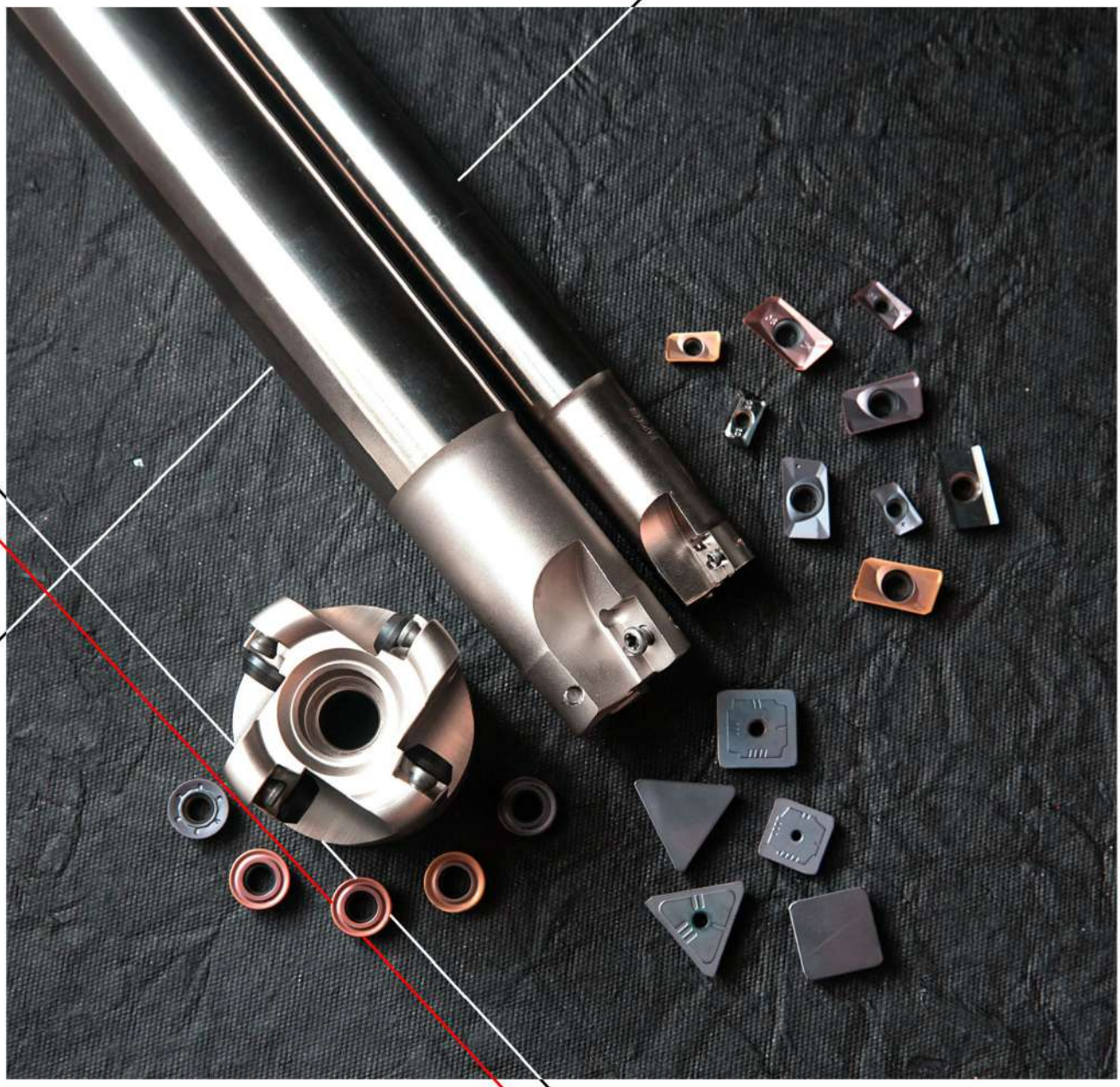


ISO MILLING

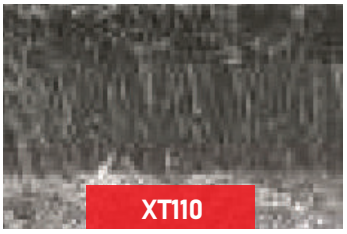
- ISO milling is a process that uses ISO codes to select milling inserts for machining operations.
- These are common with a lot of manufacturers and can be interchanged with their cutter bodies as well.

