ★ · IT8115 ★ · IT8125 · IT8225 ★ · IT9205 ★ · IT9215
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VCMT1103	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF
VCMT1604	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225 - IT9205 - IT9215	TF



VCMT-TM

35° positive rhombic insert (VCMT) for semi-finishing of steels and stainless steels, external and boring, with TM chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M
Operation	Semi-finishing
Chipbreaker	TM
INNOT grades	IT7125 · IT7225 ★ · IT8115 ★ · IT8125 · IT8225 ★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

ISO	RADIUS (RE)	AVAILABLE GRADES	CHIPBREAKER
VCMT1103	0.4 - 0.8	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM
VCMT1604	0.4 - 0.8 - 1.2	IT8115 - IT8125 - IT8225 - IT7125 - IT7225	TM

RCMX - Round



RCMX

Positive round insert (RCMX) for profiling and roughing of steel profiles, with INNOT CVD grades.

ISO materials	P
Operation	Roughing · Special
Chipbreaker	Universal (MO)
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★



Full data sheet and cutting data

ISO	DIAMETER (IC)	AVAILABLE GRADES	CHIPBREAKER
RCMX1003MO	Ø10	IT8105 - IT8115 - IT8125 - IT8225	Universal (MO)
RCMX1204MO	Ø12	IT8105 - IT8115 - IT8125 - IT8225	Universal (MO)
RCMX1606MO	Ø16	IT8105 - IT8115 - IT8125 - IT8225	Universal (MO)
RCMX2006MO	Ø20	IT8105 - IT8115 - IT8125 - IT8225	Universal (MO)
RCMX2507MO	Ø25	IT8105 - IT8115 - IT8125 - IT8225	Universal (MO)
RCMX3209MO	Ø32	IT8105 - IT8115 - IT8125 - IT8225	Universal (MO)



RCMX-MR

Positive round insert (RCMX) with MR chipbreaker for profiling with large depths of cut in steel, with INNOT CVD grades.

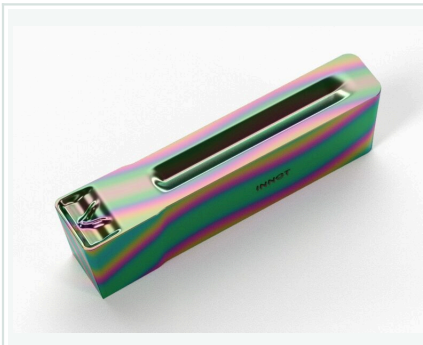
ISO materials	P
Operation	Roughing · Special
Chipbreaker	MR
INNOT grades	IT8105 · IT8115 ★ · IT8125 · IT8225 ★



Full data sheet and cutting data

ISO	DIAMETER (IC)	AVAILABLE GRADES	CHIPBREAKER
RCMX1606MO-MR	Ø16	IT8105 - IT8115 - IT8125 - IT8225	MR
RCMX2006MO-MR	Ø20	IT8105 - IT8115 - IT8125 - IT8225	MR
RCMX2507MO-MR	Ø25	IT8105 - IT8115 - IT8125 - IT8225	MR

Parting and grooving



HCMA-ST

Single-ended insert for parting, grooving and side turning, with ST chipbreaker and INNOT PVD grades.

ISO materials	M S
Operation	Parting and grooving
Chipbreaker	ST
INNOT grades	IT7125 · IT7225 ★ · IT9205 · IT9215 ★
Nose radii	0.4 · 0.6 · 0.8 mm



Full data sheet and cutting data

Code	Width CW	Corner radius RE	INSL	Available grades
HCMA3004-ST	3.0 mm (±0.025)	0.4	15.3	IT7125 - IT7225 - IT9205 - IT9215
HCMA4006-ST	4.0 mm (±0.025)	0.6	15.3	IT7125 - IT7225 - IT9205 - IT9215
HCMA5006-ST	5.0 mm (±0.025)	0.6	15.3	IT7125 - IT7225 - IT9205 - IT9215
HCMA6008-ST	6.0 mm (±0.025)	0.8	15.3	IT7125 - IT7225 - IT9205 - IT9215



HPMA-SR

Single-ended insert for profile grooving, with SR radiused cutting edge and INNOT PVD grades.

ISO materials	M S
Operation	Profiling
Chipbreaker	SR
INNOT grades	IT7125 · IT7225 ★ · IT9205 · IT9215 ★
Nose radii	1.5 · 2 · 2.5 · 3 mm



Full data sheet and cutting data

Code	Width CW	Corner radius RE	INSL	Available grades
HPMA3015-SR	3.0 mm (±0.025)	1.5	15.3	IT7125 - IT7225 - IT9205 - IT9215
HPMA4020-SR	4.0 mm (±0.025)	2.0	15.3	IT7125 - IT7225 - IT9205 - IT9215
HPMA5025-SR	5.0 mm (±0.025)	2.5	15.3	IT7125 - IT7225 - IT9205 - IT9215
HPMA6030-SR	6.0 mm (±0.025)	3.0	15.3	IT7125 - IT7225 - IT9205 - IT9215



QCMB-GT

Double-ended insert for high-feed parting and grooving, with GT chipbreaker and INNOT CVD, PVD and cermet grades.

ISO materials	P M K
Operation	Parting and grooving
Chipbreaker	GT
INNOT grades	IT6115 · IT7125 · IT7225 ★ · IT8225 ★ · ITC10
Nose radii	0.2 · 0.3 mm



Full data sheet and cutting data

Code	Width CW	Corner radius RE	INSL	Available grades
QCMB1502-GT	1.5 mm (+0.05/0)	0.2	16.0	IT8225 - IT6115 - IT7125 - IT7225 - ITC10
QCMB2002-GT	2.0 mm (+0.05/0)	0.2	16.0	IT8225 - IT6115 - IT7125 - IT7225 - ITC10
QCMB2502-GT	2.5 mm (+0.05/0)	0.2	18.5	IT8225 - IT6115 - IT7125 - IT7225 - ITC10
QCMB3002-GT	3.0 mm (+0.05/0)	0.2	21.0	IT8225 - IT6115 - IT7125 - IT7225 - ITC10
QCMB4002-GT	4.0 mm (+0.05/0)	0.2	21.0	IT8225 - IT6115 - IT7125 - IT7225 - ITC10
QCMB5003-GT	5.0 mm (+0.05/0)	0.3	26.0	IT8225 - IT6115 - IT7125 - IT7225 - ITC10

+ 1 more rows on the online data sheet



QCMB-CT

Double-ended insert for grooving and side turning, with CT chipbreaker and INNOT CVD, PVD and cermet grades.

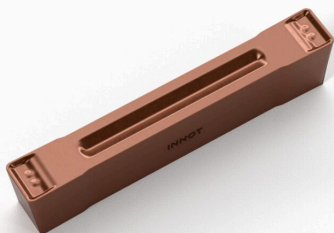
ISO materials	P M K S
Operation	Parting and grooving
Chipbreaker	CT
INNOT grades	IT6115 · IT7115 · IT7125 · IT7225 ★ · IT8225 ★ · IT9205 ★ · IT9215 ★ · ITC10
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

Code	Width CW	Corner radius RE	INSL	Available grades
QCMB1502-CT	1.5 mm (+0.05/0)	0.2	16.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225 - IT9205 - IT921...
QCMB2002-CT	2.0 mm (+0.05/0)	0.2	16.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225 - IT9205 - IT921...
QCMB2502-CT	2.5 mm (+0.05/0)	0.2	18.5	IT8225 - IT6115 - IT7115 - IT7125 - IT7225 - IT9205 - IT921...
QCMB3004-CT	3.0 mm (+0.05/0)	0.4	21.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225 - IT9205 - IT921...
QCMB4004-CT	4.0 mm (+0.05/0)	0.4	21.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225 - IT9205 - IT921...
QCMB5008-CT	5.0 mm (+0.05/0)	0.8	26.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225 - IT9205 - IT921...

+ 2 more rows on the online data sheet



QCKB

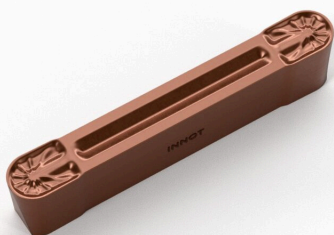
Ground double-ended insert for precision grooves, with universal chipbreaker and INNOT PVD grades.

