High Performance Milling Tools

EREE with the purchase of inserts

A comprehensive offering of tooling designed for High Feed, Face Milling & Square Shoulder Machining





PROMO PRICING EXPIRES MAY 31ST, 2019

TYSON TOOL

TYSON TOOL COMPANY LIMITED
75 ORMONT DRIVE, TORONTO, ONTARIO, M9L-2S3
TEL: (416) 746-3688 ~~ FAX: (416) 746-5415
INTERNET: www.tysontool.com ~~ E-MAIL: sales@tysontool.com

~		
	Available	From

Specifications are subject to change without notice. No responsibility for errors and/or printing errors will be accepte

High Feed HF Milling Program

HF10 End Mills

End Mills with Weldon Shanks and Extended Length End Mills with Cylindrical Shanks

Designation	D	D1	D2	L1	L2	Ар	Flutes	*FREE with Insert
INSERTS: High Feed XDMT	-100415	/ XDMW-	100415	• Squar	e Shoulde	er SDMT	-100408	Purchase Below
HF10EM-1000-5.00H2	1.000	1.000	.375	5.00	2.72	.04	2	30 Inserts
HF10EM-1000-5.00H3	1.000	1.000	.375	5.00	2.72	.04	3	40 Inserts
HF10CY-1000-8.00H2*	1.000	1.000	.375	8.00	3.00	.04	2	40 Inserts
HF10CY-1000-10.00H2*	1.000	1.000	.375	10.00	3.00	.04	2	40 Inserts
HF10EM-1250-6.00J3	1.250	1.250	.620	6.00	3.72	.04	3	40 Inserts
HF10CY-1250-8.00J3*	1.250	1.250	.620	8.00	3.00	.04	3	40 Inserts
HF10CY-1250-10.00J3*	1.250	1.250	.620	10.00	3.00	.04	3	50 Inserts
HF10EM-1500-6.00J3	1.500	1.250	.866	6.00	-	.04	3	40 Inserts
HF10CY-1500-8.00J3*	1.500	1.250	.866	8.00	-	.04	3	50 Inserts
Insert Screv	w: TX9P-3	007 • F	lag Wrer	 nch: W-37	048 • S	crew Dr	iver: W-30	5229

^{*}End mills with Cylindrical shanks

HF10 Thread-On End Mills

Thread-On End Mills with Through Coolant

Designation	D	D1	L1	G	Ар	Flutes	*FREE with Insert
INSERTS: High Feed XDMT	-100415	/ XDMW-10	00415 •	Square Sho	oulder SDN	/IT-100408	Purchase Below
HF10TS-1000-M12-2	1.000	.375	1.50	M12	.04	2	30 Inserts
HF10TS-1000-M12-3	1.000	.375	1.50	M12	.04	3	40 Inserts
HF10TS-1250-M16-2	1.250	.620	1.50	M16	.04	2	40 Inserts
HF10TS-1250-M16-3	1.250	.620	1.50	M16	.04	3	40 Inserts
HF10TS-1500-M16-3	1.500	.866	1.50	M16	.04	3	40 Inserts
HF10TS-1500-M16-4	1.500	.866	1.50	M16	.04	4	50 Inserts

Insert Screw: TX9P-3007 • Flag Wrench: W-37048 • Screw Driver: W-36229



HF10 Face Mills

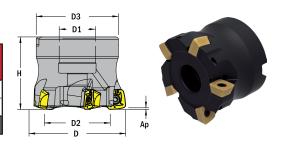
Face Mill Design with Through Coolant up to 4.00" dia.