- Popular inserts include APMT for Shoulder Milling , RDMT for Copy Milling and SPKN/TPKN for conventional milling

ISO MILLING INDEX

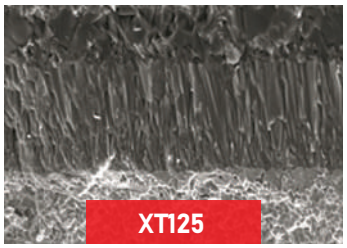
ISO Milling	291-310
Grade Information	294
Recommended Cutting Condition	295
AOMT 1236	296
APKT 1003	297
APKT 1604	298
APMT 1135	299
APMT 1604	300
RDMT 10T3	301
RPMT 10T3	302
RDMT 1204	303
RPMT 1204	304
SPKN 1203	305
SPKN 1504	306
SPMT 1204	307
TPKN 1603	308
TPKN 2204	309

GRADE INFORMATION



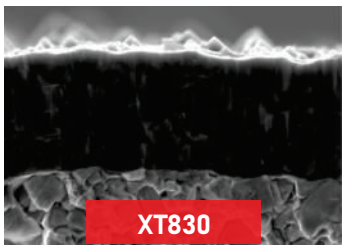
P05-P30 | M05-M20 | K05-K30

4 µ AlCrN PVD Coated, Combining with fine particles'substrates with High-Toughness, suitable for all materials in light to medium load Machining. Suitable for Steels.
Stainless Steel & Cast Iron.



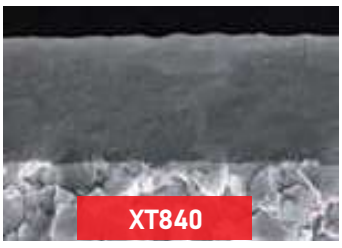
P10-P30 | K10-K25 | M10-M25

2-4 µ ALCrN+AlCrSiN PVD Coated, Combinating with ultra fine particles'substrates with High-Toughness, suitable for all materials in light & medium load Milling. Suitable for Steels, Stainless Steel & High-Temperature high hardness alloys.(Less Chromium & Nickel)



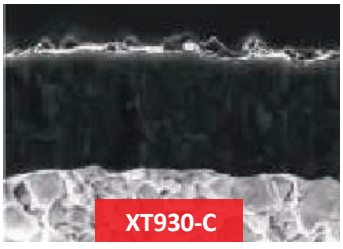
P10-P30 | K10-K25 | M10-M25

PVD coating with optimal thermal resistance & added strength. Tough carbide substrate designed for demanding application.
Suitable for all materials from steels to superalloys.



P10-P30 | K10-K25 | M10-M25

Composition: Co 10.5%; mixed carbides 2.0 %; WC balance | Grain size: 1-2 µm | Hardness: HV30 1400 | Coating specification: PVD TIAITAN
First choice for dry machining of steels and Cl at high cutting speeds



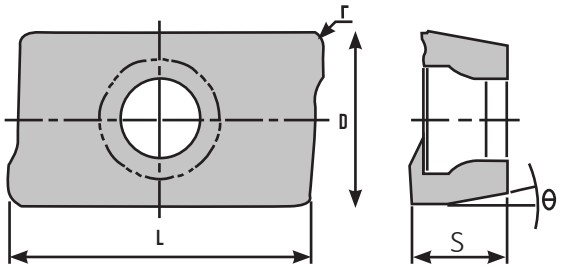
P15-P35 | M15-M35 | H05-H15

Ultra find grade with Nano coating for high heat resistance and toughness. Special AITIMEN coating gives it a bronze shade and higher temperature resistance! The first choice for general-purpose machining of stainless steel. It can be used for supplementary machining of soft steels.

RECOMMENDED CUTTING CONDITIONS

ISO	Material Group	Relative Materials (DIN)	Hardness HB	Cutting speed (m/min)				
				XT 110	XT 125	XT 830	XT 840	XT 930-C
P	Non-alloy steel	9 SMn 28, C35C50, C40E, C45E, 49 CrMo 4	125 - 250	120 - 200	150 - 250	150 - 250	90 - 250	80 - 200
	Low alloy steel	13 CrMo 44, 40NiCrM022, 58 CrV 4	200 - 350	140 - 200	150 - 250	140 - 200	80 - 220	80 -180
	High alloy steel	X 40 CrMoV 5 1, X100 CrMoV 5 1, S6-5-5	200 - 325	80 - 120	80 - 200	80 - 130	80 -180	60 -160
M	Ferritic/ martensitic Stainless steel	X6Cr13, X10CrA118, X20CrNi175	200 - 240	130 - 190	80 - 160	130 - 190		60 -220
	Austenitic Stainless steel	X5 CrNi 18 9, X5 CrNiMo 17 13 3 X6 CrNiTi 18 9	180	100 -200	80 -200	100 -200		60 -180
K	Grey cast iron	GG15, GG20, GGG40, GG-35	180 - 260	120 - 200		160 - 200		
	Malleable castiron	GTS-35-10, GTS-35,GTS70-02, 20mN5	130 - 230	110 - 180		130 - 180	90 - 240	
S	Fe, Ni or Co based	X12 NICrAlTi 31 20, TiAl5Sn2	200 - 350	30 - 50		30 - 50		40 -120
	Titanium and Ti-alloy based	TiCu2, TiAl6V4, TiAl6V4ELI		35 - 75		35 - 75		30 -100
H	Hardended steel	C 105 W1,75 CrMoNiW 6 7	55 - 60 HRc	55 - 65	35 - 65	55 - 65		30 -120
	Chilled cast iron	G-X 260 NiCr 4 2, X15 CrNiSi 25 20	400	45 - 55	35 - 55	45 - 55		
	Cast iron	G-X 300 CrMo 15 3	55 HRc	55 - 65	35 - 65	55 - 65		