ISO materials	M
Operation	Parting and grooving
Chipbreaker	Universale (gole)
INNOT grades	IT7125 · IT7225★
Nose radii	0.2 · 0.4 · 0.8 mm



Full data sheet and cutting data

Code	Width CW	Corner radius RE	INSL	Available grades
QCKB2002	2.0 mm (±0.02)	0.2	16.0	IT7125 - IT7225
QCKB2502	2.5 mm (±0.02)	0.2	18.5	IT7125 - IT7225
QCKB3004	3.0 mm (±0.02)	0.4	21.0	IT7125 - IT7225
QCKB4004	4.0 mm (±0.02)	0.4	21.0	IT7125 - IT7225
QCKB5008	5.0 mm (±0.02)	0.8	26.0	IT7125 - IT7225



QPMB-RM

Double-ended full-radius insert for profile grooving, with RM chipbreaker and INNOT CVD and PVD grades.

ISO materials	P M K S
Operation	Profiling
Chipbreaker	RM
INNOT grades	IT6115 · IT7115 · IT7125 · IT7225★ · IT8225★
Nose radii	1 · 1.5 · 2 · 2.5 · 3 mm



Full data sheet and cutting data

Code	Width CW	Corner radius RE	INSL	Available grades
QPMB2010-RM	2.0 mm (+0.05/0)	1.0	16.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225
QPMB3015-RM	3.0 mm (+0.05/0)	1.5	21.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225
QPMB4020-RM	4.0 mm (+0.05/0)	2.0	21.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225
QPMB5025-RM	5.0 mm (+0.05/0)	2.5	26.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225
QPMB6030-RM	6.0 mm (+0.05/0)	3.0	26.0	IT8225 - IT6115 - IT7115 - IT7125 - IT7225



QPEB-AK

Full-radius insert for grooves on aluminium alloy wheels, with sharp AK cutting edge and INNOT carbide grades.

ISO materials	N
Operation	Special
Chipbreaker	AK
INNOT grades	ITK10★ · ITK20★
Nose radii	4 mm



Full data sheet and cutting data

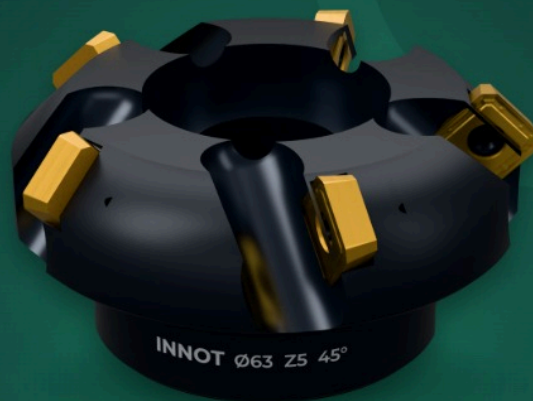
Code	Width CW	Corner radius RE	INSL	Available grades
QPEB8040-AK	8.0 mm (±0.025)	4.0	30.0	ITK10 - ITK20

Milling Inserts

Inserts for face milling, square shoulder, high feed, copy milling and helical cutters: multi-edge geometries that lower the cost per part, with INNOT grades for steels, stainless, cast irons, superalloys and hardened steels.

IN THIS CHAPTER

- › Face milling (8)
- › 90° square shoulder (5)
- › High feed (3)
- › Copy milling and profiling (7)
- › Helical cutters (1)



Face milling



ODMT / ODKT

Octagonal face milling insert with 16 usable cutting edges (8 per side): very low cost per edge and great stability.

ISO materials	P M K H
Operation	Face milling
INNOT grades	IT5110 · IT5120★ · IT5130★ · IT5210 · IT5220★ · IT6130★
Nose radii	0.8 mm



Full data sheet and cutting data

Code	IC	S	D1	BS	RE	APMX
ODKT0605ADN	15.875	5.56	5.5	1.2	0.8	4
ODMT060508-R	15.875	5.56	5.5	1.2	0.8	4



SNGX-GM / SNGX-GE

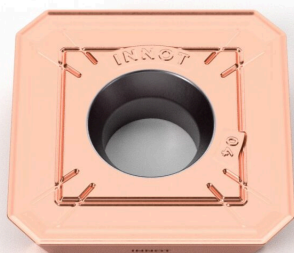
Double-sided square insert for face milling: 8 cutting edges per insert, universal GM geometry and GE for cast irons and interrupted cuts.

ISO materials	P M K H
Operation	Face milling
INNOT grades	IT5110 · IT5120★ · IT5130★ · IT5210 · IT5220★ · IT6130★
Nose radii	0.8 mm



Full data sheet and cutting data

Code	IC	S	D1	BS	RE	APMX
SNGX1005ANR-GM	10	5	4	1.2	0.8	4.7
SNGX1005ANR-GE	10	5	4	1.2	0.8	4.7



SEET / SEMT

Square insert for 45° face milling, with universal GM chipbreaker and FM for finishing.

ISO materials	P M K H
Operation	Face milling
INNOT grades	IT5110 · IT5120★ · IT5130★ · IT5210 · IT5220★ · IT6130★
Nose radii	1.5 mm



Full data sheet and cutting data

Code	IC	S	D1	BS	RE	APMX
SEET13T3-GM	13.4	3.97	4.1	1.4	1.5	6
SEMT13T3AGTN-FM	13.4	3.97	4.1	1.4	1.5	6



SZMX

Double-sided square insert for high-removal face milling, with GM chipbreaker.

ISO materials	P M K H
Operation	Face milling · Roughing
INNOT grades	IT5110 · IT5120★ · IT5130★ · IT5210 · IT5220★ · IT6130★
Nose radii	0.8 mm



Full data sheet and cutting data

Code	IC	S	D1	BS	RE	APMX
SZMX1206ANR-GM	13.4	6	4.6	1.4	0.8	6



SEKR / SEMR / SEEN

45° square insert for face milling: SEKR/SEMR in coated carbide, SEEN in cermet for finishing steels.

ISO materials	P M K H
Operation	Face milling · Finishing
INNOT grades	IT5110 · IT5120★ · IT5130★ · IT5210 · IT5220★ · IT6130★ · ITC10★
Nose radii	0.8 · 1.6 mm



Full data sheet and cutting data

Code	IC	S	D1	BS	RE	APMX
SEKR1203AFTN	12.7	3.18	2.5	1.3	1.6	5.5
SEMR1203AFTN	12.7	3.18	2.5	1.3	1.6	5.5
SEEN1203AFTN	12.7	3.18	2.5	1.2	0.8	5.5



HNMX / HNGX

Double-sided hexagonal insert for face milling: 12 cutting edges, F (finishing), M (medium) and R (roughing) geometries.

ISO materials	P M K H
Operation	Face milling
INNOT grades	IT5110 · IT5120★ · IT5130★ · IT5210 · IT5220★ · IT6130★
Nose radii	1 · 1.2 mm



Full data sheet and cutting data

Code	IC	S	D1	BS	RE	APMX
HNMX0906ANSN-F	16.5	6.34	4.9	1	1.2	5
HNMX0906ANSN-M	16.5	6.34	4.9	1	1.2	5
HNMX0906ANSN-R	16.5	6.34	4.9	1	1.2	5
HNGX0906ANSN	16.5	6.34	4.9	1.2	1	5



XNMX / XNGX

Double-sided heptagonal insert for face milling: 14 cutting edges, with dedicated W wipers for mirror finishing.

ISO materials	P M K S H
Operation	Face milling · Finishing
INNOT grades	IT5110 · IT5120★ · IT5130★ · IT5210 · IT6130★ · IT7140★ · IT8140★
Nose radii	0.8 · 1 · 1.2 · 1.5 mm



Full data sheet and cutting data

Code	IC	S	D1	BS	RE	APMX
XNMX070508-M	14.5	5	4.06	-	0.8	4.4
XNMX0705ANN-M	14.5	5	4.06	1	0.8	4.4
XNGX0705ANN-M	14.5	5	4.06	1	0.8	4.4
XNGX0705ANN-R	14.5	5	4.06	1	0.8	4.4
XNMX090612-M	19.05	5.85	5.5	-	1.2	6
XNMX0906ANN-M	19.05	5.85	5.5	1.4	0.8	6

+ 4 more rows on the online data sheet



SNGX-ZNN / SNMX

Double-sided square insert for face and shoulder milling with APMX up to 8 mm.