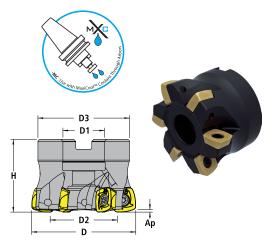
Designation	D	D1	D2	D3	Н	Ар	Flutes	*FREE with Insert	
INSERTS: High Feed XDM1	-100415	/ XDMW	-100415	• Square	e Should	er SDMT	-100408	Purchase Below	
HF10SM-2000-1.50F5	2.000	.750	1.365	1.70	1.50	.04	5	50 Inserts	
HF10SM-2000-1.50F7	2.000	.750	1.365	1.70	1.50	.04	7	70 Inserts	
Insert Screw: TX9P-3007 • Flag Wrench: W-36548 • Screw Driver: W-36229									



Tace initial pesign with initiagn coolain up to not una									
Designation	D	D1	D2	D3	Н	Ар	Flutes	*FREE with Insert	
INSERTS: High Feed XDM1	T-140520	/ XDMW	-140520	• Squar	e Should	er SDMT	-140512	Purchase Below	
HF14SM-2000-1.50F4	2.000	.750	1.122	1.70	1.50	.08	4	40 Inserts	
HF14SM-2000-1.50F5	2.000	.750	1.122	1.70	1.50	.08	5	50 Inserts	
HF14SM-2500-1.75H6	2.500	1.000	1.619	2.20	1.75	.08	6	60 Inserts	
HF14SM-3000-2.00H5	3.000	1.000	2.118	2.75	2.00	.08	5	50 Inserts	
HF14SM-3000-2.00J5	3.000	1.250	2.118	2.75	2.00	.08	5	50 Inserts	
HF14SM-3000-2.00H7	3.000	1.000	2.118	2.75	2.00	.08	7	70 Inserts	
HF14SM-3000-2.00J7	3.000	1.250	2.118	2.75	2.00	.08	7	70 Inserts	
HF14SM-4000-2.00J8	4.000	1.250	3.116	2.75	2.00	.08	8	80 Inserts	
HF14SM-4000-2.00L8	4.000	1.500	3.116	3.80	2.00	.08	8	80 Inserts	
HF14SM-6000-2.00L10	6.000	1.500	5.116	3.80	2.00	.08	10	120 Inserts	
HF14SM-8000-2.50T12	8.000	2.500	7.114	5.50	2.50	.08	12	200 Inserts	
Insert Scre	w: TX20-1	250 • I	Flag Wrei	nch: W-36	535 • S	crew Dr	iver: W-4!	5531	

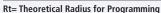
^{*}Free Cutter only valid with inserts shown on facing page





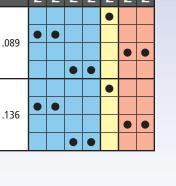
High Feed HF Milling Program

High Feed XDMT / XDMW Inserts D1 Designation Rt XDMT-100415ER-MH XDMT-100415SR-PH .040 .089 402 187 138 XDMW-100415SR-KH XDMW-100415SR-PH XDMT-140520ER-MH XDMT-140520SR-PH • .579 .197 .217 .080 .136 XDMW-140520SR-KH XDMW-140520SR-PH



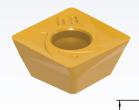
Using XDMT /

XDMW Inserts



Using SDMT

Inserts







Square Shoulder SDMT Inserts

Designation D D1 Rad SDMT-100408ER-M SDMT-100408SR-K .409 .191 .138 .409 .031 SDMT-100408SR-P SDMT-140512ER-M SDMT-140512SR-K .583 .205 .217 .583 .047 SDMT-140512SR-P

NP20MC (HC-P20) An alternative harder new generation CVD coated grade to NP25MP when higher abrasion resistance is required. Suitable for all steels at higher cutting speeds in stable conditions.

NP25MP (HC-P25/M25) A PVD multi-purpose grade suitable for all steels and stainless steel at high cutting speeds with or without coolant in stable conditions.

NP30MC (HC-P30) A universal grade with a tough carbide substrate and new generation CVD coating making an excellent choice for dry machining on a range of steels at moderate cutting speeds.

NP35MP (HC-P35/M35) A tough PVD coated grade for all steels and stainless steels. Most suitable for dry machining under difficult conditions at low to moderate cutting speeds.

NM40MP (HC-M40) An extremely tough carbide substrate with smooth PVD coating. Suitable for austenitic and duplex stainless steels, at low to moderate cutting speeds. Suitable for use with coolant.

