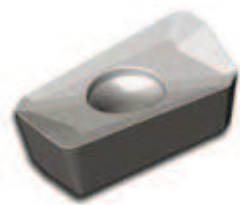


Milling

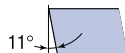


A



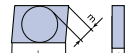
Shape
80° Diamond

P



Clearance Angle
15°

M



Tolerance
l ± 0.05 m ± 0.013
s ± 0.025

T



Insert Type
Screw Down Clamping
no chip breaker

Insert designation	Grade	l	s	P/r	D	Direction	Catalog Nr.	Page
APMT 0903 PDTR	LT 30	9	3,18	90°	15°	Right	M0000663	154
APMT 1135 PDTR	LT 30	11	3,52	90°	15°	Right	M0001133	155
APMT 1604 PDTR	LT 30	16	4,76	90°	15°	Right	M0001134	156

Surfacing Insert Lead angle 90°

Application Guide

Slotting

Shoulder Milling

Surfacing

Multi purpose 90° milling inserts. Suitable for Roughing to Finishing - Slotting, Shoulder and Face milling operations.

Stainless Steel

Vc

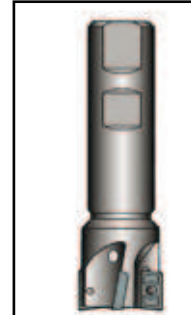
Machining Recommendation Guide - Please see Pg. 8



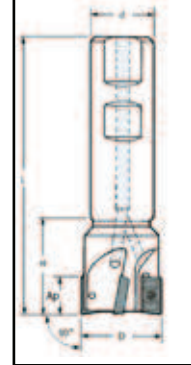
APMT 1135 PDTR

Cutters Milling

Catalog Nr.	Description	D	d	L	H	Ap	z
M2001652	LT 755 W-W-D10/1	10	16	100	25	9	1
M2001653	LT 755 W-W-D12/1	12	16	100	30	9	1
M2001654	LT 755 W-W-D16/2	16	16	120	30	9	2
M2001658	LT 755 W-WL-D16/2	16	16	160	30	9	2
M2001655	LT 755 W-W-D20/2	20	20	120	35	9	2
M2001659	LT 755 W-WL-D20/2	20	20	150	35	9	2
M2001656	LT 755 W-W-D25/4	25	25	150	40	9	4
M2001660	LT 755 W-WL-D25/4	25	25	200	40	9	4
M2001657	LT 755 W-W-D32/4	32	25	150	40	9	4
M2001661	LT 755 W-WL-D32/4	32	25	200	40	9	4



APMT



APMT 1604 PDTR

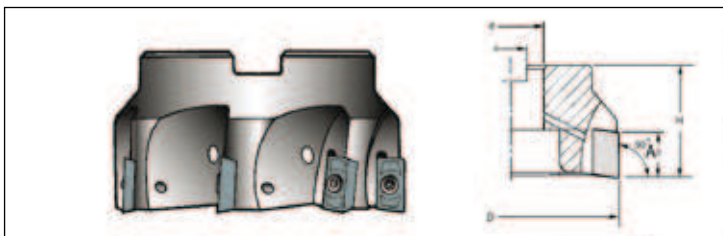
Catalog Nr.	Description	D	d	H	Ap	z	
M2001662	LT 760 W-W-D25/2	25	25	150	50	15	2
M2001665	LT 760 W-WL-D25/2	25	25	200	70	15	2
M2001663	LT 760 W-W-D32/2	32	32	200	100	15	3
M2001666	LT 760 W-WL-D32/3	32	32	250	100	15	3
M2001664	LT 760 W-W-D40/4	35	32	200	100	15	3
M2001667	LT 760 W-WL-D40/4	35	32	250	100	15	3

Catalog Nr.	Description	D	d	H	Ap	z
M2001668	LT 760 M-W-D50/5	50	22	40	15	5
M2001669	LT 760 M-W-D63/6	63	22	40	15	6
M2001670	LT 760 M-W-D80/7	80	27	50	15	7
M2001671	LT 760 M-W-D100/8	100	32	50	15	8
M2001672	LT 760 M-W-D125/9	125	40	63	15	9

