

MHFB & MHFS

INDEXABLE HIGH FEED
TOOL HOLDERS

MODULAR STRAIGHT
SHANKS

MODULAR INTEGRAL
ADAPTERS

NEW



Where **high performance** is the standard®

M.A.
FORDMAX
RANGE

Performance, Precision, Economy

HIGH FEED SERIES





Where **high performance** is the **standard**®



For almost 100 years, M.A.FORD has been at the cutting edge of tooling design and manufacture, and has developed an enviable global reputation for performance and precision in solid carbide tooling serving over 60 countries worldwide.

To expand our range of integrated manufacturing solutions to our customers, we are now launching our

brand new range of indexable high feed milling tools in both modular and bore type variants

This new programme will provide a cost effective solution to companies that are looking to increase metal removal rates and reduce cycle times when roughing medium to large work-pieces or extreme depth applications.



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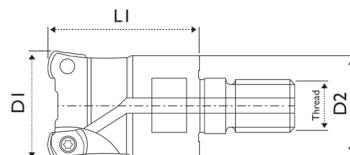
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MHFB INDEXABLE HIGH FEED MILLING

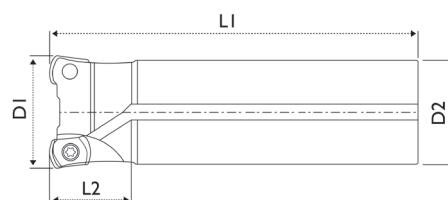
Tool Holders



CAM RADIUS	R2.0
Diameter tolerance	+ 0.0 / - 0.2
Torque setting	1.2Nm
Ap max	1.0mm

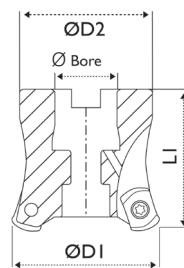
SCREW-ON MODULAR SHANK END MILL

Order Code	Description Code	D1	D2	Flutes	L1	Thread	
FH1001	MHFMBM-1602-06-M08	16	13	2	25	M8	BNMT06
FH1002	MHFMBM-2003-06-M10	20	18	3	30	M10	
FH1003	MHFMBM-2504-06-M10	25	21	4	35	M12	
FH1004	MHFMBM-3205-06-M16	32	29	5	40	M16	
FH1005	MHFMBM-3505-06-M16	35	29	5	43	M16	
FH1006	MHFMBM-4006-06-M16	40	29	6	43	M16	



CYLINDRICAL SHANK END MILL

Order Code	Description Code	D1	D2	Flutes	L1	L2	
FH1007	MHFBC-1602-06-16	16	16	2	130	30	BNMT06
FH1008	MHFBC-2003-06-20	20	20	3	140	32	
FH1009	MHFBC-2504-06-25	25	25	4	150	32	



BORE TYPE MILL

Order Code	Description Code	D1	D2	Flutes	L1	Ø Bore	
FH1010	MHFBB-5007-06-22	50	47	7	50	22	BNMT06
FH1011	MHFBB-5207-06-22	52	47	7	50	22	

SPARE PARTS

Order Code	Description Code	Description
FS1001	MS2506E	Spare Screw
FS1003	ETD-08	TX8 Torx Driver
FS1005	ETFTD-08	TX8 Torx Fixed Torque Driver
FS1006	STXB-08	TX8 Short Torx Bits
FS1007	LTXB-08	TX8 Long Torx Bits

MHFB INDEXABLE HIGH FEED MILLING

Inserts



MS Geometry



MM Geometry



MR Geometry

INSERTS				
Insert	FS5020	FS5030 Order Code	FS5040	Tool Holder
BNMT0603-MS	FW1001	FW1002	FW1003	MHFBM
BNMT0603-MM	FW1004	FW1005	FW1006	MHFBC
BNMT0603-MR	FW1007	FW1008	FW1009	MHFBB

MS

Sharp geometry for low force cutting and extreme long overhangs to reduce vibration.
Performs well in high temperature alloys and sticky materials.