NK15MC (HC-K15) A hard new generation CVD coated grade for dry machining in all cast irons including grey, nodular and compacted graphite cast iron.

NK20MP (HC-K20/P10) A tough carbide substrate with a thick PVD coating makes this grade most suitable for machining of cast materials, but also hardened steel up to 54 Rc.

Two Unique Tools **Engineered into One Cutter Body Design:** TyCarb HF **High Feed** 90 Degree

High Feed Milling Program

- All TyCarb HF tools can easily be converted from High Feed to 90 Degree Square Shoulder
- Simply switch insert styles from **XDMT / XDMW to SDMT**
- Less cost and inventory to manage

Full High Feed brochure available online at www.tysontool.com

LNMX Milling Program

The newly developed LNMX family of milling cutters for square shoulder milling, available in 2 edge lengths, utilizes strong negative inserts giving users 4 cutting edges. Due to the design and thickness of the insert, high metal removal rates can be achieved optimizing productivity and cost.

90° Square Shoulder! 4 Cutting Edges per Insert!

Features:

- 2 available cutting edge lengths- 11mm and 17mm
- Suitable for Steel, Stainless Steel and Cast Iron
- Economical 4 cutting edges
- Strong thick insert for maximum feed rates
- High rake giving smooth cutting action
- Capable of ramping and helical boring
- Proven grades giving long predictable life
- Cutter bodies manufactured in Canada

LN11 End Mills

End Mill Design with Through Coolant

Designation	Dia.	Shank	0.A.L.	Reach	Flutes	*FREE with Insert				
D.O.C. = .300"		INSERT: LNMX-110608								
LN11EM-0750-3.50F2	.750	.750	3.50	1.47	2	30 Inserts				
LN11EM-1000-4.00H3	1.000	1.000	4.00	1.72	3	40 Inserts				
LN11EM-1250-4.00J4	1.250	1.250	4.00	1.72	4	50 Inserts				
LN11EM-1500-4.00J5	1.500	1.250	4.00	1.72	5	50 Inserts				
lucasus Cau	TV0 C73	- Fl W/		2 - C		F11				

Insert Screw: TX8-672 • Flag Wrench: W-37022 • Screw Driver: W-4551

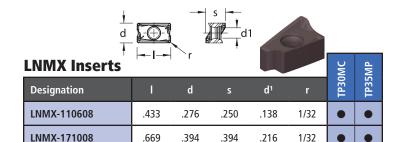
LN11 & LN17 Face Mills

Face Mill Design with Through Coolant up to 4.00" dia.

Designation	Dia.	Bore	Height	Flutes	*FREE with Insert						
D.O.C. = .300"		INSERT: LN	MX-110608		Purchase Below						
LN11SM-2000-1.50F5	2.000	.750	1.50	5	50 Inserts						
LN11SM-2500-1.75H7	2.500	1.000	1.75	7	70 Inserts						
LN11SM-3000-1.75H9	3.000	1.000	1.75	9	90 Inserts						
Insert Scre	Insert Screw: TX8-672 • Flag Wrench: W-37022 • Screw Driver: W-45511										
D.O.C. = .450"		INSERT: LNMX-171008									
LN17SM-2000-1.50F5	2.000	.750	1.50	5	50 Inserts						
LN17SM-2500-1.75H6	2.500	1.000	1.75	6	60 Inserts						
LN17SM-3000-2.00H7	3.000	1.000	2.00	7	70 Inserts						
LN17SM-4000-2.00J8	4.000	1.250	2.00	8	80 Inserts						
LN17SM-5000-2.00L9	5.000	1.500	2.00	9	100 Inserts						
LN17SM-6000-2.50P10	6.000	2.000	2.50	10	120 Inserts						
Insert Screv	w: TX15-1245	Flag Wrench: \	N-37032 • Scr	ew Driver: W-4	5526						

^{*}Free Cutter only valid with inserts shown below

THE THE WAS ALL CAMADO



TyCarb Milling Grades

TP30MC: P25-P40

The very tough carbide substrate guarantees this universal steel milling grade's high machining security for a wide range of steel material. A modern MT-CVD multilayer Al2O3 — coating ensures successful dry machining.

