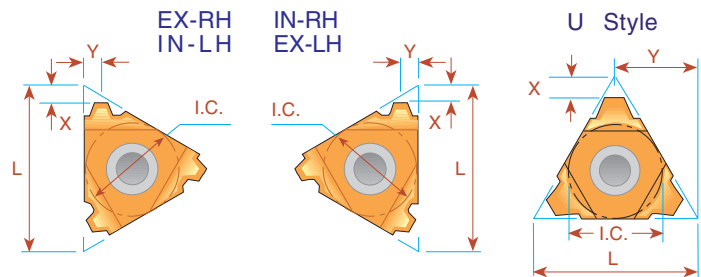
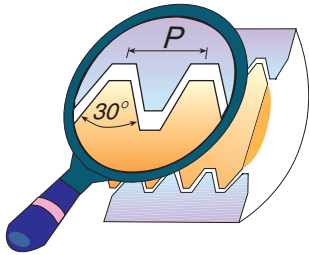


Trapez - DIN 103



Pitch mm	L mm	I.C.	EXTERNAL Ordering Code		INTERNAL Ordering Code		X	Y
			Right Hand	Left Hand	Right Hand	Left Hand		
1.5	8	3/16	MINIATURE →		**08 IR 1.5 TR	**08 IL 1.5 TR	0.6	0.6
2.0	8U	3/16U	"U" MINIATURE →		*08U IR/L 2 TR		0.9	4.0
1.5	16	3/8	16 ER 1.5 TR	16 EL 1.5 TR			1.0	1.1
2.0	16	3/8	16 ER 2 TR	16 EL 2 TR	16 IR 2 TR	16 IL 2 TR	1.0	1.3
3.0	16	3/8	16 ER 3 TR	16 EL 3 TR	16 IR 3 TR	16 IL 3 TR	1.3	1.5
4.0	22	1/2	22 ER 4 TR	22 EL 4 TR	22 IR 4 TR	22 IL 4 TR	1.8	1.9
5.0	22	1/2	22 ER 5 TR	22 EL 5 TR	22 IR 5 TR	22 IL 5 TR	2.0	2.4
6.0	22	1/2	22 ER 6 TR	22 EL 6 TR	22 IR 6 TR	22 IL 6 TR	2.0	2.4
6.0	22U	1/2U	22U ER/L 6 TR		22U IR/L 6 TR		2.0	11.00
7.0	22U	1/2U	22U ER/L 7 TR		22U IR/L 7 TR		2.3	11.00
8.0	22U	1/2U	22U ER/L 8 TR		22U IR/L 8 TR		2.5	11.00
6.0	27	5/8	27 ER 6 TR	27 EL 6 TR	27 IR 6 TR	27 IL 6 TR	2.3	2.7
7.0	27	5/8	27 ER 7 TR	27 EL 7 TR	27 IR 7 TR	27 IL 7 TR	2.2	2.6
8.0	27U	5/8U	27U ER/L 8 TR		27U IR/L 8 TR		2.5	13.7
9.0	27U	5/8U	27U ER/L 9 TR		27U IR/L 9 TR		3.0	13.7
10.0	27U	5/8U	**27U ER/L 10 TR		**27U IR/L 10 TR		3.2	13.7
12.0	33U	3/4U	33U ER/L 12 TR		33U IR/L 12 TR		3.9	16.9

Order example: 22 IR 5 TR MXC

* Available only in BXC grade

** One cutting edge

Carbide Grade Selection

Choose the C.P.T. grade specifically formulated for your application from the following list:

Uncoated Grades

P30*
(P20-P30) Carbide grade for carbon and cast steels, works well at medium to low cutting speeds.

K20*
(K10-K30) Carbide grade for non ferrous metals, aluminum and cast iron.

Coated Grades

P25C
(P15-P35) PVD TiN coated grade for treated and hard alloy steels (25 HRC & up) at medium to low cutting speeds.

MXC
(K10-K20)
(P10-P25) PVD TiN coated micrograin for free cutting untreated alloy steels (below 30 HRC), for stainless steels and cast iron.

BMA
(P20-P40)
(K20-K30) PVD TiAlN coated sub-micrograin grade for stainless steels and exotic materials at medium to high cutting speeds.

BXC**
(P30-P50)
(K25-K40) PVD TiN coated grade for low cutting speed. Works well with wide range of stainless steels.