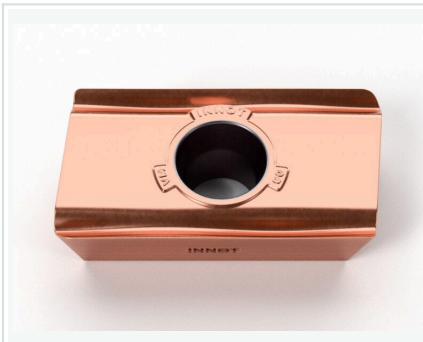
ISO materials	P M K H
Operation	Face milling · Semi-finishing
INNOT grades	IT5110 · IT5120★ · IT5130★ · IT5210 · IT5220★ · IT6130★
Nose radii	0.8 · 1.2 mm



Full data sheet and cutting data

Code	IC	S	D1	BS	RE	APMX
SNGX1005ZNN-GM	10	5	4	1	0.8	8
SNMX100512-GM	10	5	4	-	1.2	8

90° square shoulder



AOKT-VM

Insert for 90° square shoulder milling with VM chipbreaker, from the small AOKT06 to the robust AOKT16.

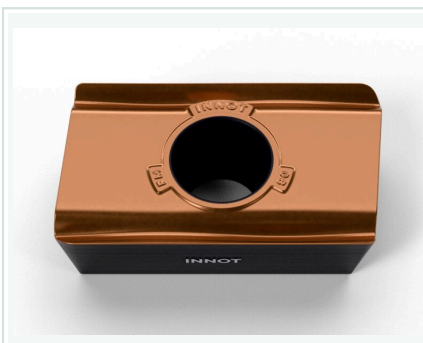
ISO materials	P M K S H
Operation	Semi-finishing
INNOT grades	IT530 · IT5110 · IT5120 · IT5130 · IT5210 · IT5220 · IT6130 · IT7240 · ITC10
Nose radii	0.2 · 0.4 · 0.8 · 1.2 · 1.6 · 2 · 3.2 mm



Full data sheet and cutting data

Code	L	W1	S	D1	RE	APMX
AOKT060202PEER-VM	7.61	4.2	2.38	2.1	0.2	4.5
AOKT060204PEER-VM	7.61	4.2	2.38	2.1	0.4	4.5
AOKT060208PEER-VM	7.61	4.2	2.38	2.1	0.8	4.5
AOKT113504PEER-VM	11.75	6.42	3.5	2.8	0.4	9.5
AOKT113508PEER-VM	11.75	6.42	3.5	2.8	0.8	9.5
AOKT113512PEER-VM	11.75	6.42	3.5	2.8	1.2	9.5

+ 6 more rows on the online data sheet



APKT-FM

Insert for 90° square shoulder milling, with FM chipbreaker and smooth cutting.

ISO materials	P M K H
Operation	Semi-finishing
INNOT grades	IT530 · IT5110 · IT5120 · IT5130 · IT5210 · IT5220 · IT6130 · ITC10
Nose radii	0.4 · 0.8 · 1.2 · 2 mm



Full data sheet and cutting data

Code	L	W1	S	D1	RE	APMX
APKT113604PEER-FM	11.3	6.25	3.6	2.8	0.4	9.5
APKT1136PEER-FM	11.3	6.25	3.6	2.8	0.8	9.5
APKT113612PEER-FM	11.3	6.25	3.6	2.8	1.2	9.5
APKT113620PEER-FM	11.3	6.25	3.6	2.8	2	9.5
APKT1605PDER-FM	17.42	9.33	5.2	4.5	0.8	14.5
APKT160512PDER-FM	17.42	9.33	5.2	4.5	1.2	14.5

+ 1 more rows on the online data sheet



ZNMU

Double-sided triangular insert for square shoulder milling: 6 cutting edges and GM, GL and GR chipbreakers.

ISO materials	P M K H
Operation	Semi-finishing · Roughing
INNOT grades	IT530 · IT5110 · IT5120 ★ · IT5130 ★ · IT5210 · IT5220 ★ · IT6130 ★ · ITC10
Nose radii	0.8 · 1.6 mm



Full data sheet and cutting data

Code	IC	S	D1	RE	APMX
ZNMU040308PNR-GM	7	3.65	2.8	0.8	4.2
ZNMU060408PNR-GM	10.16	4.41	4.2	0.8	6.3
ZNMU080608PNR-GM	12	6.35	4.6	0.8	7.3
ZNMU080608PNR-GL	12	6.35	4.6	0.8	7.3
ZNMU080608PNR-GR	12	6.35	4.6	0.8	7.3
ZNMU080616PNR-GR	12	6.35	4.6	1.6	7.3



APMT-HM / APGT-AK

Insert for 90° square shoulder milling: APMT-HM in coated carbide, APGT-AK polished for aluminium.

ISO materials	P M K N S H
Operation	Semi-finishing
INNOT grades	IT530 · IT5110 · IT5120 ★ · IT5130 ★ · IT5210 ★ · IT5220 ★ · IT6130 ★ · IT7240 · ITK10
Nose radii	0.8 · 1.6 · 2 · 3 mm



Full data sheet and cutting data

Code	L	W1	S	D1	RE	APMX
APMT1135PDER-HM	11.3	6.25	3.5	2.8	0.8	9.5
APMT113516PDER-HM	11.3	6.25	3.5	2.8	1.6	9.5
APMT1605PDER-HM	17.25	9.25	5.22	4.4	0.8	14.5
APMT160520PDER-HM	17.25	9.25	5.22	4.4	2	14.5
APMT160530PDER-HM	17.25	9.25	5.22	4.4	3	14.5
APGT1135PDFR-AK	11.3	6.25	3.5	2.8	0.8	9.5

+ 1 more rows on the online data sheet



LNHX

Tangential insert for square shoulder milling: mounted flat, it withstands high cutting forces.

ISO materials	P M K S
Operation	Roughing
INNOT grades	IT5120★ · IT5130★ · IT7140
Nose radii	0.4 · 0.8 mm



Full data sheet and cutting data

Code	L	W1	S	D1	RE	APMX
LNHX090404R-GM	9	8.5	4.5	3.4	0.4	8
LNHX130608R-GM	13	11.8	6.8	4.55	0.8	12

High feed



BLMP (high feed)

Double-sided insert for high-feed cutters: from BLMP 04 to 13, up to 2 mm/tooth, for steels, stainless steels, superalloys and hardened steels up to 65 HRC.

ISO materials	P M K S H
Operation	Semi-finishing · Roughing
INNOT grades	IT5110 · IT5210★ · IT5220★ · IT6130 · IT7140 · IT7240★
Nose radii	0.5 · 1 · 1.2 · 1.3 · 1.8 mm



Full data sheet and cutting data

Code	INSL	W1	S	RE	APMX	fz (mm/tooth)	Cutting edges
BLMP0402R-M	6	4.2	2.52	0.5	0.5	0.2-1.0	4
BLMP0402R-ML	6	4.2	2.52	0.5	0.5	0.2-0.8	4
BLMP0603R-M	9	6.39	3.73	1	1	0.3-1.2	4
BLMP0603R-ML	9	6.39	3.73	1	1	0.2-1.0	4
BLMP0603R-MM	9	6.39	3.73	1	1	0.3-1.0	4
BLMP0904R-M	11.94	9.2	4.79	1.2	1.5	0.3-1.3	4

+ 7 more rows on the online data sheet



SDMT / SDMW

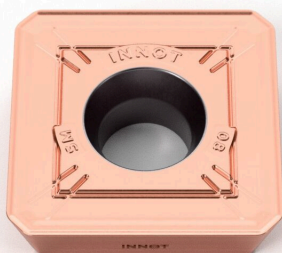
Insert for high-feed cutters: light cuts (up to 2.9 mm) with feeds up to 1.5 mm/tooth.

ISO materials	P M K H
Operation	Roughing
INNOT grades	IT530 · IT5110 · IT5120 ★ · IT5130 ★ · IT5210 · IT5220 ★ · IT6130
Nose radii	0.8 · 3 mm



Full data sheet and cutting data

Code	IC	S	D1	RE	APMX
SDMT1205ZTN-FM	12.7	5.56	4.6	3	2.3
SDMT1505ZTN-FM	15.875	5.56	5.5	0.8	2.9
SDMW1205ZTN	12.7	5.56	4.6	3	2.3
SDMW1505ZTN	15.875	5.56	5.5	0.8	2.9



SDKT-SM

High-feed insert for stainless steels and superalloys, with SM chipbreaker and positive cutting edge.

