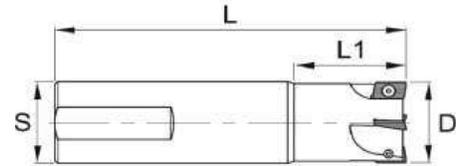




**Face Mill F90P**

Suitable for high-efficiency milling in steel, stainless steel, cast iron, and non-ferrous materials  
 Available in various diameters and lengths to fit different machining setups  
 High-rigidity steel body for stable cutting and extended tool life  
 Positive rake geometry reduces cutting forces and improves surface finish  
 Accepts standard Torx screws for secure insert holding  
 Ideal for shoulder milling, face milling, and slotting applications

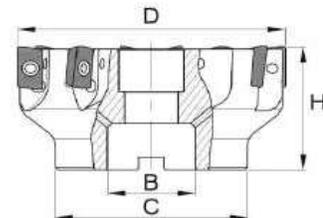


**HOMA**

Order No.	Designation	D	S	L1	ap	L	No. of Inserts	Insert	Spare Parts	
									Screw	Key
1030-1110	F90AP-D0.625	0.625	0.625	2.000	0.400	3.540	2	APMT11T3	M2.5X6.5	T08
1030-1115	F90AP-D0.625	0.625	0.625	4.000	0.400	6.500	2	APMT11T3		
1030-1120	F90AP-D0.750	0.750	0.750	2.000	0.400	3.940	2	APMT11T3		
1030-1125	F90AP-D0.750	0.750	0.750	4.000	0.400	6.500	2	APMT11T3		
1030-1128	F90AP-D0.750	0.750	0.750	6.000	0.400	8.000	2	APMT11T3	M4.0X10	T15
1030-1140	F90AP-D1.000	1.000	1.000	2.500	0.400	4.530	3	APMT11T3		
1030-1150	F90AP-D1.000	1.000	1.000	2.500	0.600	4.530	2	APMT1604		
1030-1155	F90AP-D1.000	1.000	1.000	4.000	0.600	6.500	2	APMT1604		
1030-1158	F90AP-D1.000	1.000	1.000	6.000	0.600	8.000	2	APMT1604		
1030-1060	F90AP-D1.250	1.250	1.250	1.575	0.600	4.921	3	APMT1604		
1030-2050	F90AP-D1.250	1.250	1.000	2.56"	0.600	4.530	2	APMT1604		
1030-2065	F90AP-D1.250	1.250	1.000	7.640	0.600	10.000	2	APMT1604		
1030-1070	F90AP-D1.500	1.500	1.500	1.654	0.600	5.120	4	APMT1604		

**Face Mill Cutter F90P**

Suitable for high-efficiency milling in steel, stainless steel, cast iron, and non-ferrous materials  
 Available in various diameters and lengths to fit different machining setups  
 High-rigidity steel body for stable cutting and extended tool life  
 Positive rake geometry reduces cutting forces and improves surface finish  
 Accepts standard Torx screws and clamps for secure insert holding  
 Ideal for shoulder milling, face milling, and slotting applications



**HOMA**

Order No.	Designation	D	C	B	H	ap	No. of Inserts	Insert	Spare Parts	
									Screw	Key
1031-1010	F90P-D2.000	2.000	1.575	0.750	1.57	0.630	6	APMT1604	M4.0X10	T15
1031-1020	F90P-D2.500	2.500	1.890	0.750	1.57	0.630	6	APMT1604		
1031-1030	F90P-D3.000	3.000	2.165	1.000	1.97	0.630	7	APMT1604		
1031-1040	F90P-D4.000	4.000	3.150	1.250	2.48	0.630	8	APMT1604		



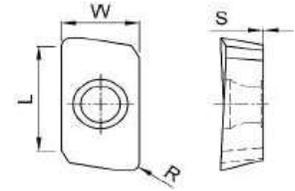
**Milling Inserts**

**APMT11T3/APMT1604**

High Cobalt and fine grain substrate provides wonderful edge strength  
 OP1315, 1650 PVD Coated  
 H10, OK434 are ground for non-ferrous metals