AOMT1236



90 DEGREE MILLING INSERT.
SUITABLE FOR: SURFACING / SLOTTING/SHOULDER MILLING

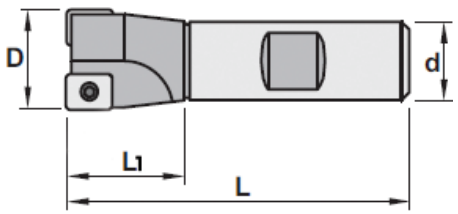
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT830
	L	D	S	Ø	R	MIN	MAX	MIN	MAX	
AOMT123608PEER	12	6.6	3.6	11	0.8	0.07	0.22	0.5	11	O

● STOCKABLE O NON STOCKABLE

END MILL CUTTER

DESIGNATION	D	d	L1	L	Z	STOCKABLE
016-85-AOMT12-T2	16	16	22	85	2	O
020-90-AOMT12-T3	20	20	25	90	3	O
025-95-AOMT12-T3	25	25	25	95	3	O

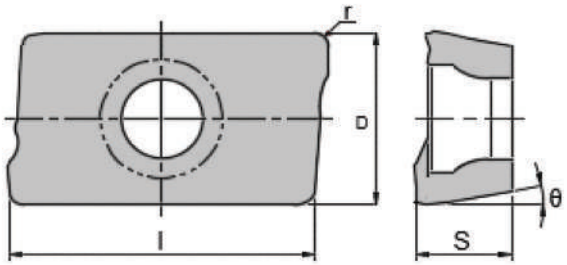
● STOCKABLE O NON STOCKABLE



MILLING

SCREW: SCREW FOR AOMT12

APKT1003



90 DEGREE LEAD ANGLE INSERT
2 CORNER INSERT SUITABLE FOR POCKET MILLING, COPYING & SURFACING

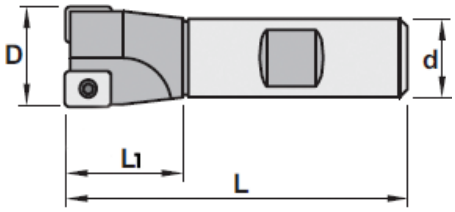
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT110	XT830
	L	D	S	Ø	R	MIN	MAX	MIN	MAX		
APKT1003PDTR	10.5	6.7	3.5	11	0.5	0.06	0.20	0.50	9.00	●	○
APKT100308PDTR	10.5	6.7	3.5	11	0.8	0.07	0.26	0.50	9.00		○

● STOCKABLE ○ NON STOCKABLE

END MILL CUTTER

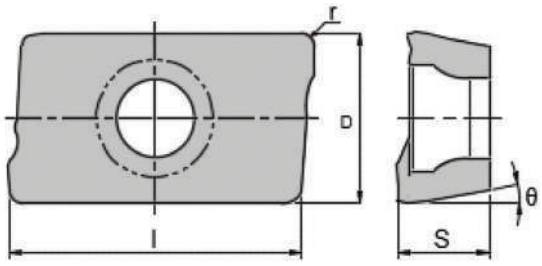
DESIGNATION	D	d	L1	L	Z	STOCKABLE
APKT10-DIA16-2FL-L200	16	16	50	200	2	○
APKT10-DIA20-2FL-L200	20	20	50	200	2	○
APKT10-DIA25-3FL-L200	25	25	50	200	3	○

● STOCKABLE ○ NON STOCKABLE



SCREW - SCREW FOR APKT10

APKT1604



90 DEGREE LEAD ANGLE INSERT
2 CORNER INSERT SUITABLE FOR POCKET MILLING, COPYING & SURFACING

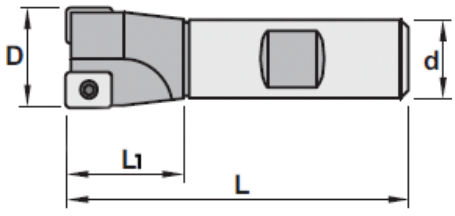
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT110	XT840
	L	D	S	Ø	R	MIN	MAX	MIN	MAX		
APKT160408	16.3	9.5	5.3	11	0.8	0.10	0.32	0.50	15	O	O
APKT160420	16.3	9.5	5.3	11	2.0	0.10	0.32	1.0	15		O
APKT160425	16.3	9.5	5.3	11	2.5	0.10	0.32	1.5	15		O
APKT160440	16.3	9.5	5.3	11	4.0	0.10	0.32	1.5	15		O