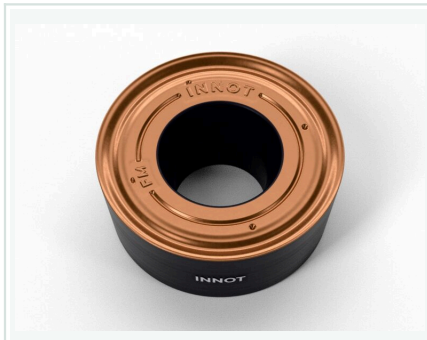
ISO materials	P M K S
Operation	Roughing
INNOT grades	IT5120 · IT5130 ★ · IT7140 ★ · IT7240 ★
Nose radii	1.2 · 2 mm



Full data sheet and cutting data

Code	IC	S	D1	RE	APMX
SDKT09T312ZDER-SM	9.525	3.97	4.16	1.2	1.2
SDKT120520ZDER-SM	12.788	5	4.45	2	1.4

Copy milling and profiling



RCKT-FM

Positive round insert for copy milling and face milling with a strong cutting edge and continuous profile.

ISO materials	P M K S H
Operation	Semi-finishing · Roughing
INNOT grades	IT530 · IT5110 · IT5120★ · IT5130★ · IT5210★ · IT5220★ · IT6130 · IT7240



Full data sheet and cutting data

Code	IC	S	D1	AN	APMX
RCKT10T3MO-FM	10	3.97	4.4	7°	5
RCKT1204MO-FM	12	4.76	4.4	7°	6
RCKT1606MO-FM	16	6.35	5.5	7°	8
RCKT2006MO-FM	20	6.35	6.55	7°	10



RPMT-HM / RPMW

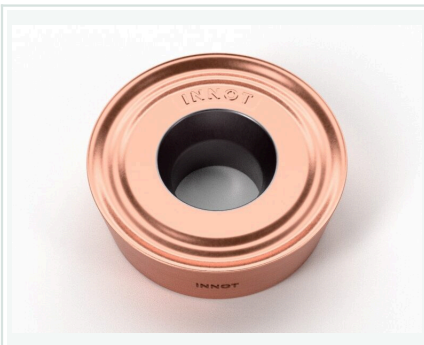
Round insert for copy milling of moulds and 3D surfaces, with 11° clearance angle.

ISO materials	P M K S H
Operation	Semi-finishing · Roughing
INNOT grades	IT530 · IT5110 · IT5120★ · IT5130★ · IT5210★ · IT5220★ · IT6130 · IT7240



Full data sheet and cutting data

Code	IC	S	D1	AN	APMX
RPMT08T2MO-HM	8	2.78	3.4	11°	4
RPMW1003MO	10	3.18	4.5	11°	5
RPMT1204MO-HM	12	4.76	4.4	11°	6



RPKT / RPMT-SM

Round insert for stainless steels, titanium and superalloys: MS/SM chipbreaker and AlCrN PVD grades.

ISO materials	P M S
Operation	Semi-finishing · Roughing
INNOT grades	IT7140★ · IT7240★ · IT8140



Full data sheet and cutting data

Code	IC	S	D1	AN	APMX
RPKT10T3MO-MS	10	3.97	3.4	11°	5
RPKT1204MO-MS	12	4.76	4.4	11°	6
RPKT1606MO-MS	16	6.35	5.5	11°	8
RPMT08T2MO-SM	8	2.78	3.4	11°	4
RPMT10T3MO-SM	10	3.97	4.4	11°	5
RPMT1204MO-SM	12	4.76	4.4	11°	6

+ 1 more rows on the online data sheet



RDMW / RDKW

Round insert with 15° clearance for copy milling cutters, from Ø5 to Ø16 mm.

ISO materials	P M K H
Operation	Finishing · Semi-finishing
INNOT grades	IT530 · IT5110 · IT5120★ · IT5130★ · IT5210★ · IT5220★ · IT6130



Full data sheet and cutting data

Code	IC	S	D1	AN	APMX
RDMW0501MO	5	1.4	2.16	15°	2.5
RDMW0602MO	6	2.38	2.5	15°	3
RDMW0702MO	7	2.38	2.9	15°	3.5
RDMW0802MO	8	2.38	3.4	15°	4
RDMW10T3MO	10	3.97	4.4	15°	5
RDMW1204MO	12	4.76	4.5	15°	6

+ 4 more rows on the online data sheet



BNM (ball nose)

Ball nose insert for copy milling cutters, from Ø12 to Ø32 mm, for finishing moulds and 3D surfaces.

ISO materials	P M K H
Operation	Finishing · Semi-finishing
INNOT grades	IT5130 · IT5210★ · IT5220
Nose radii	6 · 8 · 10 · 12.5 · 15 · 16 mm



Full data sheet and cutting data

Code	Ø (W1)	S	D1	RE	APMX
BNM1203-S	12	3	3.5	6	6
BNM1604-S	16	4	4	8	8
BNM2005-S	20	5	5	10	10
BNM2506-S	25	6	6	12.5	12.5
BNM3007-S	30	7	8	15	15
BNM3207-S	32	7	8	16	16

+ 4 more rows on the online data sheet



UNM-CE (copy milling)

Insert for large-radius copy milling cutters (RE up to 20 mm), for roughing and semi-finishing of moulds.

ISO materials	P M K S
Operation	Semi-finishing · Roughing
INNOT grades	IT5120 · IT5130★ · IT7140★
Nose radii	8 · 10 · 12.5 · 15 · 16 · 20 mm



Full data sheet and cutting data

Code	INSL	D1	S	AN	RE	APMX
UNM1603-CE	16	2.8	3.18	15°	8	16
UNM20T3-CE	19	4	3.97	15°	10	20
UNM2504-CE	24	4.7	4.76	15°	12.5	25
UNM3006-CE	27	5.5	6.35	15°	15	30
UNM3206-CE	31	5.5	6.35	15°	16	32
UNM4007-CE	38	6.7	7.94	11°	20	40



RDHX (15° round)

Ground round insert with 15° clearance for copy milling cutters, from Ø5 to Ø12 mm: moulds, 3D surfaces and hardened steels up to 65 HRC.

ISO materials	P M K S H
Operation	Finishing · Semi-finishing · Roughing
INNOT grades	IT5110 · IT5210★ · IT5220 · IT6130★ · IT7140 · IT7240★



Full data sheet and cutting data

Code	Ø IC	S	D1	AN	APMX	fz (mm/tooth)
RDHX0501MOE	5	1.59	2.2	15°	1.25	0.05-0.20
RDHX0702MOT	7	2.38	2.8	15°	1.75	0.06-0.25
RDHX0803MOT	8	3.18	3.4	15°	2	0.08-0.28
RDHX1003MOT	10	3.18	3.9	15°	2.5	0.10-0.30
RDHX12T3MOT	12	3.97	4.4	15°	3	0.12-0.35

Helical cutters



SPMT / APMT-MM

Inserts for 90° helical (long edge) cutters: deep shoulders and roughing of tall flanks.

ISO materials	P M K H
Operation	Roughing
INNOT grades	IT530 · IT5120 · IT5130★ · IT5210 · IT5220★ · IT6130★
Nose radii	0.4 · 0.8 · 1.2 mm



Full data sheet and cutting data

Code	L	W1	S	D1	RE	AN
SPMT120408-MM	12.7	12.7	4.76	5.5	0.8	11°
APMT150412-MM	15.865	12.69	4.76	5.56	1.2	11°
SPHX120408T21	12.7	12.7	4.76	5.5	0.8	11°
APHX1504	15.875	12.7	4.76	5.7	0.4	11°

Solid Carbide End Mills

Solid carbide end mills with 2 to 6 flutes, square, torus and ball nose, for every material up to 65 HRC, and long-neck end mills for dies and moulds. Also custom-made, with the right coating for your material.

IN THIS CHAPTER

- › End mills for every material (10)
- › Long-neck end mills for moulds (4)



End mills for every material



4-flute flat end mill - universal

4-flute carbide end mill for steels, alloy steels and cast irons up to 54 HRC, and up to 65 HRC in the hardened-steel version. Available short or long, with or without reduced neck.

ISO materials	P K H
Operation	Finishing · Semi-finishing
Geometry	Flat (sharp corner)
Cutting edges	4
Diameters	Ø 1-20 mm



Full data sheet and cutting data



4-flute torus end mill

End mill with a corner radius: the radius protects the cutting edge and leaves a fillet on the part. For moulds, pockets and shoulders with radius.

ISO materials	P K H
Operation	Semi-finishing · Roughing
Geometry	Torus (corner radius)
Cutting edges	4
Diameters	Ø 3-20 mm



Full data sheet and cutting data



6-flute end mill - square, torus and ball nose

Solid carbide end mill with 6 flutes, square, torus or ball nose, for dynamic roughing and finishing: more flutes engaged for higher feed rates and better surfaces on steels, stainless steels, superalloys and hardened steels.