TP35MP: P20-P40, M20-M40

Very tough Nanotop PVD AlTiN gradient coating carbide grade especially for milling tool steels. Ideal for dry milling at low to medium cutting speeds for roughing.

^{*}Free Cutter only valid with inserts shown below

TS90 Milling Program

The TS90 Square Shoulder Milling Cutters are an ideal tool for 90° slot and shoulder milling. They are available in diameters from $1\frac{1}{2}$ " to 6", using $\frac{1}{2}$ " I.C. inserts.

The cutter bodies are manufactured with premium hardened steel for rigidity. The TS90s use indexable inserts with four effective cutting edges, which are securely clamped with Torx® screws.

The TS90 cutter delivers optimum milling performance with outstanding chip evacuation. The cutters operate smoothly with low power requirements. These cutters are ideal for slot milling, edge trimming, square shoulder milling and face milling, in materials ranging from low alloy steels to stainless and high alloy steels, as well as grey, ductile and nodular cast iron.

Positive geometries and strengthened cutting edges guarantee trouble-free machining of a wide range of materials. These inserts have 4 usable cutting edges.

TS90 End Mills

End Mill Design with Through Coolant

				_	_			
Designation	Dia.	Shank	0.A.L.	Reach	Flutes	*FREE with Insert		
D.O.C. = .400"		INSERT:		Purchase Below				
TS90E-1.5SD4	1.500	1.250	4.00	1.72	3	40 Inserts		
TS90E-2SD4	2.000	1.250	4.00	1.72	4	40 Inserts		
Insert Screw: TX15-388 • Flag Wrench: W-37032 • Screw Driver: W-45526								

^{*}Free Cutter only valid with inserts shown below.





Face Mill Design with Through Coolant up to 4.00" dia.

Designation	Dia.	Bore	Height	Flutes	LBS	*FREE with Insert
D.O.C. = .400"		INSERT:	SDMT-1204	PDR-TM		Purchase Below
TS90-2SD4	2.000	.750	1.50	4	.50	40 Inserts
TS90-2SD4F	2.000	.750	1.50	5	.50	50 Inserts
TS90-2.5SD4	2.500	1.000	1.75	5	1.00	50 Inserts
TS90-2.5SD4F	2.500	1.000	1.75	6	1.35	60 Inserts
TS90-3SD4	3.000	1.000	2.00	6	2.00	60 Inserts
TS90-4SD4	4.000	1.500	2.00	8	2.70	80 Inserts
TS90-5SD4F	5.000	1.500	2.00	9	5.25	120 Inserts
TS90-6SD4	6.000	2.000	2.50	10	8.15	140 Inserts
Insert Scre	w: TX15-388	• Flag Wre	ench: W-3703	32 • Screw	Driver: W-45	5526

^{*}Free Cutter only valid with inserts shown below.



90° Square Shoulder • 4 Cutting Edges per Insert!

SDMT-1204 PDR-TM is a multi purpose format designed for materials including low to high alloy steels, tool steels, as well as stainless.

TS90 Inserts Designation I s r I.C. d¹ WSE dW SDMT-1204 PDR-TM .500 3/16 3/64 1/2 .173 • •

TyCarb Milling Grades

RP35MP: P20-P35, M20-M40

A tough grade with TiAlN supernitride PVD coating used in roughing of steel and stainless when good wear resistance is required.

RP40MP: P30-P40, M30-M40, S30-S40

A very tough strong grade with TiAIN supernitride coating. Used in roughing applications in steel but also machining 300 series stainless steel and difficult to cut aerospace alloys.