MM

First choice for medium cutting in steels, tool-steels and stainless steels.
Also high temparture alloys when stronger edge is required.

MR

Rough milling in steel, tool-steel and hardened steel.
Also first choice for interupted cutting.

FS5020

Designed for working at high to medium cutting speeds.
First choice for high-temperature alloys and hardened steel above 50HRC.

FS5030

Wide range of cutting applications and materials with excellent properties in wear and impact resistance.
Suitable for steel and stainless steel applications, and also high-temperature alloys when extra edge strength is required.

FS5040

Toughest roughing grade for high impact applications and interupted machining.
Also high chrome stainless steels.

MHFB INDEXABLE HIGH FEED MILLING

Technical Data

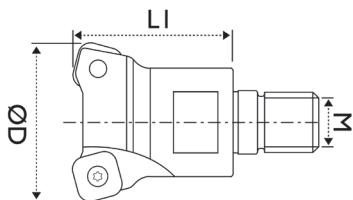
Workpiece Material Group		Material Type	Coolant		3D	3D-5D	5D-7D	> 7D
			Air	Emulsion			Carbide Shank	
					Vc-m/min Cutting Speed			
Steel	P	Carbon Steel	•		200	150	120	100
		Alloy Steels	•		180	140	100	80
		Tool Steel Below 260HB	•		180	140	100	80
		Pre-Hardened Tool Steel 30-40HRC	•		150	120	100	80
Stainless Steel	M	Stainless Steel 400 Series	•		110	90	80	70
		Stainless Steel 300 Series	•	•	100	80	70	60
		Stainless Steel PH Series	•		110	90	80	70
Special Alloys	S	High Temp Alloys		•	25	20	15	12
		Titanium Alloys		•	50	40	30	20
Cast Irons	K	GG GGG		•	180	140	100	80
Hardened Steels	H	Hardened Steels 45-50HRC	•		120	90	70	60
		Hardened Steels 50-55HRC	•		80	70	60	50

Workpiece Material Group		Material Type			3D	3D-5D	5D-7D	> 7D
					Carbide Shank			
			Fz-mm	Ae-mm	Ap-mm			
Steel	P	Carbon Steel	1.2	70%	0.8	0.6	0.5	0.4
		Alloy Steels	1.2	70%	0.8	0.6	0.5	0.4
		Tool Steel Below 260HB	1.1	70%	0.8	0.6	0.5	0.4
		Pre-Hardened Tool Steel 30-40HRC	1.0	70%	0.7	0.5	0.4	0.3
Stainless Steel	M	Stainless Steel 400 Series	0.8	70%	0.7	0.5	0.4	0.3
		Stainless Steel 300 Series	0.6	60%	0.6	0.4	0.3	0.2
		Stainless Steel PH Series	0.8	60%	0.7	0.5	0.4	0.3
Special Alloys	S	High Temp Alloys	0.5	30%	0.6	0.4	0.3	0.2
		Titanium Alloys	0.5	30%	0.6	0.4	0.3	0.2
Cast Irons	K	GG GGG	1.2	70%	0.8	0.6	0.5	0.4
Hardened Steels	H	Hardened Steels 45-50HRC	0.8	70%	0.6	0.5	0.4	0.3
		Hardened Steels 50-55HRC	0.4	60%	0.6	0.5	0.4	0.3

Tool Diameter Ø (mm)	16.0	20.0	25.0	32.0	35.0	40.0	50.0	52.0
Max Straight Ramp Angle (A°)	3.0	1.5	1.4	1.0	1.0	0.9	0.6	0.6
Helical Milling / Hole Ø (mm)	23-32	31-40	41-50	55-64	60-70	71-80	91-100	95-104
Heical Milling / Max pitch/rev (mm)	0.7	0.8	1.0	1.0	1.0	1.0	1.0	1.0

