

NEW PRODUCT NEWS

CHASE² MILL

expansion

90° Entering Angle With AN11 Series Inserts



CHASE²MILL

90° Entering angle with AN11 series inserts

FEATURES

- 90° cutter with 4 corner indexable inserts
- High density cutter maximises productivity
- High positive cutting edges - smooth cutting with low cutting force
- Thick insert design - stable and reliable performance
- Excellent surface finish achieved by wide wiper flat
- True 90° cutting edge guarantees squareness quality and wall accuracy
- Ramping capability

The CHASE2MILL line of milling products is expanding its range of applications with the introduction of smaller size inserts. The ANHX/ANMX11 adopting the same superior features of the 16mm (ANHX) series enable higher feed rates due to helical insert geometry and tools with higher insert density.

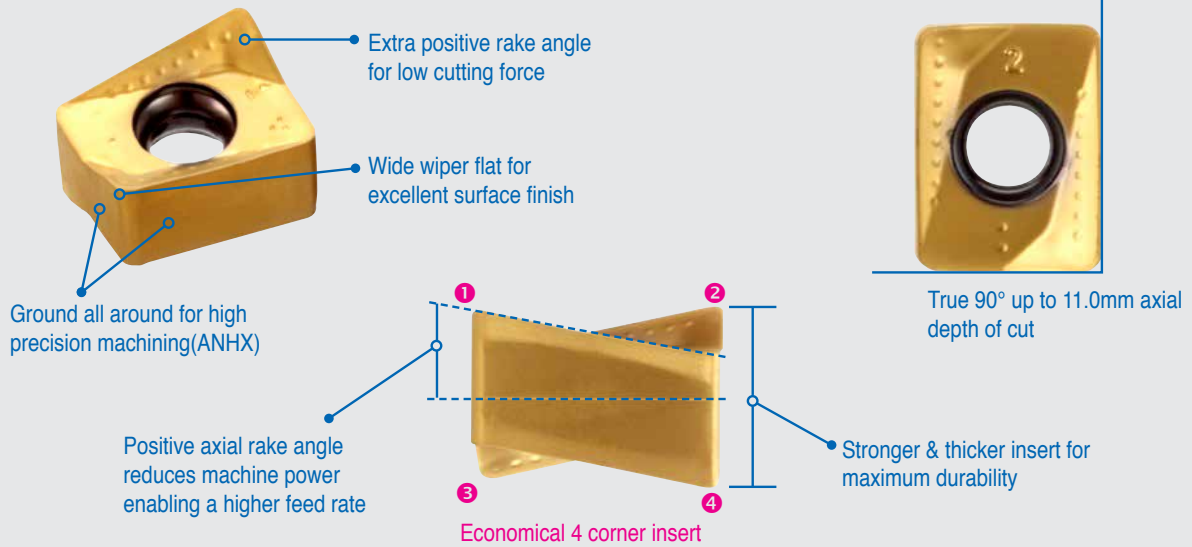
11mm double sided, 4 corner inserts, with a very high positive rake angle, offer smooth cutting with low cutting forces for 90° milling operation. The CHASE2MILL line of inserts with the ability for 11mm depths of cut is available in 3 types:

- The ANHX-M with ground periphery delivering high precision machining and a wide frontal wiper flat for excellent surface finish
- The ANHX-AL, for aluminum machining, prevents built up edge credit to a polished rake face structure with full ground sharp cutting edges
- The ANMX (press-to-size), for economy in general milling applications in general machining

A further advantage to the CHASE2MILL family is the latest in GOLDRUSH technology.

The CHASE2MILL AN11 holders are now available in a wide range of options; end mills, face mills, modular heads, extended flute cutters and all cutters include internal coolant holes for better chip evacuation and extended tool life.

Features

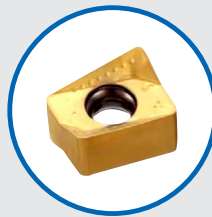


Economical type



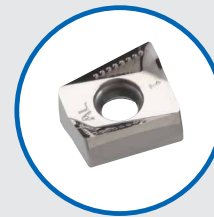
ANMX 110608R-M

Precision type



ANHX 110604R-M
ANHX 110608R-M
ANHX 110616R-M

For Aluminum machining



ANHX 110604R-AL
ANHX 110608R-AL
Ground & top polished type
Super positive cutting edge