● STOCKABLE O NON STOCKABLE

END MILL CUTTER

DESIGNATION	D	d	L1	L	Z	STOCKABLE
APKT16-DIA25-2FL-L200	25	25	50	200	2	O
APKT16-DIA32-3FL-L200	32	32	50	200	3	O

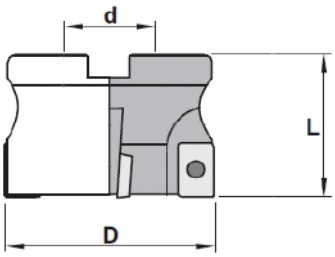
● STOCKABLE O NON STOCKABLE



SHELL MILL CUTTER

DESIGNATION	D	d	L	Z	STOCKABLE
APKT16-DIA50-5FL	50	22	50	5	O
APKT16-DIA63-6FL	63	22	50	6	O
APKT16-DIA80-7FL	80	27	60	7	O

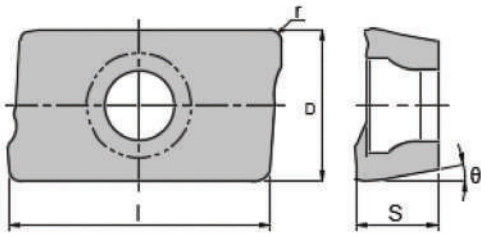
● STOCKABLE O NON STOCKABLE



SCREW: SCREW FOR APKT16

MILLING

APMT1135



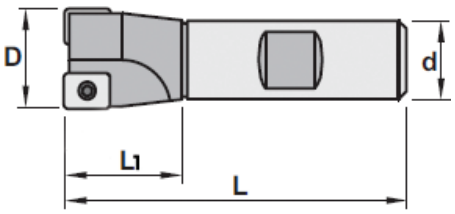
90 DEGREE LEAD ANGLE INSERT
2 CORNER INSERT SUITABLE FOR POCKET MILLING, COPYING & SURFACING

DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT110	XT125	XT830	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX				
APMT1135PDTR	11.18	6.2	3.5	11	0.4	0.07	0.15	0.5	10			O	
APMT113508PDTR	11.18	6.2	3.5	11	0.8	0.07	0.22	0.5	10			O	
APMT1135PDERH2	11.18	6.2	3.5	11	0.8	0.07	0.22	0.5	10		●		●
APMT1135PDERM2	11.18	6.2	3.5	11	0.8	0.07	0.22	0.5	10		●		●
APMT1135PDER	11.18	6.2	3.5	11	0.4	0.07	0.25	0.5	10	●			

● STOCKABLE O NON STOCKABLE

END MILL CUTTER

DESIGNATION	D	d	L1	L	Z	STOCKABLE
BAP300R-1616-200-2T	16	16	50	200	2	●
BAP300R-2020-200-2T	20	20	50	200	2	●
BAP300R-2525-200-3T	25	25	50	200	3	●
BAP300R-2525-200-4T	25	25	50	200	4	●

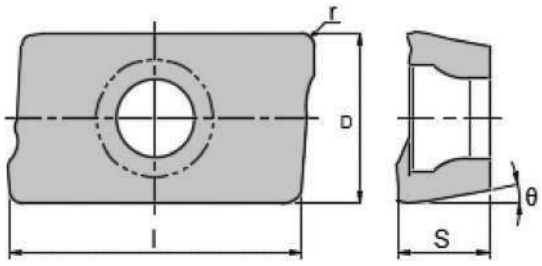


● STOCKABLE O NON STOCKABLE

SCREW - SCREW FOR APMT11

MILLING

APMT1604



90 DEGREE LEAD ANGLE INSERT
2 CORNER INSERT SUITABLE FOR POCKET MILLING, COPYING & SURFACING

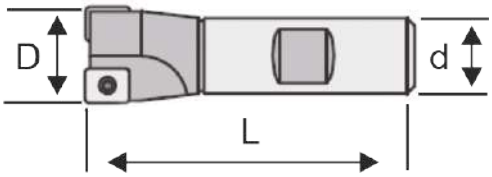
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT110	XT125	XT830	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX				
APMT1604PDTR	17.19	5.5	4.76	11	0.8	0.09	0.3	0.5	13	●		●	
APMT1604PDERH2	17.19	9.5	5.5	11	0.8	0.09	0.3	0.5	13		●		●
APMT1604PDERM2	17.19	9.5	5.5	11	0.8	0.09	0.3	0.5	13		●		●
APMT160420-GW	17.19	5.5	4.76	11	2	0.09	0.3	0.5	13	●			
APMT160430PDER	17.19	5.5	4.76	11	3	0.09	0.3	0.5	13		●		