ISO materials	P M S H
Operation	Finishing · Semi-finishing · Roughing
Geometry	Square (sharp corner), torus (corner radius) or ball nose ($R = D/2$)
Cutting edges	6
Diameters	Ø 3-20 mm



Full data sheet and cutting data



2-flute ball nose end mill

Full-radius end mill ($R = D/2$) for copy milling and finishing of moulds, free-form surfaces and 3D profiles.

ISO materials	P K H
Operation	Finishing
Geometry	Ball nose ($R = D/2$)
Cutting edges	2
Diameters	Ø 1-20 mm



Full data sheet and cutting data



2- and 3-flute end mill for aluminium

Polished end mill with wide flute for aluminium and light alloys: no built-up edge, excellent chip evacuation and a bright finish.

ISO materials	N
Operation	Finishing · Roughing
Geometry	Flat (sharp corner)
Cutting edges	2 o 3
Diameters	Ø 3-20 mm



Full data sheet and cutting data



4-flute end mill for superalloys

End mill with a highly heat-stable coating for heat-resistant superalloys and stainless steels. Flat or torus.

ISO materials	M S
Operation	Semi-finishing
Geometry	Torus (corner radius)
Cutting edges	4
Diameters	Ø 3-20 mm



Full data sheet and cutting data



4- and 5-flute end mill for titanium

4- or 5-flute end mill with variable pitch for titanium alloys and stainless steels: no vibration and large chip volumes.

ISO materials	M S
Operation	Semi-finishing · Roughing
Geometry	Torus (corner radius)
Cutting edges	4 o 5
Diameters	Ø 6-20 mm



Full data sheet and cutting data



HSM end mill for fast roughing

End mill for high-speed machining (HSM) strategies: light cuts and high feeds on steels, alloy steels and cast irons.

ISO materials	P K
Operation	Roughing
Geometry	Torus (corner radius)
Cutting edges	4
Diameters	Ø 6-12 mm



Full data sheet and cutting data



Roughing end mill with wavy cutting edge

Wavy cutting edge that breaks the chip: lower cutting forces and vibration, very high removal rates in roughing.

ISO materials	P K N
Operation	Roughing
Geometry	Flat with wavy cutting edge
Cutting edges	3 or 4
Diameters	Ø 6-20 mm



Full data sheet and cutting data



End mill for hardened steels up to 65 HRC

End mill for hardened and mould steels up to 65 HRC: ultra-fine grain carbide, high-silicon coating and reinforced cutting edges. Flat, torus or ball nose.

ISO materials	P K H
Operation	Finishing
Geometry	Flat (sharp corner)
Cutting edges	4
Diameters	Ø 1-20 mm



Full data sheet and cutting data

Long-neck end mills for moulds



2-flute torus end mill with long cylindrical neck

2-flute torus end mill with relieved cylindrical neck for ribs, deep pockets and mould details: it works where the shank cannot reach, up to 65 HRC.

ISO materials	P M K N H
Operation	Finishing · Semi-finishing
Geometry	Torus (corner radius), 2 flutes
Neck	Relieved cylindrical, just below the cutting diameter: it enters narrow ribs and cavities wher...
Diameters	Ø 0.5 - 3 mm in tight tolerance; intermediate diameters and above Ø3 custom made



Full data sheet and cutting data

Ø D	l cutting	Ø d1 neck	l1 usable	Radii r	Ø d shank	L overall
Ø 0,5	0,75	0,45	1 - 10	0,05 · 0,1	6	50
Ø 0,6	0,9	0,55	2 - 10	0,05 · 0,1	6	50
Ø 0,8	1,2	0,75	2 - 12	0,05 · 0,1 · 0,2	6	50
Ø 1	1,5	0,95	2 - 20	0,1 · 0,2	4 · 6	50 · 60
Ø 1,2	1,8	1,15	2 - 20	0,2 · 0,3	6	50 · 60
Ø 1,5	2,25	1,45	4 - 25	0,2 · 0,3	4 · 6	50 · 60

+ 3 more rows on the online data sheet



2-flute ball nose end mill with long cylindrical neck

Ball nose end mill with relieved cylindrical neck for 3D finishing of ribs, fillets and deep mould cavities, up to 65 HRC.

ISO materials	P M K N H
Operation	Finishing · Semi-finishing
Geometry	Ball nose ($R = D/2$), 2 flutes
Neck	Relieved cylindrical, just below the cutting diameter: it enters narrow ribs and cavities wher...
Diameters	Ø 0.5 – 3 mm in tight tolerance; intermediate diameters and above Ø3 custom made



Full data sheet and cutting data

Ø D	l cutting	Ø d1 neck	l1 usable	Radius	Ø d shank	L overall
Ø 0,5	0,35	0,45	1 – 10	R 0,25	6	50
Ø 0,6	0,4	0,55	2 – 10	R 0,3	6	50
Ø 0,8	0,5	0,75	2 – 12	R 0,4	6	50
Ø 1	0,8	0,95	2 – 20	R 0,5	4 · 6	50 · 60
Ø 1,2	1	1,15	2 – 20	R 0,6	6	50 · 60
Ø 1,5	1,35	1,45	4 – 25	R 0,75	4 · 6	50 · 60

+ 3 more rows on the online data sheet



2-flute torus end mill with reinforced tapered neck

Torus end mill with reinforced tapered neck: the neck follows the draft angle of the walls, is more rigid and vibrates less in deep mould machining, up to 65 HRC.

ISO materials	P M K N H
Operation	Finishing · Semi-finishing
Geometry	Torus (corner radius), 2 flutes
Neck	Reinforced tapered: starts just below the cutting diameter and widens with a 0.5° to 2° taper...
Diameters	Ø 0.5 – 3 mm in tight tolerance; intermediate diameters and above Ø3 custom made



Full data sheet and cutting data

Ø D	l cutting	Ø d1 neck	l1 usable	Radii r	Taper α	Ø d shank	L overall
Ø 0,5	0,75	0,45	2 – 14	0,05 · 0,1	0,5° · 1° · 1,5° · 2°	6	50
Ø 0,6	0,9	0,55	2 – 15	0,05 · 0,1	0,5° · 1° · 1,5° · 2°	6	50
Ø 0,8	1,2	0,75	4 – 20	0,1 · 0,2	0,5° · 1° · 1,5° · 2°	6	50 · 60
Ø 1	1,5	0,95	8 – 35	0,1 · 0,2 · 0,3	0,5° · 1° · 1,5° · 2°	6	60 · 78
Ø 1,2	1,8	1,15	10 – 40	0,1 · 0,2 · 0,3	0,5° · 1° · 1,5° · 2°	6	60 · 78
Ø 1,5	2,25	1,45	10 – 40	0,1 · 0,2 · 0,3 · 0,5	0,5° · 1° · 1,5° · 2°	6	60 · 78

+ 3 more rows on the online data sheet



2-flute ball nose end mill with reinforced tapered neck

Ball nose end mill with reinforced tapered neck for copy milling and finishing of deep cavities with drafted walls: more rigidity, less vibration, up to 65 HRC.



Full data sheet and cutting data

ISO materials	P M K N H
Operation	Finishing · Semi-finishing
Geometry	Ball nose ($R = D/2$), 2 flutes
Neck	Reinforced tapered: starts just below the cutting diameter and widens with a 0.5° to 2° taper...
Diameters	Ø 0.5 – 3 mm in tight tolerance; intermediate diameters and above Ø3 custom made

Ø D	l cutting	Ø d1 neck	l1 usable	Radius	Taper α	Ø d shank	L overall
Ø 0,5	0,35	0,45	2 – 14	R 0,25	0,5° · 1° · 1,5° · 2°	6	50
Ø 0,6	0,4	0,55	2 – 15	R 0,3	0,5° · 1° · 1,5° · 2°	6	50
Ø 0,8	0,5	0,75	4 – 20	R 0,4	0,5° · 1° · 1,5° · 2°	6	50 · 60
Ø 1	0,8	0,95	8 – 35	R 0,5	0,5° · 1° · 1,5° · 2°	6	60 · 78
Ø 1,2	1	1,15	10 – 40	R 0,6	0,5° · 1° · 1,5° · 2°	6	60 · 78
Ø 1,5	1,35	1,45	10 – 40	R 0,75	0,5° · 1° · 1,5° · 2°	6	60 · 78

+ 3 more rows on the online data sheet

CHAPTER 04

Drills

Solid carbide drills from 3×D to 30×D, with and without internal coolant, custom step drills and indexable drills from Ø 16 to Ø 60 mm.