W = With coolant

Screw set: VT 40

Key set: CT 15



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	8.5	0.10	0.25	180	300
			180		8.5		0.25		260
			210		8.5		0.25		220
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.5	8.5	0.08	0.22	130	200
			230		8.5		0.22		180
			280	0.5	8.5	0.08	0.18	100	160
			320		8.5		0.18		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	0.08	0.18	90	130
			280		7.0		0.18		110
			320	0.5	7.0	0.08	0.16	60	100
			350		7.0		0.16		90
			400	0.5	4.0	0.10	0.16	40	80
			480		2.0		0.15		70
			550		1.0		0.14		60
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.5	8.5	0.10	0.22	190	250
	5	X2 CrNiMo 17 2 2 316	230 to 270	0.5	8.5	0.10	0.20	160	210
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----	0.5	7.0	0.08	0.18	70	120
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.5	8.5	0.08	0.22	150	230
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed	0.5	8.5	0.08	0.18	130	210
			Treated	0.5	8.5	0.08	0.18	90	150
Grey Cast Iron	9	GG 20	140 to 230	0.5	8.5	0.10	0.28	150	240
		GG 25							220
		GG 30							190
Nodular Cast Iron	10	GGG 40	210	0.5	8.5	0.10	0.25	100	200
		GGG 50	260						160
		GGG 70	310						130
		G-X260NiCr42	450	0.5	3.0	0.10	0.14	30	60
Nickel Based Alloys	11	Inconel 625	-----	0.5	5.0	0.08	0.15	25	35
		Inconel 718						28	38
		Hastelloy C						40	65
Titanium Based Alloys	12	TiAl 6 V4	-----	0.5	5.0	0.08	0.18	35	60
		T40					0.15	28	40

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	10.0	0.10	0.38	180	300
			180		10.0		0.25		260
			210		10.0		0.23		220
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.5	10.0	0.08	0.22	130	200
			230		10.0		0.22		180
			280	0.5	10.0	0.08	0.18	100	160
			320		10.0		0.18		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	0.08	0.18	90	130
			280		7.0		0.18		110
			320	0.5	7.0	0.08	0.16	60	100
			350		7.0		0.16		90
			400	0.5	4.0	0.10	0.16	40	80
			480		2.0		0.15		70
			550		1.0		0.14		60
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.5	10.0	0.10	0.22	190	250
	5	X2 CrNiMo 17 2 2 316	230 to 270	0.5	10.0	0.10	0.20	160	210
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----	0.5	7.0	0.08	0.18	70	120
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.5	10.0	0.08	0.20	150	230
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed	0.5	7.0	0.08	0.20	130	210
			Treated	0.5	7.0	0.08	0.20	90	150
Grey Cast Iron	9	GG 20	140 to 230	0.5	10.0	0.10	0.25	150	240
		GG 25							220
		GG 30							190
Nodular Cast Iron	10	GGG 40	210	0.5	10.0	0.10	0.22	100	200
		GGG 50	260						160
		GGG 70	310	0.5	3.0	0.10	0.14	30	130
		G-X260NiCr42	450						60
Nickel Based Alloys	11	Inconel 625	-----	0.5	5.0	0.08	0.15	25	35
		Inconel 718						28	38
		Hastelloy C						40	65
Titanium Based Alloys	12	TiAl 6 V4	-----	0.5	5.0	0.08	0.18	35	60
		T40					0.15	28	40

APMT



Milling Machining conditions **APMT 1604 PDTR & APMT 160408 PDTR**

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	15.0	0.18	0.32	180	300
			180		15.0		0.32		260
			210		15.0		0.32		220
Alloy Steel	2	42 CrMo 4 St 50-2 Ck60 1060 4140	180	0.5	15.0	0.15	0.25	130	200
			230		15.0		0.25		180
			280	0.5	15.0	0.15	0.22	100	160
			320		15.0		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	12.0	0.12	0.22	90	130
			280		12.0		0.22		110
			320	0.5	12.0	0.12	0.18	60	100
			350		12.0		0.18		90
			400	0.5	5.0	0.10	0.18	40	80
			480		3.0		0.16		70
			550		1.5		0.14		60
Austenitic Stainless Steel	4	X5 CrNi 18 9 304	210 to 250	0.5	15.0	0.15	0.25	190	250
	5	X2 CrNiMo 17 2 2 316	230 to 270	0.5	15.0	0.12	0.22	120	210
	6	X6 CrNiMoTi 17 12 2 316 Ti Duplex / Nitronic	-----	0.5	12.0	0.12	0.18	70	120
Ferritic Stainless Steel	7	X8 Cr 7 430	Annealed	0.5	15.0	0.15	0.25	150	230
Martensitic Stainless Steel	8	X15 Cr 13 410	Annealed	0.5	15.0	0.15	0.25	130	210
			Treated	0.5	15.0	0.15	0.20	90	150
Grey Cast Iron	9	GG 20	140 to 230	0.5	15.0	0.18	0.32	150	240
		GG 25							220
		GG 30							190
Nodular Cast Iron	10	GGG 40	210	0.5	15.0	0.15	0.28	100	200
		GGG 50	260						160
		GGG 70	310	0.5	3.0	0.10	0.14	30	130
		G-X260NiCr42	450						60
Nickel Based Alloys	11	Inconel 625	-----	0.5	12.0	0.12	0.18	25	35
		Inconel 718						28	38
		Hastelloy C						40	65
Titanium Based Alloys	12	TiAl 6 V4	-----	0.5	12.0	0.12	0.20	35	60
		T40					0.18	28	40