● STOCKABLE ○ NON STOCKABLE

END MILL CUTTER

DESIGNATION	D	d	L1	L	Z	STOCKABLE
BAP400R-2525-200-2T	25	25	50	200	2	●
BAP400R-3232-200-3T	32	32	50	200	3	●

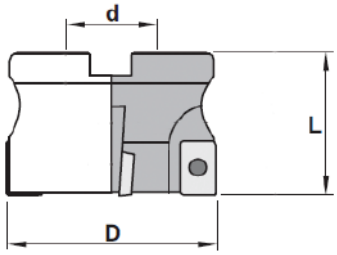
● STOCKABLE ○ NON STOCKABLE



SHELLMILLCUTTER

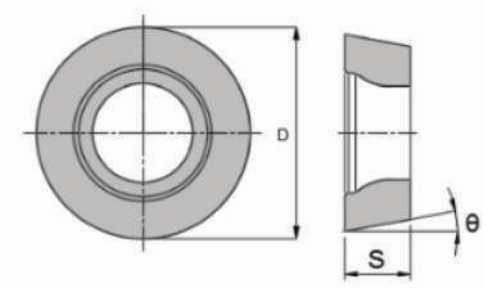
DESIGNATION	D	d	L	Z	STOCKABLE
BAP400R-50-22-4T	50	22	50	4	●
BAP400R-63-22-5T	63	22	50	5	●
BAP400R-80-27-6T	80	27	50	6	●

● STOCKABLE ○ NON STOCKABLE



SCREW: SCREW FOR APMT16

RDMT10T3



90 DEGREE LEAD ANGLE INSERT
2 CORNER INSERT SUITABLE FOR POCKET MILLING, COPYING & SURFACING

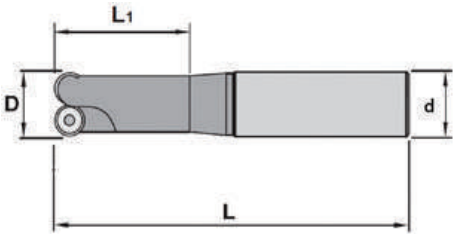
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT125	XT830	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX			
RDMT10T3MO	-	10	3.97	15	-	0.1	0.60	0.3	2.5		O	
RDMW10T3MO	-	10	3.97	15	-	0.1	0.60	0.3	2.5	●	O	
RDMT10T3MOTN	-	10	3.97	15	-	0.1	0.60	0.3	2.5	●		●

● STOCKABLE O NON STOCKABLE

END MILL CUTTER

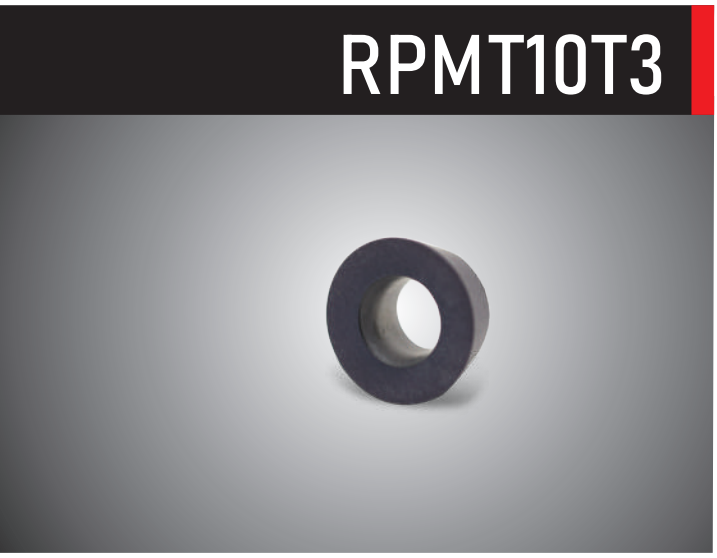
DESIGNATION	D	d	L1	L	Z	STOCKABLE
TRS-5R-25-160-C25-2T	25	25	50	160	2	●
TRS-5R-32-160-C32-3T	32	32	50	160	3	●