Diverse cutter type

End Mill



Modular Head



Face Mill



Extended Flute End Mill



Extended Flute Shell Mill



All through coolant type

Inserts

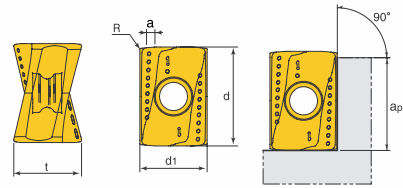
ANMX 11 / ANHX 11



M



AL



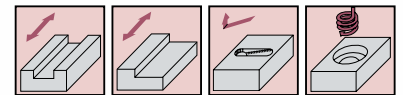
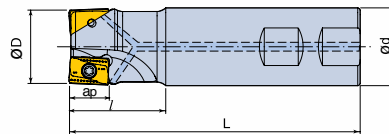
Designation	Dimension (mm)						Grade								Application
	d	d1	t	a	r	ap	TT9080	TT8080	TT8020	TT7800	TT7080	TT6800	TT6080	K10	
ANMX 110608R-M	12	9.2	8.6	1.1	0.8	11	●	●							End Mill & Cutter TE90AN-11 TE90AN-M□□-11 TFM90AN-11 TEF-AN11 TES-AN11
ANHX 110604R-M	12	9.2	8.6	1.5	0.4	11	●	●					●		
ANHX 110608R-M	12	9.2	8.6	1.1	0.8	11	●	●	●	●	●	●			
ANHX 110616R-M	12	9.2	8.6	0.7	1.6	11	●	●							
ANHX 110604R-AL	12	9.2	8.6	1.5	0.4	11							●		
ANHX 110608R-AL	12	9.2	8.6	1.2	0.8	11							●		

End Mill Type

TE90AN □□□-□□□-11



• $\kappa = 90^\circ$



Designation	Insert		Dimension (mm)				
			D	d	L	l	ap
TE90AN 225-W25-11	ANMX 110608R-M ANHX 1106□□R-M/AL	2	25	25	100	40	11.1
TE90AN 332-W32-11		3	32	32	110	40	11.1
TE90AN 440-W32-11		4	40	32	115	40	11.1

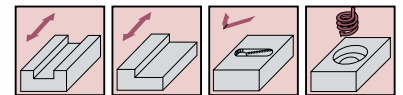
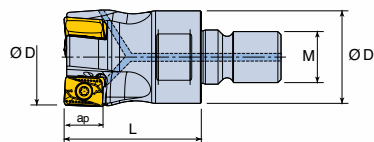
• Coolant through type

Modular Type

TE90AN-□□□-M□□-11



• $\kappa = 90^\circ$



Designation	Insert		Dimension (mm)				
			D	D1	L	M	ap
TE90AN 225-M12-11	ANMX 110608R-M ANHX 1106□□R-M/AL	2	25	21	35	12	11.1
TE90AN 332-M16-11		3	32	29	43	16	11.1
TE90AN 440-M16-11		4	40	29	43	16	11.1

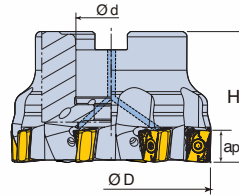
• Coolant through type

Face Mill Type

TFM90AN-□□□-11



• $\kappa = 90^\circ$



Designation	Insert		Dimension (mm)				Weight (Kg)	Mounting Bolt	
			D	d	H	ap			
TFM90AN 440-16R-11	ANMX 110608R-M ANHX 1106□□R-M/AL		4	40	16	40	11.1	0.2	SH M8X1.25X25
TFM90AN 450-22R-11			4	50	22	40	11.1	0.3	SH M10X1.5X30
TFM90AN 650-22R-11			6	50	22	40	11.1	0.3	SH M10X1.5X30
TFM90AN 563-22R-11			5	63	22	40	11.1	0.6	SH M10X1.5X30
TFM90AN 763-22R-11			7	63	22	40	11.1	0.6	SH M10X1.5X30
TFM90AN 880-27R-11			8	80	27	50	11.1	1.1	SH M12X1.75X35
TFM90AN 1080-27R-11			10	80	27	50	11.1	1.1	SH M12X1.75X35
TFM90AN 9100-32R-11			9	100	32	50	11.1	2.0	SH M16X2X35
TFM90AN 12100-32R-11			12	100	32	50	11.1	2.0	SH M16X2X35
TFM90AN 10125-40R-11			10	125	40	63	11.1	3.3	SH M20X2.5X40
TFM90AN 14125-40R-11			14	125	40	63	11.1	3.4	SH M20X2.5X40

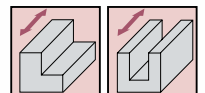
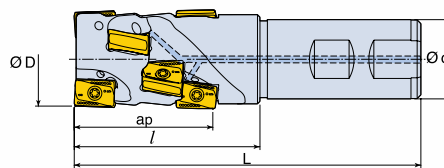
- Coolant through type
- Mounting bolts supplied do not have coolant through facility.
If the application demands a coolant through cutter, the mounting bolt with coolant through holes needs to be ordered separately.
Ex) SH M10x1.5x30 : Bolt without hole.
SH M10x1.5x30-C : Bolt with hole.