OP1315

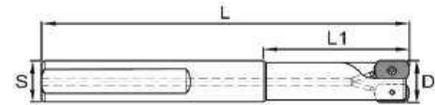


OK434

Order No.	L	W	S	IC	Radius R	Iso grade		
APMT 11T308-ZM OP1315	0.485	0.2555	0.142	0.400	0.31	P15-P25	M15-M25	S10-S20
APMT 11T308-ZM OP1650	0.485	0.2555	0.142	0.400	0.31	P25-P45	M25-M45	S25-S45
APMT 160408-ZM OP1315	0.691	0.374	0.227	0.600	0.31	P15-P25	M15-M25	S10-S20
APMT 160408ZM OP1650	0.691	0.374	0.227	0.600	0.31	P25-P45	M25-M45	S25-S45
APMT 11T308-AL H10	0.485	0.2555	0.142	0.400	0.31	N01-N35		
APKT 160402-NL OK434	0.691	0.374	0.227	0.600	0.008			
APKT 160404-NL OK434	0.691	0.374	0.227	0.600	0.016			
APKT 160408-NL OK434	0.691	0.374	0.227	0.600	0.031			

**High Feed Indexable End Mill HF90**

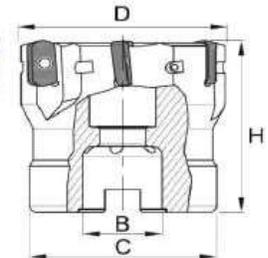
Engineered for high-feed milling applications with LNMx inserts  
 Shallow depth of cut, high feed per tooth for maximum metal removal rates  
 Optimized chip thinning effect for efficient cutting and longer tool life  
 Robust cutter body design for high stability and reduced vibration  
 Negative cutting geometry for smooth entry and reduced cutting forces  
 Ideal for mold & die, aerospace, and general machining applications  
 Coolant Thru  
 Double sided Insert



Order No.	Designation	D	S	L1	L	No. of Pocket	Insert	Spare Parts	
								Screw	Key
1033-1010	HF90-D0.625	0.625	0.625	1.575	5	2	LNMU0303	L60 M2.5X6.5	T08
1033-1020	HF90-D0.750	0.750	0.750	1.575	5	2	LNMU0303		
1033-1030	HF90-D1.000	1.000	1.000	1.772	5	3	LNMU0303		

**High Feed Indexable Face Mill HF90**

Engineered for high-feed milling applications with LNMx inserts  
 Shallow depth of cut, high feed per tooth for maximum metal removal rates  
 Optimized chip thinning effect for efficient cutting and longer tool life  
 Robust cutter body design for high stability and reduced vibration  
 Negative cutting geometry for smooth entry and reduced cutting forces  
 Ideal for mold & die, aerospace, and general machining applications  
 Coolant Thru  
 Double sided Insert



Order No.	Designation	D	B	C	H	No. of Pocket	Insert	Spare Parts	
								Screw	Key
1033-1060	HF90-D2.000	2.000	0.750	1.772	1.970	6	LNMU0303	L60 M2.5X6.5	T08
1033-1070	HF90-D2.500	2.500	0.750	2.165	1.970	7	LNMU0303		
1033-1080	HF90-D3.000	3.000	1.000	2.362	1.970	8	LNMU0303		



**LNMU0303 Double Sided High Feed Carbide Insert**

Ideal to cut Steel, Stainless Steel, Super Alloys



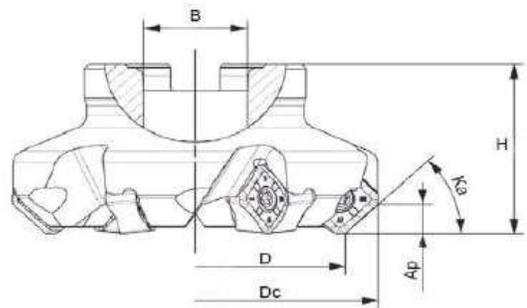
Steel	P
Stainless Steel	M
Cast Iron	K
Non Ferrous	N
Super Alloys	S
Hardened Metals	H



Order No.	Width	Thickness	IC	Radius	Iso grade		
LNMU0303-ZER-MJ OP1215	0.236	0.169	0.236	0.5	P15-P25	M15-M25	S10-S20

**Face Mill FM452**

45° approach angle for reduced cutting forces and longer tool life  
 Double-sided square inserts provide 8 cutting edges for maximum economy  
 High metal removal rate with smooth cutting action  
 Excellent surface finish due to favorable cutting geometry  
 Cost-effective solution with reduced insert consumption  
 Satin Nickel plating for longevity



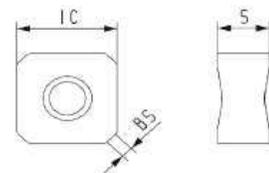
Order No.	D	Dc	No. of Insert	B	H	Ka	ap	Insert	Weight
1041-1010	2	2.513	5	0.750	1.750	45.000	0.256	SN...1306	1.1lb
1041-1030	2.5	3.513	6	0.750	2.205	45.000	0.256	SN...1306	1.2lb
1041-1050	3	4.513	7	1.000	2.500	45.000	0.256	SN...1306	3.4lb
1041-1060	4	5.513	8	1.250	2.874	45.000	0.256	SN...1306	6.4lb
1041-1070	5	6.513	10	1.500	4.882	45.000	0.256	SN...1306	9.5lb