IN THIS CHAPTER

- › Solid carbide drills (7)
- › Indexable drills (2)



INNOT

Solid carbide drills



3x solid carbide drill

Short solid drill (usable depth 3 times the diameter), 140° point angle and h6 shank. Version with or without internal coolant.

ISO materials	P M K N S
Drilling depth	up to 3xD (3 times the diameter)
Diameters	Ø 3 – 20 mm, in 0.01 mm steps
Point angle	140° with web thinning
Ø D tolerance	m7



Full data sheet and cutting data

Drill Ø D	Ø d shank	L overall	Lc cutting length	Ls shank
Ø 3	6	62	20	36
Ø 4	6	66	24	36
Ø 5	6	66	28	36
Ø 6	6	66	28	36
Ø 8	8	79	41	36
Ø 10	10	89	47	40

+ 5 more rows on the online data sheet



5x solid carbide drill

Solid drill for holes up to 5 times the diameter, with internal coolant: reliable chip evacuation and high speeds.

ISO materials	P M K N S
Drilling depth	up to 5xD (5 times the diameter)
Diameters	Ø 3 – 20 mm, in 0.01 mm steps
Point angle	140° with web thinning
Ø D tolerance	m7



Full data sheet and cutting data

Drill Ø D	Ø d shank	L overall	Lc cutting length	Ls shank
Ø 3	6	66	28	36
Ø 4	6	74	36	36
Ø 5	6	82	44	36
Ø 6	6	82	44	36
Ø 8	8	91	53	36
Ø 10	10	103	61	40

+ 5 more rows on the online data sheet



8xD solid carbide drill

Solid drill for deep holes up to 8 times the diameter, with internal coolant and polished flute for chip evacuation.

ISO materials	P M K N S
Drilling depth	up to 8xD (8 times the diameter)
Diameters	Ø 3 – 20 mm, in 0.01 mm steps
Point angle	140° with web thinning
Ø D tolerance	m7



Full data sheet and cutting data

Drill Ø D	Ø d shank	L overall	Lc cutting length	Ls shank
Ø 3	6	70	30	36
Ø 4	6	75	37,5	36
Ø 5	6	90	50	36
Ø 6	6	97	57	36
Ø 8	8	116	76	36
Ø 10	10	139	95	40

+ 5 more rows on the online data sheet



12xD solid carbide drill

Drill for deep holes up to 12 times the diameter, self-centring 135° point and internal coolant. A pilot hole is recommended.

ISO materials	P M K N S
Drilling depth	up to 12xD (12 times the diameter)
Diameters	Ø 3 – 20 mm, in 0.01 mm steps
Point angle	135° self-centring, double margin
Ø D tolerance	h7



Full data sheet and cutting data

Drill Ø D	Ø d shank	L overall	Lc cutting length	Ls shank
Ø 3	6	90	50	36
Ø 4	6	102	64	36
Ø 5	6	116	78	36
Ø 6	6	116	78	36
Ø 8	8	146	108	36
Ø 10	10	174	132	40

+ 5 more rows on the online data sheet



20xD solid carbide drill

Drill for very deep holes up to 20 times the diameter: double-margin geometry for hole straightness and high-pressure coolant.

ISO materials	P M K N S
Drilling depth	up to 20xD (20 times the diameter)
Diameters	Ø 3 – 14 mm, in 0.01 mm steps
Point angle	135° self-centring, double margin
Ø D tolerance	h7



Full data sheet and cutting data

Drill Ø D	Ø d shank	L overall	Lc cutting length	Ls shank
Ø 3	6	110	70	36
Ø 4	6	136	96	36
Ø 5	6	158	118	36
Ø 6	6	180	140	36
Ø 8	8	223	183	36
Ø 10	10	272	228	40

+ 2 more rows on the online data sheet



30xD solid carbide drill

Drill for extra-deep holes up to 30 times the diameter, as an alternative to gun drilling on machining centres and lathes.

ISO materials	P M K N S
Drilling depth	up to 30xD (30 times the diameter)
Diameters	Ø 3 – 10 mm, in 0.01 mm steps
Point angle	135° self-centring, double margin
Ø D tolerance	h7



Full data sheet and cutting data

Drill Ø D	Ø d shank	L overall	Lc cutting length	Ls shank
Ø 3	6	140	100	36
Ø 4	6	176	136	36
Ø 5	6	208	168	36
Ø 6	6	240	200	36
Ø 8	8	305	265	36
Ø 10	10	372	328	40



Custom step drill

Solid drill with two or three diameters for hole and counterbore or chamfer in a single pass. Made to drawing.

Diameters	Ø D1 (hole) and Ø D2 (counterbore or chamfer) from Ø3 to Ø20 mm
Step	At 90° for counterbores, or chamfer at 45°/60°/90° for countersinks
Length L1	Depth of the first diameter to drawing
Multiple steps	Up to three diameters on the same tool
Coolant	Internal, recommended



Full data sheet and cutting data

Indexable drills



Indexable drills 2xD - 5xD

Drill body with indexable inserts for holes from Ø16 to Ø60 mm: when the insert wears, you only change the insert.

Depth	2xD, 3xD, 4xD, 5xD
Connection	Cylindrical with Weldon flat and stop collar
Inserts	Two identical inserts (central and peripheral) with 4 cutting edges: a single insert code per...
Coolant	Internal, mandatory
Application	Machining centres and lathes (also stationary, with the part rotating)



Full data sheet and cutting data

Hole diameter	Ø d shank	Inserts
Ø 16 - 17	20	WCMX 03
Ø 18 - 20	25	WCMX 03
Ø 21 - 25	25	WCMX 04
Ø 26 - 30	32	WCMX 05
Ø 31 - 40	40	WCMX 06
Ø 41 - 60	40	depending on the diameter



Inserts for WCMX / SPMG drills

Indexable inserts for indexable drills: 4-edge WCMX with chipbreaker for drilling and SPMG for larger diameters.

Shape	4-edge trigon WCMX; square SPMG
Chipbreaker	Drilling geometry: short chips and smooth evacuation
Grades	CVD for steels and cast irons, PVD for stainless steels and tough materials: tell us the mater...
Application	On INNOT indexable drills and on standard market drill bodies with the same seats



Full data sheet and cutting data

Insert	Corner radius RE	Compatible drills
WCMX 030204	0.4	Ø 16 - 20
WCMX 030208	0.8	Ø 16 - 20
WCMX 040204	0.4	Ø 21 - 25
WCMX 040208	0.8	Ø 21 - 25
WCMX 050308	0.8	Ø 26 - 30
WCMX 06T308	0.8	Ø 31 - 40

Threading

Thread turning inserts (ISO, Whitworth, UN, pipe, NPT, trapezoidal) and taps for through and blind holes, forming taps and custom taps, chosen for the material to machine.

IN THIS CHAPTER

- › Threading inserts (7)
- › Through hole taps (5)
- › Blind hole taps (4)
- › Forming taps (1)
- › Special and custom threads (2)



Threading inserts



ISO metric 60° threading inserts

Full-profile inserts for ISO 60° metric threads: crest and root formed by the insert, finished thread without deburring.

ISO materials	P M S
Operation	Special
INNOT grades	IT5125 · IT5225★



Full data sheet and cutting data

Type	IC mm (size)	Pitches	Thickness S mm
External	9,525 (16)	1.00 - 3.00 mm	3,52
External	12,70 (22)	3.50 - 6.00 mm	4,65
Internal	9,525 (16)	1.00 - 3.00 mm	3,52
Internal small bores (ground)	3,97 (06)	0.50 - 1.25 mm	1,91
Internal small bores (ground)	4,76 (08)	0.75 - 1.50 mm	2,38



55° and 60° partial profile threading inserts

Universal partial profile inserts: a single insert covers a range of pitches with a 55° or 60° angle. Ideal for small batches and different pitches.

ISO materials	P M S
Operation	Special
INNOT grades	IT5125 · IT5225★



Full data sheet and cutting data

Grade	ISO	Coating	Composition	Application
IT5225 ★	P · M · S	PVD	Multilayer PVD	First-choice grade for threading: steels, stainless steels...
IT5125	P · M · S	PVD	Multilayer PVD	Tough grade for threading in unstable conditions and interr...



Whitworth 55° threading inserts (W)

Full-profile inserts for Whitworth 55° threads (BSW and BSF), with crest and root radius.

ISO materials	P M S
Operation	Special
INNOT grades	IT5125 · IT5225★



Full data sheet and cutting data

Grade	ISO	Coating	Composition	Application
IT5225 ★	P · M · S	PVD	Multilayer PVD	First-choice grade for threading: steels, stainless steels...
IT5125	P · M · S	PVD	Multilayer PVD	Tough grade for threading in unstable conditions and interr...