MHFS INDEXABLE HIGH FEED MILLING

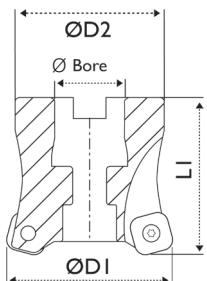
Tool Holders



CAM RADIUS	R4.5
Diameter tolerance	+ 0.0 / - 0.2
Torque setting	3.0Nm
Ap max	2.0mm

SCREW-ON MODULAR SHANK END MILL

Order Code	Description Code	D1	D2	Flutes	L1	Thread	Insert
FH1100	MHFSM-3503-12-M16	35	29	3	43	M16	
FH1101	MHFSM-4204-12-M16	42	29	4	43	M16	SDMT12



BORE TYPE MILL

Order Code	Description Code	D1	D2	Flutes	L1	Ø Bore	Insert
FH1105	MHFSB-5004-12-22	50	35	4	50	22	
FH1102	MHFSB-5205-12-22	52	35	5	50	22	
FH1103	MHFSB-6606-12-27	66	60	6	50	27	
FH1104	MHFSB-8006-12-27	80	60	6	50	27	SDMT12

SPARE PARTS

Order Code	Description Code	Description
FS1002	MS4011G	Spare Screw
FS1004	ETD-15	TX15 Torx Driver
FS1010	ETFTD-15	TX15 Torx Fixed Torque Driver
FS1011	STXB-15	TX15 Short Torx Bits
FS1012	LTXB-15	TX15 Long Torx Bits

MHFS INDEXABLE HIGH FEED MILLING

Inserts



MM Geometry

MR Geometry

MR Flat
(SDNW)

SM Geometry

Insert	GRADE			Tool Holder
	FS5030	FS5040 Order Code	FA6030	
SDMT1205TR-MM	FW1102	—	—	
SDMT1205TR-MR	FW1103	—	—	MHFSM
SDNW1205TR-MR	FW1100	FW1101	—	MHFSB
SDMT 120512-SM	—	—	FW1104	

SM

Special geometry for low force cutting.
Performs well in high temperature alloys, stainless steel, titanium and sticky materials.

MM

First choice for medium cutting in steels, tool-steels and alloy steels.

MR

Rough milling in steel, tool-steel and alloy steels.

FS5030

Wide range of cutting applications and materials with excellent properties in wear and impact resistance.
Suitable for steel and cast iron applications.

FS5040

Toughest roughing grade for high impact applications and interrupted machining.

FA6030

Designed for working at low to medium cutting speeds.
First choice for high-temperature alloys, Duplex, Titanium and Stainless Steels.

MHFS INDEXABLE HIGH FEED MILLING

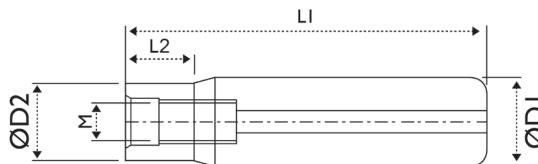
Technical Data

Workpiece Material Group		Material Type	Coolant		3D	3D-5D
			Air	Emulsion		
					Vc-m/min Cutting Speed	
Steel	P	Carbon Steel	•		200	150
		Alloy Steels	•		180	140
		Tool Steel Below 260HB	•		180	140
		Pre-Hardened Tool Steel 30-40HRC	•		150	120
Stainless Steel	M	Stainless Steel 400 Series	•		110	90
		Stainless Steel 300 Series	•	•	100	80
		Stainless Steel PH Series	•		110	90
Special Alloys	S	High Temp Alloys		•	25	20
		Titanium Alloys		•	50	40
Cast Irons	K	GG GGG		•	180	140