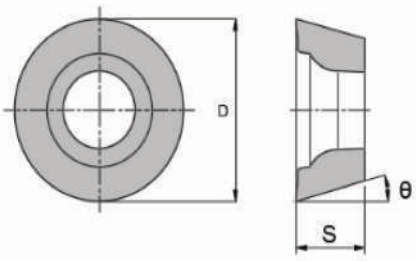
● STOCKABLE O NON STOCKABLE



SCREW - Spare kit R5

RPMT10T3





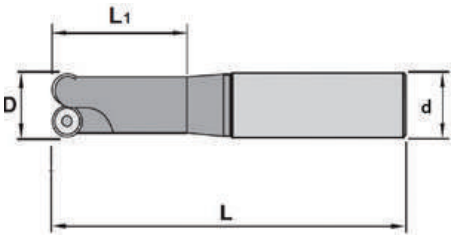
90 DEGREE LEAD ANGLE INSERT
SUITABLE FOR POCKET MILLING, COPYING & SURFACING

DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT125	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX		
RPMT10T3MO	-	10	3.97	11	-	0.1	0.64	0.3	2.5	○	○
RPMW10T3MO	-	10	3.97	11	-	0.1	0.64	0.3	2.5	●	

● STOCKABLE ○ NON STOCKABLE

END MILL CUTTER

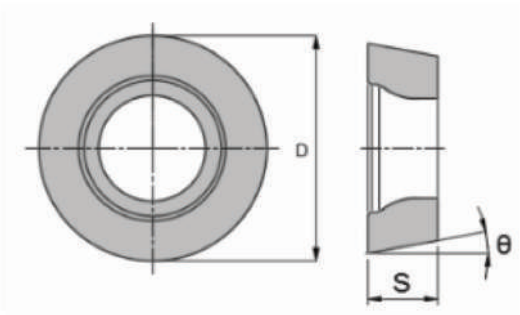
DESIGNATION	D	d	L1	L	Z	STOCKABLE
020-180-RPMT10-2T	20	20	80	180	2	○
025-180-RPMT10-3T	25	25	80	180	3	●
032-200-RPMT10-3T	32	32	105	200	3	●



● STOCKABLE ○ NON STOCKABLE

SCREW - Spare kit R5

RDMT1204



90 DEGREE LEAD ANGLE INSERT
SUITABLE FOR POCKET MILLING, COPYING & SURFACING

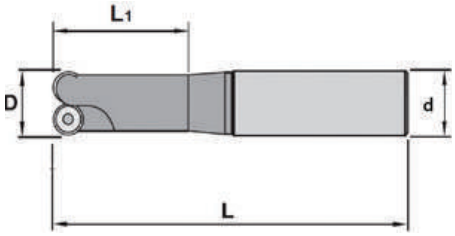
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT125	XT830	XT930-C
RDMT1204M0	-	12	4.76	15	-	0.14	0.74	0.3	3		●	
RDMT1204M0TN	-	12	4.76	15	-	0.1	0.74	0.3	3	●		●

● STOCKABLE ○ NON STOCKABLE

END MILL CUTTER

DESIGNATION	D	d	L1	L	Z	STOCKABLE
025-160L-RDMT1204 Z-2	25	25	50	160	2	●
032-160L-RDMT1204 Z-3	32	32	50	160	3	●

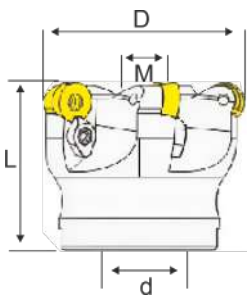
● STOCKABLE ○ NON STOCKABLE



SHELL MILL CUTTER

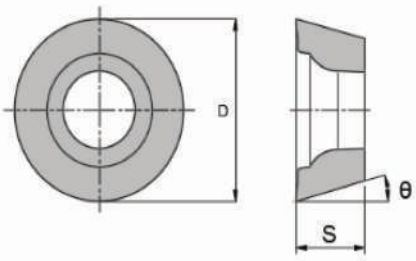
DESIGNATION	D	d	L	Z	STOCKABLE
050-A22-RDMT1204 Z-4	50	22	50	4	●
052-A22-RDMT1204 Z-4	52	22	50	4	●
063-A22-RDMT1204-Z-5	63	22	50	5	●
080-A27-RDMT1204-Z-6	80	27	60	6	○
0100-A32-RDMT1204-Z-7	100	32	60	7	○

● STOCKABLE ○ NON STOCKABLE



SCREW - Spare kit R6

RPMT1204



90 DEGREE LEAD ANGLE INSERT
SUITABLE FOR POCKET MILLING, COPYING & SURFACING

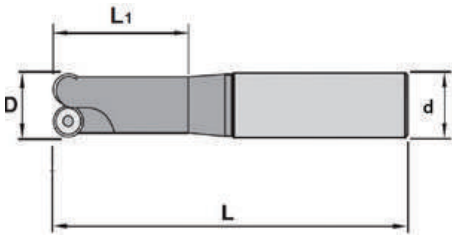
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT125	XT830	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX			
RPMT1204M0	-	12	4.76	11	-	0.14	0.74	0.3	3	O	O	●
RPMW1204M0	-	12	4.76	11	-	0.14	0.74	0.3	3	●		