UN 60° threading inserts (UNC, UNF)

Full-profile inserts for UN 60° unified threads (UNC, UNF, UNEF), required in aerospace and hydraulics.

ISO materials	P M S
Operation	Special
INNOT grades	IT5125 · IT5225★



Full data sheet and cutting data

Grade	ISO	Coating	Composition	Application
IT5225 ★	P · M · S	PVD	Multilayer PVD	First-choice grade for threading: steels, stainless steels...
IT5125	P · M · S	PVD	Multilayer PVD	Tough grade for threading in unstable conditions and interr...



BSPT 55° pipe threading inserts

Inserts for BSPT (Rc / R) 55° pipe threads with 1:16 taper, for sealing fittings on gas, heating and water pipes.

ISO materials	P M S
Operation	Special
INNOT grades	IT5125 · IT5225★



Full data sheet and cutting data

Grade	ISO	Coating	Composition	Application
IT5225 ★	P · M · S	PVD	Multilayer PVD	First-choice grade for threading: steels, stainless steels...
IT5125	P · M · S	PVD	Multilayer PVD	Tough grade for threading in unstable conditions and interr...



NPT 60° threading inserts

Inserts for NPT 60° taper threads with 1:16 taper, for pipes and sealing fittings to the American standard.

ISO materials	P M S
Operation	Special
INNOT grades	IT5125 · IT5225★



Full data sheet and cutting data

Grade	ISO	Coating	Composition	Application
IT5225 ★	P · M · S	PVD	Multilayer PVD	First-choice grade for threading: steels, stainless steels...
IT5125	P · M · S	PVD	Multilayer PVD	Tough grade for threading in unstable conditions and interr...



30° trapezoidal threading inserts (TR)

Inserts for ISO 30° trapezoidal threads (TR), used on lead screws, vices, presses and power transmissions.

ISO materials	P M S
Operation	Special
INNOT grades	IT5125 · IT5225★



Full data sheet and cutting data

Grade	ISO	Coating	Composition	Application
IT5225 ★	P · M · S	PVD	Multilayer PVD	First-choice grade for threading: steels, stainless steels...
IT5125	P · M · S	PVD	Multilayer PVD	Tough grade for threading in unstable conditions and interr...

Taps

Through hole taps



Through hole tap - Structural and annealed steels

Spiral point tap for through holes in structural and annealed steels: the chip is pushed forward. TiN, 12 – 15° rake.

ISO materials	P
Hole type	Through holes
Geometry	Spiral point (gun nose) · 3 shallow straight flutes: strong core
Chamfer	Form B, 3.5 – 5 threads
Chip	Pushed forward, it exits from the bottom of the hole



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	11	3,5	2,7
M3,5	0,6	2,9	56	12	4	3
M4	0,7	3,3	63	13	4,5	3,4
M5	0,8	4,2	70	16	6	4,9

+ 14 more rows on the online data sheet



Through hole tap - Quenched and tempered, alloy and tool steels

Spiral point tap for through holes in quenched and tempered and alloy steels: the chip is pushed forward. TiCN, 10 - 12° rake.

ISO materials	P
Hole type	Through holes
Geometry	Spiral point (gun nose) · 3 shallow straight flutes: strong core
Chamfer	Form B, 3.5 - 5 threads
Chip	Pushed forward, it exits from the bottom of the hole



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	11	3,5	2,7
M3,5	0,6	2,9	56	12	4	3
M4	0,7	3,3	63	13	4,5	3,4
M5	0,8	4,2	70	16	6	4,9

+ 14 more rows on the online data sheet



Through hole tap - Stainless steels

Spiral point tap for through holes in stainless steels: the chip is pushed forward. Steam oxide, 8 - 10° rake.

ISO materials	M
Hole type	Through holes
Geometry	Spiral point (gun nose) · 3 shallow straight flutes: strong core
Chamfer	Form B, 3.5 - 5 threads
Chip	Pushed forward, it exits from the bottom of the hole



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	11	3,5	2,7
M3,5	0,6	2,9	56	12	4	3
M4	0,7	3,3	63	13	4,5	3,4
M5	0,8	4,2	70	16	6	4,9

+ 14 more rows on the online data sheet



Through hole tap - Aluminium and light alloys

Spiral point tap for through holes in aluminium and light alloys: the chip is pushed forward. Bright, 20 - 25° rake.

ISO materials	N
Hole type	Through holes
Geometry	Spiral point (gun nose) · 3 shallow straight flutes: strong core
Chamfer	Form B, 3.5 - 5 threads
Chip	Pushed forward, it exits from the bottom of the hole



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	11	3,5	2,7
M3,5	0,6	2,9	56	12	4	3
M4	0,7	3,3	63	13	4,5	3,4
M5	0,8	4,2	70	16	6	4,9

+ 14 more rows on the online data sheet



Cast iron tap - through and blind holes

Straight flute tap for cast irons and short-chipping materials, in through and blind holes. Broken chips, TiCN against abrasion.

ISO materials	K N
Hole type	Through holes and blind holes
Geometry	Straight flutes · 4 straight flutes
Chamfer	Form C, 2 - 3 threads
Chip	Short and broken: stays in the flutes or comes out as powder



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	11	3,5	2,7
M3,5	0,6	2,9	56	12	4	3
M4	0,7	3,3	63	13	4,5	3,4
M5	0,8	4,2	70	16	6	4,9

+ 14 more rows on the online data sheet

Blind hole taps



Blind hole tap - Structural and annealed steels

35° right-hand spiral flute tap for blind holes in structural and annealed steels: the chip flows back towards the shank. TiN, 12 - 15° rake.

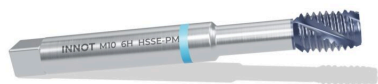
ISO materials	P
Hole type	Blind holes
Geometry	Right-hand helix 35° - 3 spiral flutes
Chamfer	Form C, 2 - 3 threads
Chip	Risale lungo l'elica verso il gambo: il fondo del foro resta pulito



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	7	3,5	2,7
M3,5	0,6	2,9	56	7	4	3
M4	0,7	3,3	63	8	4,5	3,4
M5	0,8	4,2	70	10	6	4,9

+ 14 more rows on the online data sheet



Blind hole tap - Quenched and tempered, alloy and tool steels

40° right-hand spiral flute tap for blind holes in quenched and tempered and alloy steels: the chip flows back towards the shank. TiCN, 10 - 12° rake.

ISO materials	P
Hole type	Blind holes
Geometry	Right-hand helix 40° - 3 spiral flutes
Chamfer	Form C, 2 - 3 threads
Chip	Risale lungo l'elica verso il gambo: il fondo del foro resta pulito



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	7	3,5	2,7
M3,5	0,6	2,9	56	7	4	3
M4	0,7	3,3	63	8	4,5	3,4
M5	0,8	4,2	70	10	6	4,9

+ 14 more rows on the online data sheet



Blind hole tap - Stainless steels

35° - 40° right-hand spiral flute tap for blind holes in stainless steels: the chip flows back towards the shank. Steam oxide, 8 - 10° rake.

ISO materials	M
Hole type	Blind holes
Geometry	Right-hand helix 35° - 40° · 3 spiral flutes
Chamfer	Form C, 2 - 3 threads
Chip	Risale lungo l'elica verso il gambo: il fondo del foro resta pulito



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	7	3,5	2,7
M3,5	0,6	2,9	56	7	4	3
M4	0,7	3,3	63	8	4,5	3,4
M5	0,8	4,2	70	10	6	4,9

+ 14 more rows on the online data sheet



Blind hole tap - Aluminium and light alloys

45° right-hand spiral flute tap for blind holes in aluminium and light alloys: the chip flows back towards the shank. Bright, 20 - 25° rake.

ISO materials	N
Hole type	Blind holes
Geometry	Right-hand helix 45° · 3 spiral flutes
Chamfer	Form C, 2 - 3 threads
Chip	Risale lungo l'elica verso il gambo: il fondo del foro resta pulito



Full data sheet and cutting data

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,6	45	8	2,8	2,1
M2,5	0,45	2,05	50	9	2,8	2,1
M3	0,5	2,5	56	7	3,5	2,7
M3,5	0,6	2,9	56	7	4	3
M4	0,7	3,3	63	8	4,5	3,4
M5	0,8	4,2	70	10	6	4,9

+ 14 more rows on the online data sheet

Forming taps



Forming tap - through and blind holes

Fluteless tap that cold-forms the thread without chips: stronger and ideal for blind holes in steels, stainless steels and aluminium.