Note: Due to our unique and specialized production techniques, C.P.T. coated inserts provide superior cutting performance and exceptionally long tool life.

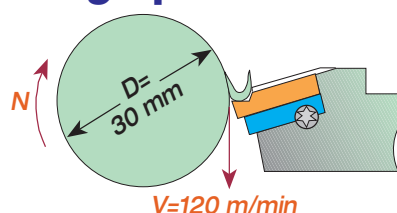
Recommended cutting speed (m/min) for thread turning inserts

ISO Standard	Materials	Coated				Uncoated	
		P25C*	MXC	BMA	BXC**	P30*	K20*
P	Steel: Low & Medium Carbon Steels	80-160	90-160	100-180	20-100	70-120	
	High Carbon Steels	80-120	80-150	90-160	30-80	60-100	
	Alloy Steels, Treated Steels	50-100	80-120	90-120	40-90	50-80	
	Cast Steel	80-140	100-140	120-160	30-80	50-100	
M	Stainless steel: Cast steels Stainless austenitic and austenitic ferritic steel and cast steel		70-120	90-130	30-90	70-100	80-100
K	Cast iron: Grey cast iron, cast iron with spherical graphite, malleable cast iron		80-130	80-150	30-90		60-100
N	Nonferrous Metal: Aluminium and other nonferrous metals, copper alloys non metallic		300-600		20-200		120-200
S	Super-alloys and Titanium: Heat resistant special alloys based on iron, nickel and cobalt, titanium and titanium alloys		40-80	50-100	15-30		
H	Hard Materials: Hardened steel, hardened cast iron materials, chilled cast iron		20-40	30-50	15-30		

- Upon request
- For miniature and ultra miniature insert

Conversion of Cutting Speed to Rotational Speed

Conversion of a selected cutting speed to rotational speed is calculated by the following formula:

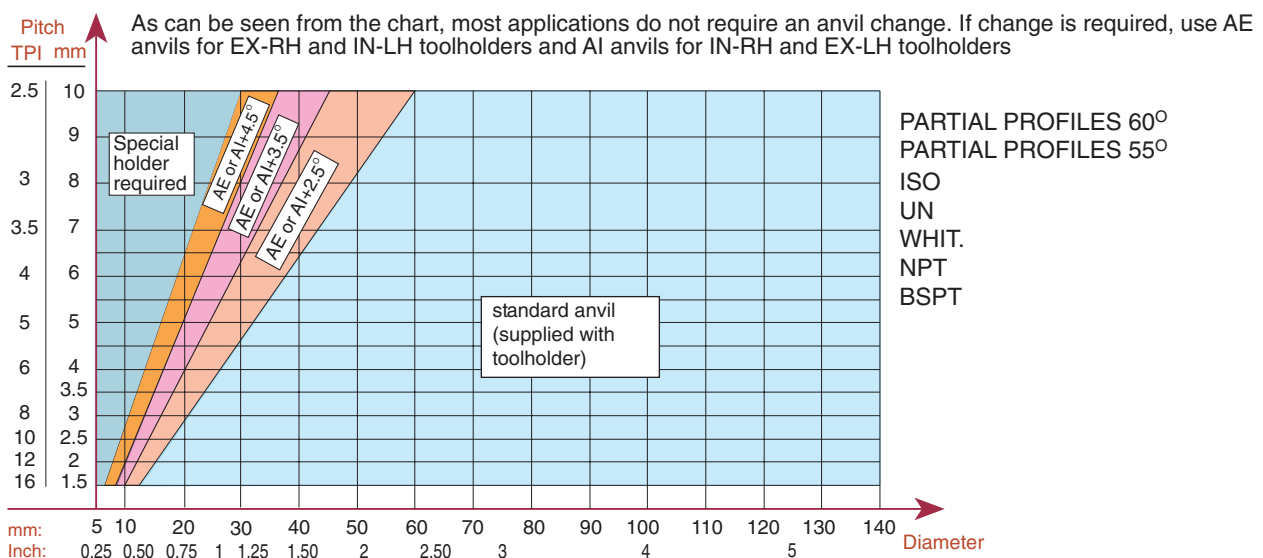
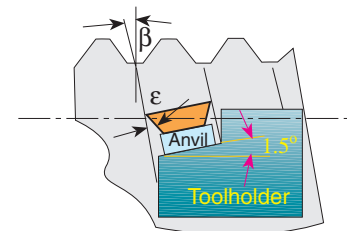
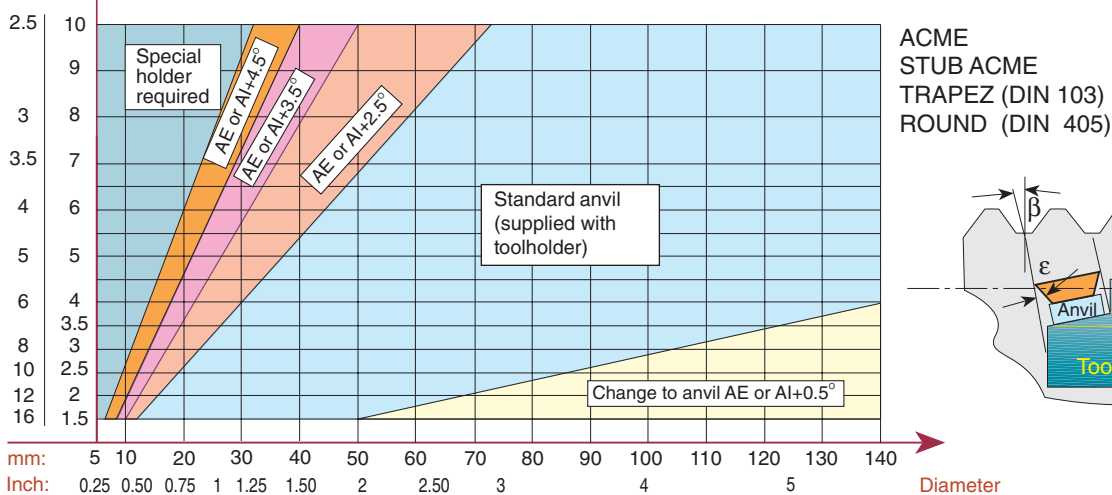


