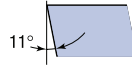




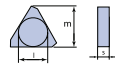
TPUN



Shape
Triangle 60°



Clearance Angle
11°



Tolerance
l ± 0.05 m ± 0.013
s ± 0.025



Insert Type
Clamping
No chip breaker

Insert designation	Grade	l	s	P/r	D	Direction	Catalog Nr.	Page
TPUN 160308	LT 30	16	3,18	90°	15°	Right	M0000054	221

Application Guide

Slotting

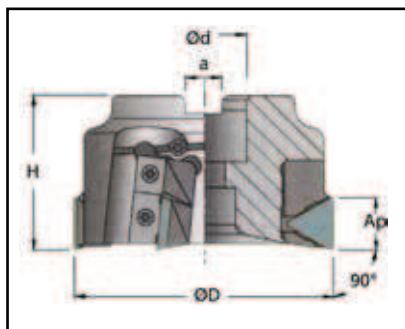
Sholder Milling

Surfacing

Multi purpose 90° milling insert, with 3 cutting edges and corner radius. Suitable for Roughing to Finishing - Slotting, Shoulder and Face milling operations.

Machining Recommendation Guide - Please see Pg. 8 **TPUN**

Catalog Nr.	Description	D	d	H	Ap	z
M2000699	LT 310 M-D63	63	22	50	14	6
M2000700	LT 310 M-D80	80	27	50	14	6
M2000701	LT 310 M-D100	100	32	50	14	7
M2000702	LT 310 M-D125	125	40	63	14	8



Material Group	Group No	Material Examples*	Brinell hardness	d.o.c [mm]		feed [mm/tooth]		V _c [m/min]	
				min	max	min	max	min	max
Low Carbon Steel	1	Ck15, Ck45 1020, 1045	150	0.5	12	0.15	0.25	180	300
			180		12		0.25		260
			210		12		0.25		220
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.5	7	0.12	0.23	130	200
			230		7		0.23		180
			280	0.5	7	0.12	0.22	100	160
			320		7		0.22		140
High Alloy Steel	3	X40 CrMoV 5 1 H 13 40 NiCrMo 6 4340 S 2-10-1-8 HSS M42	220	0.5	7	0.12	0.18	90	130
			280		7		0.18		120
			320	0.5	7	0.12	0.18	90	110
			350		7		0.18		100
			400	0.5	5	0.1	0.18	40	80
			480		3		0.16		70
			550		1.5		0.14		60
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	TPUN inserts are not recommended for Stainless Steel					
	5	X2 CrNiMo 17 2 2 316	230 to 270						
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----						
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed						
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed Treated						
Grey Cast Iron	9	GG 20	140 to 230	0.5	12	0.15	0.25	150	240
		GG 25							220
		GG 30							190
Nodular Cast Iron	10	GGG 40	210	0.5	12	0.12	0.21	100	200
		GGG 50	260						160
		GGG 70	310						130
		G-X260NiCr42	450	0.5	3	0.1	0.16	30	60
Nickel Based Alloys	11	Inconel 625	-----	TPUN inserts are not recommended for Exotic materials					
		Inconel 718							
		Hastelloy C							
Titanium Based Alloys	12	TiAl 6 V4	-----						
		T40							

TPUN