Full data sheet and cutting data

ISO materials	P M N
Hole type	Through holes and blind holes, with the same tool
Process	Cold forming: the lobes of the tap displace the material and form the thread, without chips
Chamfer	Form C (2 - 3 threads) for blind holes, form D (3.5 - 5 threads) for through holes
Thread depth	Up to 2.5 × d

Thread	Pitch P	Tap drill Ø	L overall	l thread	Ø d2 shank	Square a
M2	0,4	1,8	45	8	2,8	2,1
M2,5	0,45	2,3	50	9	2,8	2,1
M3	0,5	2,8	56	11	3,5	2,7
M3,5	0,6	3,2	56	12	4	3
M4	0,7	3,7	63	13	4,5	3,4
M5	0,8	4,65	70	16	6	4,9

+ 6 more rows on the online data sheet

Special and custom threads



Taps for fine, pipe and inch threads

Metric fine, pipe G, Whitworth, UNC, UNF, UNEF, Pg and round, right- and left-hand: the same geometries for through and blind holes as the metric taps.



Full data sheet and cutting data

ISO materials	P M K N
Through holes	Spiral point, form B
Blind holes	Right-hand helix 15°, 35° or 45° depending on the material, form C
Cast irons and short chips	Straight flutes, form C
Materials	Annealed and quenched and tempered steels, stainless steels, cast irons, aluminium: substrate...

System	Range	Application
Metric fine MF	from MF 3 × 0.35 to MF 52 × 4	All ISO fine pitches, tolerance 6H
Parallel pipe G (BSP)	da G 1/8" a G 2"	Fittings, hydraulics and pneumatics, gasket sealing
Whitworth BSW	da 1/8" a 2"	Machinery and spare parts of British manufacture
UNC	da n. 2-56 a 3"-4	Inch coarse pitch, tolerance 2B
UNF	da n. 2-64 a 1.1/2"-12	Inch fine pitch, tolerance 2B
UNEF	da n. 12-32 a 1.1/2"-18	Inch extra-fine pitch

+ 4 more rows on the online data sheet



Custom tap

Taps made to drawing: profile, tolerance, lengths, coolant, HSS-E, PM or carbide substrate and coating chosen for your part.

ISO materials	P M K N S
Profile	Metric, fine, inch, parallel and taper pipe (NPT, BSPT), trapezoidal Tr, round Rd and profiles...
Tolerance	4H, 5H, 6H, 6G, 7G, 6HX and oversize tolerances for threads to be galvanised, nickel-plated or...
Lengths	Overall and thread length to drawing, extended taps for deep or hard-to-reach holes
Geometry	Imbocco, angolo d'elica, spoglia, numero di scanalature, filetti interrotti per i materiali ch...



Full data sheet and cutting data

Toolholders and Chucks

Turning toolholders, boring bars, parting blades, indexable cutters, modular heads and chucks: the tool bodies for INNOT inserts.

IN THIS CHAPTER

- › Turning toolholders (7)
- › Indexable cutters and chucks (8)



Turning toolholders



95° external turning toolholders

Toolholders for 95° external turning: the same tool turns longitudinally and faces. Lever or clamp locking for negative inserts, screw clamping for positive inserts.

Operations	Longitudinal turning · Facing · Roughing and finishing
Compatible INNOT inserts	CNMG · WNMG · CCMT



Full data sheet and cutting data



93° profiling toolholders

Toolholders for 93° profiling: the narrow tip of 55° and 35° inserts reaches grooves, fillets and undercut profiles.

Operations	Copy machining · Profiles and fillets · Finishing
Compatible INNOT inserts	DNMG · VNMG · DCMT · VBMT



Full data sheet and cutting data



45° and 75° toolholders for roughing

Toolholders with 45° or 75° lead angle for square and triangular inserts: the chip gets thinner and the cutting edge withstands deep cuts.

Operations	Roughing · Chamfers · Facing
Compatible INNOT inserts	SNMG · TNMG · SCMT



Full data sheet and cutting data



Boring bars for internal turning

Steel or carbide boring bars, with internal coolant supply, for turning bores from small to large diameter.

Operations	Boring · Internal seats and shoulders · Bore finishing
Compatible INNOT inserts	CCMT · DCMT · TCMT · CNMG



Full data sheet and cutting data



Blades and blocks for parting and grooving

Blades and blocks for single- and double-ended inserts: bar parting, external grooving and side turning with the same blade.

Operations	Parting off · External grooving · Side turning
Compatible INNOT inserts	QCMB · HCMA · QPMB



Full data sheet and cutting data



Face grooving toolholders

Curved toolholders for face grooving: the curvature follows the groove diameter to machine axially without rubbing.

Operations	Face grooves · Seal grooves
Compatible INNOT inserts	QCMB · QPMB



Full data sheet and cutting data



Threading toolholders

Toolholders and boring bars for partial or full profile threading inserts: metric, pipe, UN and trapezoidal.

Operations	External threading · Internal threading
Compatible INNOT inserts	Threading inserts



Full data sheet and cutting data

Indexable cutters and chucks



Face mills

Indexable face mills, 45° or with double-sided inserts, for flat surfaces with high productivity and a good finish.

Operations	Face milling · Roughing and finishing of surfaces
Compatible INNOT inserts	ODMT · SNGX · SEMT · HNMX · XNMX



Full data sheet and cutting data



90° square shoulder cutters

End mills and shell mills for 90° shoulders, slots and contouring, with positive or tangential inserts.

Operations	90° shoulders · Slots · Contouring
Compatible INNOT inserts	APKT · APMT · AOKT · ZNMU



Full data sheet and cutting data



High-feed cutters

High-feed cutters: light cuts and very high feed per tooth to rough moulds and pockets in the shortest time.

Operations	Roughing of moulds · Pockets · Ramping
Compatible INNOT inserts	SDMT · SDKT · BLMP



Full data sheet and cutting data



Copy milling cutters

Copy milling cutters for round and ball nose inserts: 3D surfaces, moulds and complex profiles.

Operations	Copy machining · Moulds · 3D surfaces
Compatible INNOT inserts	RCKT · RPMT · RDMW · BNM · RDHX



Full data sheet and cutting data



Helical cutters (long edge)

Helical cutters with several rows of inserts: a continuous flank for very deep shoulders and large chip volumes.

Operations	Deep shoulders · Side roughing
Compatible INNOT inserts	SPMT · APMT-MM



Full data sheet and cutting data



Chucks and adapters

BT, HSK and DIN tapers with ER collets, shell mill holders and hydraulic or shrink-fit chucks to connect cutter and spindle.

Operations	ER collet chucks · Shell mill holders · Weldon holders
Available systems	BT · HSK · ER



Full data sheet and cutting data



BLMP high-feed modular heads

High-feed modular heads from Ø10 to Ø42 mm, 2 to 8 cutting edges, M6-M16 connection, for BLMP inserts.



Full data sheet and cutting data

Cutter Ø	BLMP 04	BLMP 06	BLMP 09	BLMP 11	BLMP 13
Ø10	2	-	-	-	-
Ø11	2	-	-	-	-
Ø12	3	-	-	-	-
Ø13	3	-	-	-	-
Ø16	4	2	-	-	-
Ø17	4	-	-	-	-

+ 12 more rows on the online data sheet



RDHX copy milling modular heads

Copy milling modular heads from Ø10 to Ø42 mm, 2 to 5 cutting edges, M6-M16 connection, for RDHX round inserts.



Full data sheet and cutting data

Cutter Ø	RDHX 05	RDHX 07	RDHX 08	RDHX 10	RDHX 12
Ø10	2	-	-	-	-
Ø12	3	-	-	-	-
Ø15	4	3	-	-	-
Ø16	-	-	2	-	-
Ø20	-	4	3	2	-
Ø24	-	-	-	-	2

+ 9 more rows on the online data sheet

Free tools for your machine shop

On the INNOT website you will find tools designed for people working at the machine.

Shop-floor calculators

Spindle speed, feeds, power, torque, tap drill size and hardness conversion.



Tool wear guide

Recognise the type of edge wear and find out what to change.



Find the equivalent

From the code you use today to the equivalent INNOT insert.



Free tester

An INNOT tool to test on your part, with a PDF report.



Custom end mills and drills

Configure the tool and get a quote.



Request a quote

Codes, quantities and drawings: we reply within 30 minutes.



Data, sizes and images are indicative and may change without notice. Cutting data are starting values to be adapted to machine, clamping and material.



Need a tool?

Write or call us: an INNOT technician will help you choose insert, grade and cutting data for your part.

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