Workpiece Material Group		Material Type			3D	3D-5D
			Fz-mm	Ae-mm	Ap-mm	
			Feed/tooth	Stepover	Depth of Cut	
Steel	P	Carbon Steel	2.0	70%	0.8	0.6
		Alloy Steels	1.6	70%	0.8	0.6
		Tool Steel Below 260HB	1.2	70%	0.8	0.6
		Pre-Hardened Tool Steel 30-40HRC	1.1	70%	0.7	0.5
Stainless Steel	M	Stainless Steel 400 Series	0.8	70%	0.7	0.5
		Stainless Steel 300 Series	0.6	60%	0.6	0.4
		Stainless Steel PH Series	0.8	60%	0.7	0.5
Special Alloys	S	High Temp Alloys	0.5	30%	0.6	0.4
		Titanium Alloys	0.5	30%	0.6	0.4
Cast Irons	K	GG GGG	2.0	70%	0.8	0.6

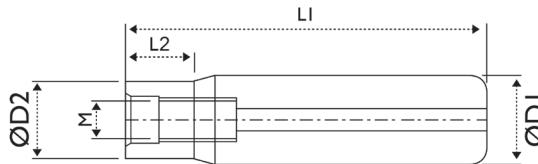
Tool Diameter Ø (mm)	35.0	42.0	50.0	52.0	66.0	80.0
Max Straight Ramp Angle (A°)	5.5	4.0	2.5	2.5	1.0	1.0
Helical Milling / Hole Ø (mm)	48-66	63-80	81-98	83-100	112-128	142-156
Heical Milling / Max pitch/rev (mm)	1.2	1.2	1.2	1.1	1.0	1.0

MSS STEEL MODULAR SHANK



Order Code	Description Code	D1	D2	L2	L1	Thread
FC1200	MSS-D16-M8-150-10	16	14	10	150	M8
FC1201	MSS-D16-M8-200-10	16	14	10	200	M8
FC1202	MSS-D20-M10-150-12	20	18	12	150	M10
FC1203	MSS-D20-M10-200-12	20	18	12	200	M10
FC1204	MSS-D25-M12-150-15	25	23	15	150	M12
FC1205	MSS-D25-M12-200-15	25	23	15	200	M12
FC1206	MSS-D32-M16-200-18	32	29	18	200	M16
FC1207	MSS-D32-M16-250-18	32	29	18	250	M16

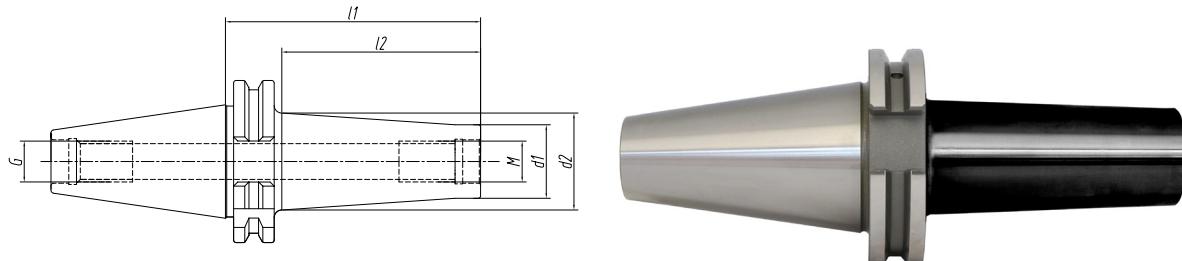
MCS CARBIDE MODULAR SHANK



Order Code	Description Code	D1	D2	L2	L1	Thread
FC1001	MCS-D16-M8-100-30	16	14.5	30	100	M8
FC1002	MCS-D16-M8-150-50	16	14.5	50	150	M8
FC1003	MCS-D16-M8-200-100	16	14.5	100	200	M8
FC1004	MCS-D20-M10-200-50	20	18.5	50	200	M10
FC1005	MCS-D20-M10-250-100	20	18.5	100	250	M10
FC1006	MCS-D20-M10-300-150	20	18.5	150	300	M10
FC1007	MCS-D25-M12-200-50	25	23	50	200	M12
FC1008	MCS-D25-M12-250-100	25	23	100	250	M12
FC1009	MCS-D25-M12-300-150	25	23	150	300	M12
FC1010	MCS-D32-M16-250-100	32	28	100	250	M16
FC1011	MCS-D32-M16-300-150	32	28	150	300	M16
FC1012	MCS-D32-M16-350-200	32	28	200	350	M16