Example

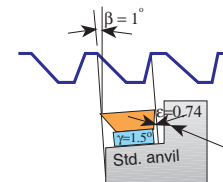
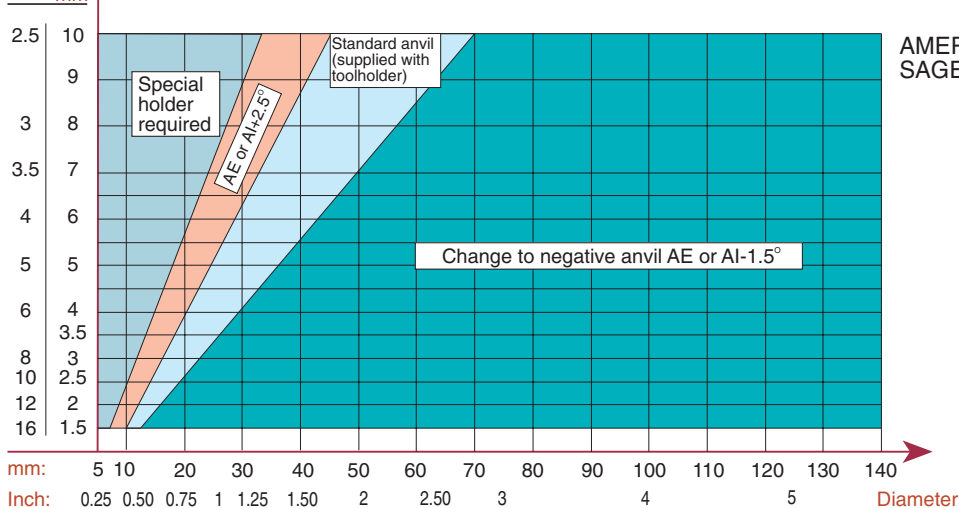
$$N = \frac{V \times 1000}{\pi \times D} = \frac{120 \times 1000}{3.14 \times 30} = 1274 \text{ RPM}$$

Anvil Change Recommendation

As can be seen from the chart, some Pitch to Diameter combinations require an anvil change. If change is required, use AE anvils for EX-RH and IN-LH toolholders and AI anvils for IN-RH and EX-LH toolholders.

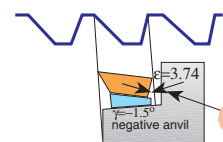


As can be seen from the chart, most applications require an anvil change. In most cases a negative anvil is required. use AE anvils for EX-RH



Before Anvil change

Replacing the standard anvil with an anvil with negative angle, will eliminate side rubbing



After Anvil Change