**Milling Inserts SNMX13**

Negative geometry insert for stable and rigid milling operations  
 Square, double-sided design with 8 cutting edges for high economy  
 Strong edge strength ideal for roughing and heavy-duty machining  
 Suitable for face milling  
 Multi grade Inserts for machining Steel, Stainless Steel  
 For application with stable to interrupted cut  
 PVD Coated



Steel	P
Stainless Steel	M
Cast Iron	K
Non Ferrous	N
Super Alloys	S
Hardened Metals	H

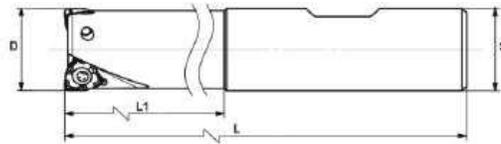


Order No.	S	I.C (in)	BS	ISO Grade Range			Application
SNMX 1306 ANN-OM OP1325	0.24	0.500	0.062	P10-P35	M10-M25	S10-S25	Steel, Stainless, Super Alloys



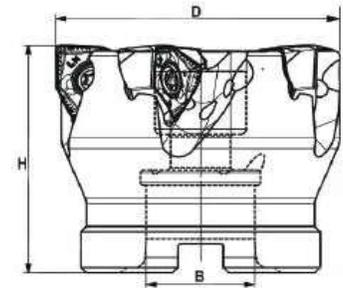
**Face Mill FM452**

45° approach angle for reduced cutting forces and longer tool life  
 Double-sided square inserts provide 8 cutting edges for maximum economy  
 High metal removal rate with smooth cutting action  
 Excellent surface finish due to favorable cutting geometry  
 Cost-effective solution with reduced insert consumption  
 Satin Nickel plating for longevity



Order No.	D	S	L1	L	No. of Insert	Insert	Spare Parts	
							Screw	Key
1042-1010	0.750	0.625	3.000	5.000	2			
1042-1020	0.750	0.625	3.000	5.000	3	WNMX040308	M2.5X6	T8
1042-1030	1.000	0.625	3.000	5.000	3			

45° approach angle for reduced cutting forces and longer tool life  
 Double-sided square inserts provide 8 cutting edges for maximum economy  
 High metal removal rate with smooth cutting action  
 Excellent surface finish due to favorable cutting geometry  
 Cost-effective solution with reduced insert consumption  
 Satin Nickel plating for longevity



Order No.	D	B	H	No. of Inserts	Insert	Spare Parts	
						Screw	Key
1042-1060	2	0.750	1.746	5			
1042-1070	2.5	0.750	1.746	6			
1042-1080	3	1.000	2.000	7	WNMX080608R	M4X10	T15
1042-1090	4	1.250	2.350	8			

**Milling Inserts WNMX**

Negative geometry insert for stable and rigid milling operations  
 Square, double-sided design with 6 cutting edges for high economy  
 Strong edge strength ideal for roughing and heavy-duty machining  
 Suitable for Shouldering and face milling  
 Multi grade Inserts for machining Steel, Stainless Steel  
 For application with stable to interrupted cut  
 PVD Coated



Steel	P
Stainless Steel	M
Cast Iron	K
Non Ferrous	N
Super Alloys	S
Hardened Metals	H

Order No.	Thickness	I.C (in)	Radius	ISO Grade Range			Application
WNMX040308R-OM OP1325	0.157	0.256	0.031	P10-P35	M10-M25	S10-S25	Steel, Stainless, Super Alloys
WNMX080608R-OM OP1325	0.307	0.506	0.031				

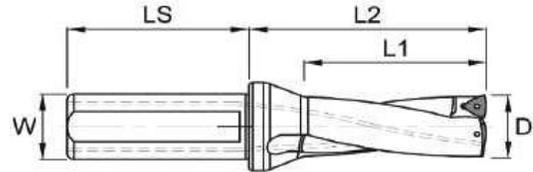


**Indexable Drills**

- WCMT/WCMX Inserts
- Coolant thru
- High resistance to abrasion
- Hardness : 750-800 Vckers
- High temperature resistance
- High fatigue strength
- High scratch and impact resistance



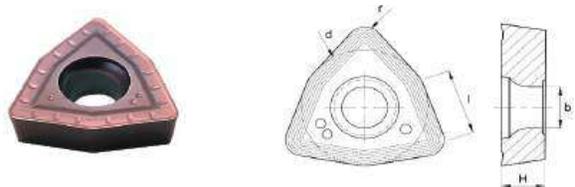
- Steel
- Stainless Steel
- Cast Iron
- Non Ferrous
- Heat Resistant Materials
- Hardend Steel