AD Milling Program

AD11 & AD16 End Mills

End Mill Design with Through Coolant

Designation	Dia.	Dia. Shank		Reach	Flutes	*FREE with Insert
D.O.C. = .350"		INSERT: ADM	T-11T3 oı	ADET-11T3_	_	Purchase Below
AD11EM-0625-3.00E2	.625	.625	3.00	1.09	2	30 Inserts
AD11CY-0625-6.00E2	.025	.025	6.00	2.00	2	30 Inserts
AD11EM-0750-3.50F2			3.50	1.47 -	2	30 Inserts
AD11EM-0750-3.50F3	.750	.750	3.30	1.47	3	40 Inserts
AD11CY-0750-8.00F2			8.00	2.00	2	40 Inserts
AD11EM-1000-3.50F3		.750	3.50	1.47	3	40 Inserts
AD11EM-1000-4.00H2					2	40 Inserts
AD11EM-1000-4.00H3	1.00	1.00	4.00	1.72	3	40 Inserts
AD11EM-1000-4.00H4					4	50 Inserts
AD11CY-1000-8.00H3			8.00	2.25	3	40 Inserts
AD11EM-1250-4.00J4		1.250	4.00	1.72 -	4	50 Inserts
AD11EM-1250-4.00J5	1.25		4.00	1.72	5	60 Inserts
AD11CY-1250-8.00J3			8.00	2.25	3	50 Inserts
AD11EM-1500-4.00J5	1.50	1.250	4.00	1.72	5	60 Inserts
Insert Screv	w: TX8P-25	05 • Flag Wro	ench: W-370	46 • Screw I	Oriver: W-3	6228
D.O.C. = .500"		INSERT: ADM	T-1606 <u> </u> oı	ADET-1606_	_	
AD16EM-1000-4.00H2	1.00	1.000	4.00	1.72	2	30 Inserts
AD16CY-1000-8.00H2	1.00	1.000	8.00	2.25	2	40 Inserts
AD16EM-1250-4.00J3	1.25	1.250	4.00	1.72	3	40 Inserts
AD16CY-1250-8.00J3	1.23	1.230	8.00	2.25	3	40 Inserts
AD16EM-1500-4.00J4	1.50	1.250	4.00	1.72	4	50 Inserts
AD16CY-1500-8.00J3	1.50	1.230	8.00	2.25	3	50 Inserts
Insert Screw	v: TX15P-40	008 • Flag Wr	ench: W-36	552 • Screw	Driver: W-3	6238

MADE IN CANAL

and Inconel.

The TyCarb AD series of tools offer high

performance capabilities for profiling, ramping, slotting, face milling, as well as helical interpolation. Combined with our insert selection of 3 geometries and 5 grades these tools offer excellent results in steel, stainless, aluminum, cast iron, as well as exotic materials such as Titanium

10

100 Inserts

120 Inserts

AD11 & AD16 Fac	ce Mills	Face Mill [Face Mill Design with Through Coolant up to 4.00" dia.						
Designation	Dia.	Bore	Height	Flutes	*FREE with Insert				
D.O.C. = .350"	INSE	RT: ADMT-11T3_	or ADET-11T3	3_	Purchase Below				
AD11SM-2000-1.50F5	2.00	.750	1.50 —	5	60 Inserts				
AD11SM-2000-1.50F7	2.00	./50	1.50	7	70 Inserts				
AD11SM-2500-1.75H7	2.50	1.000 —	1.75	7	70 Inserts				
AD11SM-3000-2.00H9	3.00	1.000 —	2.00	9	90 Inserts				
Insert Screv	w: TX8P-2505 •	Flag Wrench: W-	37046 • Scre	w Driver: W-3	6228				
D.O.C. = .500"	INSE	RT: ADMT-1606_	_ or ADET-160	6					
AD16SM-2000-1.50F3			_	3	40 Inserts				
AD16SM-2000-1.50F4	2.00	.750	1.50	4	50 Inserts				
AD16SM-2000-1.50F5				5	50 Inserts				
AD16SM-2500-1.75H6	2.50	1.000 —	1.75	6	60 Inserts				
AD16SM-3000-2.00H7	3.00	1.000	2.00	7	70 Inserts				
AD16SM-4000-2.00L8	4.00			8	80 Inserts				