● STOCKABLE O NON STOCKABLE

END MILL CUTTER

DESIGNATION	D	d	L1	L	Z	STOCKABLE
025-160L-RPMT1204-Z2	25	25	50	160	2	●
032-160L-RPMT1204-Z3	32	32	50	160	3	●

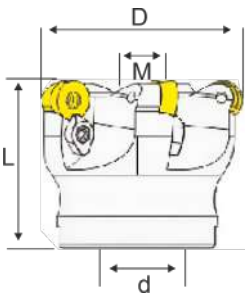
● STOCKABLE O NON STOCKABLE



SHELL MILL CUTTER

DESIGNATION	D	d	L	Z	STOCKABLE
050-A22-RPMT1204 Z-4	50	22	50	4	●
052-A22-RPMT1204 Z-4	52	22	50	4	O
063-A22-RPMT1204-Z-5	63	22	50	5	O
080-A27-RPMT1204-Z-6	80	27	60	6	O
0100-A32-RPMT1204-Z-7	100	32	60	7	O

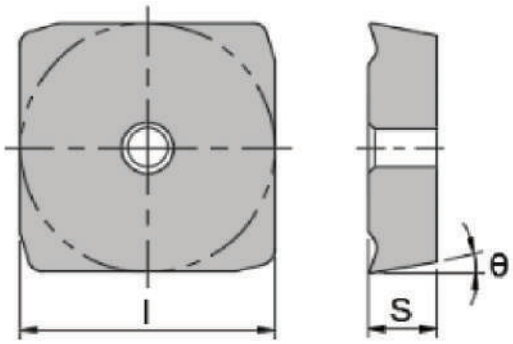
● STOCKABLE O NON STOCKABLE



SCREW - Spare kit R6

MILLING

SPKN1203



75 DEGREE LEAD ANGLE INSERT
APPLICATION : HIGH DEPTH OF CUT FACE MILLING

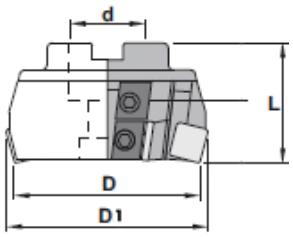
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT830	XT840	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX			
SPKN1203EDTR	-	12.7	3.18	20	-	0.1	0.46	0.5	6	O		
SPKN1203EDR	-	12.7	3.18	20	-	0.1	0.46	0.5	6		●	O

● STOCKABLE O NON STOCKABLE

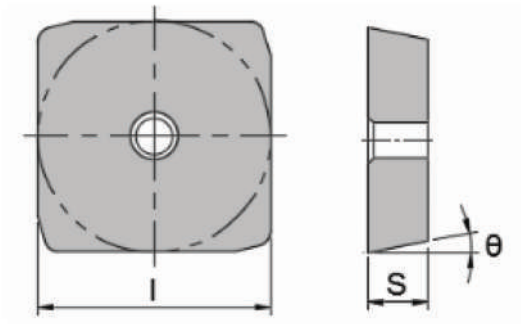
SHELL MILL CUTTER

DESIGNATION	D	D1	d	L	Z	STOCKABLE
063-A22-Z4-SPKN12	50	25	50	160	2	O
080-A22-Z5-SPKN12	52	32	50	160	3	O
100-A32-Z7-SPKN12	63	32	60	160	4	O
125-A40-Z8-SPKN12	80	68	32	50	6	O

● STOCKABLE O NON STOCKABLE



SPKN1504



75 DEGREE LEAD ANGLE INSERT
APPLICATION : HIGH DEPTH OF CUT FACE MILLING

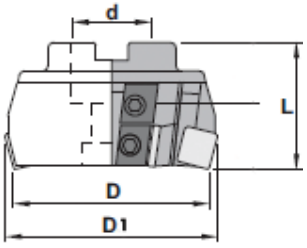
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT830	XT840	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX			
SPKN1504EDTR	-	15.88	4.76	20	-	0.1	0.5	0.5	8	O		
SPKN1504EDR	-	15.88	4.76	20	-	0.1	0.5	0.5	8		●	O

● STOCKABLE O NON STOCKABLE

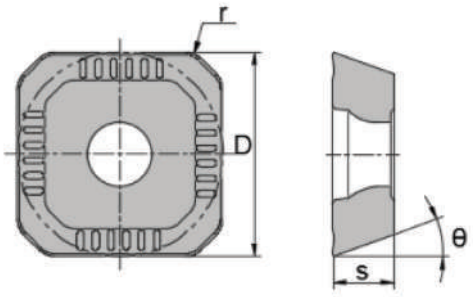
SHELL MILL CUTTER

DESIGNATION	D	D1	d	L	Z	STOCKABLE
063-22-SPKN15-4T	63	69	22	40	4	O
080-27-SPKN15-5T	80	86	27	40	5	O
0100-32-SPKN15-7T	100	106	27	32	7	O
0125-40-SPKN15-8T	125	131	40	50	8	O
0160-40-SPKN15-10T	160	166	40	43	10	O
0200-60-SPKN15-12T	200	206	60	63	12	O
0250-60-SPKN15-14T	250	256	60	63	14	O
0160-40-SPKN15-10T	100	88	40	50	7	O