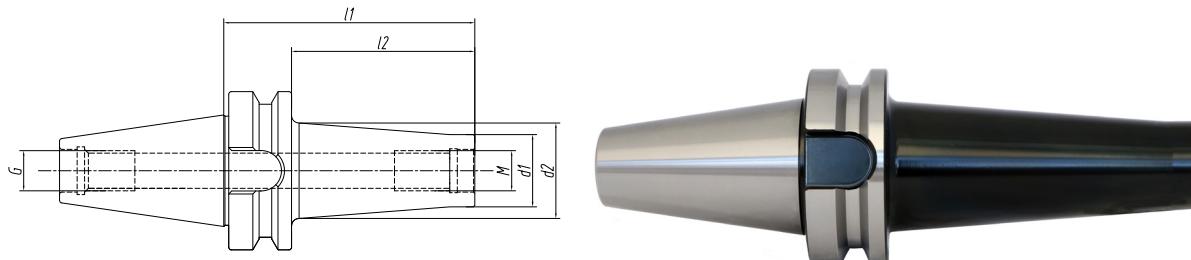
MODULAR INTEGRAL ADAPTERS

SK40 (DIN 69871)



Order Code	Description Code	M	L2	L1	D1	D2
FC1118	SK40-SOM8-44 L=25	M8	25	44	13	15
FC1119	SK40-SOM8-69 L=50	M8	50	69	13	23
FC1120	SK40-SOM8-94 L=75	M8	75	94	13	23
FC1121	SK40-SOM8-119 L=100	M8	100	119	13	25
FC1122	SK40-SOM10-44 L=25	M10	25	44	18	20
FC1123	SK40-SOM10-69 L=50	M10	50	69	18	23
FC1124	SK40-SOM10-94 L=75	M10	75	94	18	28
FC1125	SK40-SOM10-119 L=100	M10	100	119	18	32
FC1126	SK40-SOM12-44 L=25	M12	25	44	21	24
FC1127	SK40-SOM12-69 L=50	M12	50	69	21	31
FC1128	SK40-SOM12-94 L=75	M12	75	94	21	33
FC1129	SK40-SOM12-119 L=100	M12	100	119	21	36
FC1130	SK40-SOM16-44 L=25	M16	25	44	29	29
FC1131	SK40-SOM16-69 L=50	M16	50	69	29	34
FC1132	SK40-SOM16-94 L=75	M16	75	94	29	34
FC1133	SK40-SOM16-119 L=100	M16	100	119	29	36

BT40 (MAS 403)



Order Code	Description Code	M	L2	L1	D1	D2
FC1134	BT40-SOM8-52 L=25	M8	25	52	13	15
FC1135	BT40-SOM8-77 L=50	M8	50	77	13	23
FC1136	BT40-SOM8-102 L=75	M8	75	102	13	23
FC1137	BT40-SOM8-127 L=100	M8	100	127	13	25
FC1138	BT40-SOM10-52 L=25	M10	25	52	18	20
FC1139	BT40-SOM10-77 L=50	M10	50	77	18	23
FC1140	BT40-SOM10-102 L=75	M10	75	102	18	28
FC1141	BT40-SOM10-127 L=100	M10	100	127	18	32
FC1142	BT40-SOM12-52 L=25	M12	25	52	21	24
FC1143	BT40-SOM12-77 L=50	M12	50	77	21	31
FC1144	BT40-SOM12-102 L=75	M12	75	102	21	33
FC1145	BT40-SOM12-127 L=100	M12	100	127	21	36
FC1146	BT40-SOM16-52 L=25	M16	25	52	29	29
FC1147	BT40-SOM16-77 L=50	M16	50	77	29	34
FC1148	BT40-SOM16-102 L=75	M16	75	102	29	34
FC1149	BT40-SOM16-127 L=100	M16	100	127	29	36



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