1.500

2.00

Flag Wrench: W-37052 • Screw Driver: W-36238



			区							
ADMT		5					30MP	P40MP	M40MC	TK10M
Designation	-	d	S	d¹	r	P25MC	P3(P4(M4	.XL
ADMT-11T304-TRM					.016		•			
ADMT-11T308-TRM	.433	.257	.156	5 .114	.032					
ADMT-11T316-TRM	.433				.063		•			
ADMT-11T330-TRM					.118		•			
ADMT-11T308-TRR	.433	.257	.156	.114	.032					
ADMT-160608-TRM					.032					
ADMT-160616-TRM	.630	.392	.246	.177	.063		•			
ADMT-160632-TRM					.126					
ADMT-160608-TRR	.630	.392	.246	.177	.032					
ADMT-160608-TRR	.630	.392	.246	.177	.032					

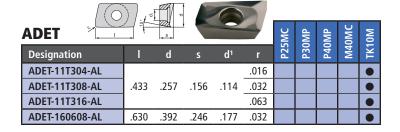
5.00

6.00

Insert Screw: TX15P-4011

AD16SM-5000-2.00L9

AD16SM-6000-2.00L10



SNMX Milling Program

The newly developed SNMX family of milling cutters are designed for rapid metal removal in general face milling applications. Utilizing double sided square inserts with a high positive top rake angle provides users with an economical solution for better productivity.

- Maximum depth of cut capability of .250"
- Economical 8 usable cutting edges
- Strong, thick insert for high feed rates
- Smooth cutting action with low cutting forces due to high top rake on insert
- Excellent surface finish
- Suitable for Steel, Stainless Steel, and Cast Iron
- Proven grades giving long predictable life

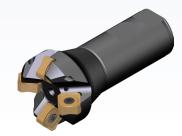


SN14 End Mills

End Mill Design with Through Coolant

Designation	Dia.	Shank	O.D. Dia.	0.A.L.	Flutes	*FREE with Insert	
D.O.C. = .250"		Purchase Below					
SN14EM-1250-3.50J3	1.250	1.250	1.78	3.50	3	40 Inserts	
SN14EM-1500-4.00J4	1.500	1.250	2.03	4.00	4	50 Inserts	
Insert Screw: TX15-2415 • Flag Wrench: W-37032 • Screw Driver: W-45526							





SN14 Face Mills

Face Mill Design with Through Coolant up to 4.00" dia.

Designation	Dia.	Bore	O.D. Dia.	Height	Flutes	*FREE with Insert	
D.O.C. = .250"		Purchase Below					
SN14SM-2000-1.75F5	2.000	0.750	2.53	1.75	5	60 Inserts	
SN14SM-2500-2.00H6	2.500	1.000	3.03	2.00	6	70 Inserts	
SN14SM-3000-2.00H7	3.000	1.000	3.53	2.00	7	80 Inserts	
SN14SM-4000-2.50L8	4.000	1.500	4.53	2.50	8	100 Inserts	
SN14SM-6000-2.50P10	6.000	2.000	6.53	2.50	10	120 Inserts	
SN14SM-8000-2.50T12	8.000	2.500	8.53	2.50	12	200 Inserts	
Insert Screw TX15-2415 • Flag Wrench W-37032 • Screw Driver W-45526							





8 Economical Cutting Edges! • .250" Maximum Depth of Cut!

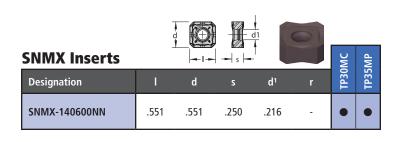
TyCarb Milling Grades

TP30MC: P25-P40

The very tough carbide substrate guarantees this universal steel milling grade's high machining security for a wide range of steel material. A modern MT-CVD multilayer Al2O3 — coating ensures successful dry machining.

TP35MP: P20-P40, M20-M40

Very tough Nanotop PVD AlTiN gradient coating carbide grade especially for milling tool steels. Ideal for dry milling at low to medium cutting speeds for roughing.