● STOCKABLE O NON STOCKABLE



SPMT1204



90 DEGREE LEAD ANGLE INSERT
4 CORNER INSERT SUITABLE FOR POCKET MILLING, COPYING & SURFACING

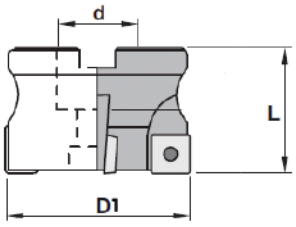
DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT830
	L	D	S	Ø	R	MIN	MAX	MIN	MAX	
SPMT120408	-	13.29	4.76	11	0.8	0.07	0.29	0.5	9.0	●

● STOCKABLE ○ NON STOCKABLE

SHELL MILL CUTTER

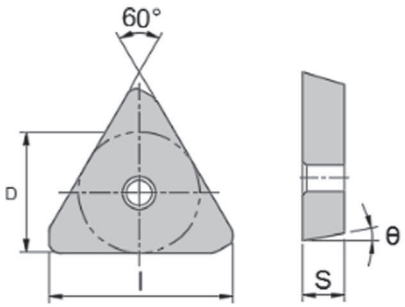
DESIGNATION	D	D1	d	L	Z	STOCKABLE
XTSM-D50-SPMT120408	56	50	22	40	4	●
XTSM-D63-SPMT120408	69	63	22	50	5	●
XTSM-D80-SPMT120408	86	80	27	50	6	●
XTSM-D100-SPMT120408	106	100	32	50	7	○
XTSM-D125-SPMT120408	131	125	40	63	8	○

● STOCKABLE ○ NON STOCKABLE



SCREW - SCREW M4 FOR SPMT12
OTHER CORNER RADII ON REQUEST BUT IN M4.5 SCREW

TPKN1603



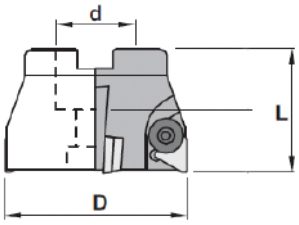
75 DEGREE LEAD ANGLE INSERT
APPLICATION : HIGH DEPTH OF CUT FACE MILLING

DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT830	XT840	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX			
TPKN1603	16.4	16.4	3.18	11	-	0.08	0.27	0.5	12	O	●	O

● STOCKABLE O NON STOCKABLE

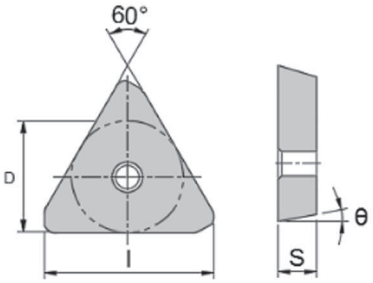
SHELL MILL CUTTER

DESIGNATION	D	D1	d	L	Z	STOCKABLE
063-A22-TPKN16-6T	63	22	22	50	6	O
080-A27-TPKN16-6T	80	27	27	50	6	O
100-A32-TPKN16-7T	100	32	27	50	7	O
125-A40-TPKN16-8T	125	40	40	63	8	O



● STOCKABLE O NON STOCKABLE

TPKN2204



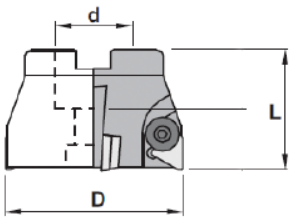
75 DEGREE LEAD ANGLE INSERT
APPLICATION : HIGH DEPTH OF CUT FACE MILLING

DESIGNATION	DIMENSIONS					FEED (MM/ TOOTH)		DEPTH OF CUT(MM)		XT830	XT840	XT930-C
	L	D	S	Ø	R	MIN	MAX	MIN	MAX			
TPKN2204PDTR	22.1	12.7	4.76	11	-	0.09	0.27	0.5	0.5	O		
TPKN2204PDR	22.1	12.7	4.76	11	-	0.09	0.27	0.5	0.5		●	O

● STOCKABLE O NON STOCKABLE

SHELL MILL CUTTER

DESIGNATION	D	D1	d	L	Z	STOCKABLE
080-A27-TPKN22-5T	80	27	22	50	5	O
100-A32-TPKN22-6T	100	32	22	50	6	O
125-A40-TPKN22-7T	125	40	27	60	7	O
160-A40-TPKN22-9T	160	40	32	60	9	O



● STOCKABLE O NON STOCKABLE