Extended Flute End Mill

TEF □□□-□□-□□□-AN11



• $\kappa = 90^\circ$

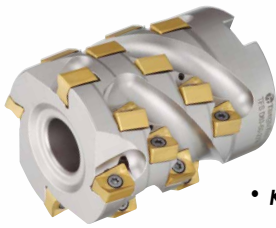


Designation	Insert		No. of Insert	Dimension (mm)				
				D	d	L	l	ap
TEF D32-40-W32-AN11	ANMX 110608R-M ANHX 1106□□R-M/AL		8	32	32	110	48	40
TEF D40-40-W32-AN11				3	12	40	32	125

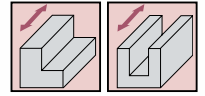
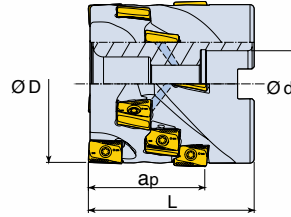
- Coolant through type

Extended Flute Shell Mill

TES □□□-□□-□□R-AN11



• $\kappa = 90^\circ$



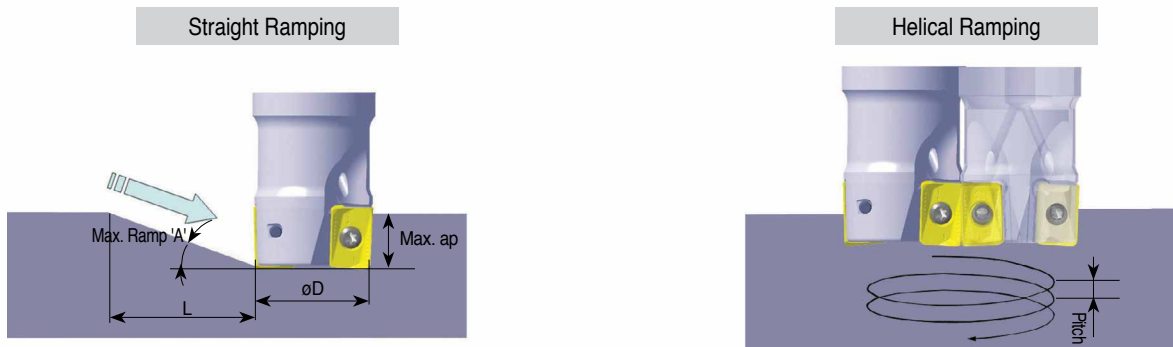
Designation	Insert		No. of Insert	Dimension (mm)				Weight (Kg)	Mounting Bolt
				D	d	L	ap		
TES D50-40-22R-AN11	ANMX 110608R-M ANHX 1106□□R-M/AL		12	50	22	60	40	0.588	SH M10x1.5x40
TES D63-60-27R-AN11			24	63	27	80	60	1.339	SH M12x1.75x60
TES D80-60-32R-AN11			30	80	40	80	60	2.27	SH M16x2x60

- Coolant through type
 - Mounting bolts supplied do not have coolant through facility.
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Ex) SH M10x1.5x30 : Bolt without hole.
SH M10x1.5x30-C : Bolt with hole.

Components

	Screw	Wrench
	TS 35A088I/HG	TD 10P

Ramping Data



ANH(M)X 11

Cutter Dia.	Straight Ramp Down			Helical Ramp Down		
	Max. Ramp (A°)	Max. ap (mm)	Min. Length (L)	Min. Dia.	Max. Dia.	Max. Pitch/Rev.
Ø25	1.7	11	371	34.9	50	0.8
						2.0
Ø32	1.1	11	573	48.9	64	0.9
						1.6
Ø40	0.8	11	788	64.9	80	0.9
						1.5
Ø50	0.6	11	1051	80.6	100	0.9
						1.4
Ø63	0.5	11	1261	106.6	126	1.0
						1.5
Ø80	0.35	11	1802	140.6	160	1.0
						1.3
Ø100	0.25	11	2522	180.6	200	0.9
						1.2
Ø125	0.2	11	3153	230.6	250	1.0
						1.2

Recommended Cutting Condition

Material	Brinell	D.O.C (mm)	Speed (m/min)	Best grades	Feed (mm/tooth)
Low Carbon Steel	85-175	-9.0	180 - 300	TT7080, TT7800, TT9080	0.10 - 0.25
High Carbon Steel	175-225	-9.0	130 - 280	TT7080, TT7800, TT9080	0.10 - 0.20
Alloyed Steel	275-325	-9.0	120 - 250	TT7080, TT9080, TT8080, TT7800	0.10 - 0.18
Tool Steel	-	-9.0	80 - 200	TT7080, TT9080, TT8080	0.10 - 0.15
Stainless 300 Series	-	-6.0	80 - 170	TT8080, TT8020, TT9080	0.10 - 0.18
Stainless 400 Series	-	-6.0	100 - 210	TT9080, TT8080, TT8020	0.10 - 0.18
High Temp. Super Alloy	-	-6.0	30 - 100	TT8080, TT9080	0.08 - 0.12
Titanium Alloy	-	-6.0	30 - 80	TT8080, TT9080	0.08 - 0.12
Gray Cast Iron	190-220	-10.0	150 - 400	TT6800, TT6080	0.10 - 0.3
Nodular Cast Iron	140-200	-10.0	100 - 250	TT6080	0.10 - 0.25
Aluminum	-	-10.0	400 - 600	K10	0.10 - 0.4

• Reduce Speed by 20% for Face Mills when slotting