Order No.	Designation	D	W	L1	LS	L2	Insert	Insert Screw	Torx Key
40031400	SD14-3D-C20	14.000	20.000	42.0	50.0	60.0	WCMX 1.81.52	M2.5X6	T8
40031500	SD15-3D-C20	15.000	20.000	45.0	50.0	65.0	WCMX 1.81.52	M2.5X6	T8
40031600	SD16-3D-C25	16.000	25.000	48.0	55.0	68.0	WCMX 1.81.52	M2.5X6	T8
40031700	SD17-3D-C25	17.000	25.000	51.0	55.0	72.0	WCMX 1.81.52	M2.5X6	T8
40031800	SD18-3D-C25	18.000	25.000	54.0	55.0	75.0	WCMX 1.81.52	M2.5X6	T8
40031900	SD19-3D-C25	19.000	25.000	57.0	55.0	75.0	WCMX1.81.52	M2.5X6	T8
40032000	SD20-3D-C25	20.000	25.000	60.0	55.0	80.0	WCMX 21.52	M3X8	T8
40032100	SD21-3D-C25	21.000	25.000	63.0	55.0	83.0	WCMX 21.52	M3X8	T8
40032200	SD22-3D-C25	22.000	25.000	66.0	55.0	86.0	WCMX 21.52	M3X8	T8
40032300	SD23-3D-C25	23.000	25.000	69.0	55.0	95.0	WCMX 21.52	M3X8	T8
40032400	SD24-3D-C25	24.000	25.000	72.0	60.0	103.0	WCMX 2.522	M3.5X9	T8
40032500	SD25-3D-C25	25.000	25.000	75.0	60.0	106.0	WCMX 2.522	M3.5X9	T8
40032600	SD26-3D-C32	26.000	32.000	78.0	60.0	109.0	WCMX 2.522	M3.5X9	T8
40032700	SD27-3D-C32	27.000	32.000	81.0	60.0	109.0	WCMX 2.522	M3.5X9	T8
40032800	SD28-3D-C32	28.000	32.000	84.0	60.0	111.0	WCMX 2.522	M3.5X9	T8
40032900	SD29-3D-C32	29.000	32.000	87.0	60.0	114.0	WCMX 2.522	M3.5X9	T8
40033000	SD30-3D-C32	30.000	32.000	90.0	60.0	116.0	WCMX 2.522	M3.5X9	T8
4003150	SD31.5-3D-C32	31.500	32.000	94.5	60.0	119.0	WCMX 32.52	M4X10	T15
40033200	SD32-3D-C32	32.000	32.000	96.0	60.0	120.0	WCMX 32.52	M4X10	T15
40033300	SD33-3D-C32	33.000	32.000	99.0	60.0	123.0	WCMX 32.52	M4X10	T15
40033400	SD34-3D-C32	34.000	32.000	102.0	60.0	126.0	WCMX 32.52	M4X10	T15
40033500	SD35-3D-C32	35.000	32.000	105.0	60.0	129.0	WCMX 32.52	M4X10	T15
40033600	SD36-3D-C32	36.000	32.000	108.0	60.0	133.0	WCMX 32.52	M4X10	T15
40033700	SD37-3D-C32	37.000	32.000	111.0	60.0	136.0	WCMX 32.52	M4X10	T15
40033800	SD38-3D-C32	38.000	32.000	114.0	60.0	136.0	WCMX 32.52	M4X10	T15
40033900	SD39-3D-C32	39.000	32.000	117.0	60.0	140.0	WCMX 32.52	M4X10	T15

**WCMX Inserts**

- PVD Coated
- Multi grade for Steel, Stainless Steel, Nickel base Metal, Alu., Copper, Brass, Bronze, Plastic



Order Code	ISO Designation	d	r	l	b	H	ISO Grade		
WCMX 1.81.52 OP1415	WCMX 030208 OP1415	0.219	0.031	0.150	0.110	0.094	P25-P45	M25-M45	S25-S45
WCMX 21.52 OP1415	WCMX 040208 OP1415	0.250	0.031	0.169	0.118	0.094			
WCMX 2.522 OP1415	WCMX 050308 OP1415	0.312	0.031	2.130	0.134	0.125			
WCMX 32.52 OP1415	WCMX 06T308 OP1415	0.375	0.031	0.256	0.154	0.156			
WCMX 433 OP1415	WCMX 080412 OP1415	0.500	0.047	0.343	0.173	0.187			