^{*}Free Cutter only valid with inserts shown below.

^{*}Free Cutter only valid with inserts shown below.

HexMill 45 HN Milling Program

The NEW TyCarb HexMill 45 offers exceptional Metal Removal Rates (MRR) at very competitive cost per corner. Ideal for light to medium roughing at Depth of Cut to .120".

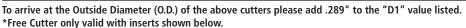
- Double sided insert with 12 Cutting edges
- Improved cycle times
- Exceptionally smooth cutting action
- Premium carbide milling grades
- 3 cutting geometries for light, medium & heavy applications
- Excellent tool life in all applications
- All tools with through coolant
- Milling cutters manufactured in Canada



HN33 End Mills

End Mill Design with Through Coolant

Designation	Dia.	Shank	O.A.L.	Reach	Flutes	*FREE with Insert			
Insert: HNGX-33.5-ANSN Purchase Belo									
HN33EM-1000-3.50F3	1.000	.750	3.50	1.47	3	40 Inserts			
HN33EM-1000-4.00H3	1.000	1.000	4.00	1.72	3	40 Inserts			
HN33EM-1250-4.00J3	1.250	1.250	4.00	1.72	3	40 Inserts			
HN33EM-1500-4.00J4	1.500	1.250	4.00	1.72	4	50 Inserts			
Insert Screw: TX9P-3007 • Flag Wrench: W-36548 S/D: W-36229 • T-Handle: W-36461									







HN33 Face Mills

Face Mill Design with Through Coolant

Designation	Dia.	Bore	Height	Flutes	*FREE with Insert	
Insert: HNGX-33.5-ANSN					Purchase Below	
HN33SM-2000-1.50F5	2.000	.750	1.50	5	60 Inserts	
HN33SM-2500-1.75H7	2.500	1.00	1.75	7	70 Inserts	
HN33SM-3000-2.00H8	3.000	1.00	2.00	8	80 Inserts	
HN33SM-4000-2.00L9	4.000	1.50	2.00	9	100 Inserts	
Insert Screw: TX9P-3007 • Flag Wrench: Flag: W-36548 S/D: W-36229 • T-Handle: W-36461						

To arrive at the Outside Diameter (O.D.) of the above cutters please add .289" to the "D1" value listed. *Free Cutter only valid with inserts shown below.



TyCarb Milling Grades

P25MC is a Universal CVD coated grade and is the first choice for general steel milling applications. It provides the user with a unique combination of wear resistance, toughness and reliability. P25MC comprises a fine-grained substrate with a thin MT-CVD coating including a unique Al2O3 layer. Suitable for machining material group P and conditionally also groups M & S.

P30MP excels in medium to heavy roughing of steel in the P family of materials. This grade is a sub micron substrate with a PVD applied thin Nano-Structure coating containing a high content of Al. P30MP is a highly versatile grade combining good abrasion resistance, toughness and reliability. Suitable for materials in the P, M & K groups.

P40MP is our toughest grade designed for applications with severe shock and/or heavy interruptions. The substrate is a sub-micron carbide with a high cobalt content. The coating is a Nano structure thin coating with a high Al content and applied by the PVD process. Suitable for machining material groups P, M, S & K. Can be used with or without coolant.

M40MC is our first choice grade for Stainless Steel milling applications. M40MC is a MT-CVD coated grade suitable for low cutting speeds and unstable conditions such as vibrations and/or interrupted cuts. The MT-CVD coating is comprised of a TiCN layer as well as a unique outer Al2O3 layer. Suitable for machining in the M, S and conditionally also P material groups. Can be used with or without coolant.











HNGX Inserts					NC	ΜM	MP	M
Designation	d	S	d1	Ар Мах	P25MC	P30I	P40MP	M40M
HNGX-33.5-ANSN-TF	.413	.207	.146	.120		•		
HNGX-33.5-ANSN-TM	.413	.207	.146	.120	•	•		
HNGX-33.5-ANSN-TR	.413	.207	.146	.120	•	•	•	