



Technical Guide for FMR Tool

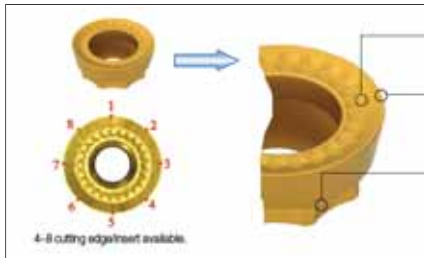
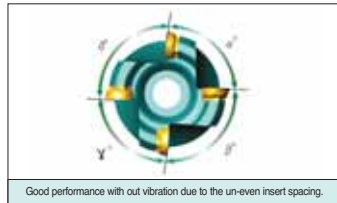
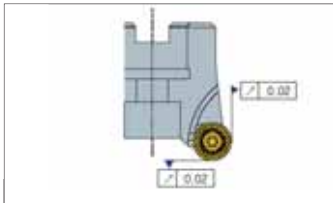
Special Features

- Wide coverage for mould material, alloy steel, hardened steel etc.
- 2 step shape of insert provides good positioning & tight clamp of insert.
- 4-8 cutting edge/insert available.
- Uneven insert spacing prevents chattering.



- Precision design on insert seat part prevents insert from chattering.
- Special design on insert bottom prevents movement and chattering of insert.
- Very easy to change insert due to the rotation prevention part of insert.

Clamping System



Special chipbreaker design for low cutting load

- Minimised heat generation due to smooth chip flow

Special cutting edge preparation

- Nega-land preparation applied
- Good surface finish due to the low cutting load

Facial contact through curved face

- Rotation prevention of insert during machining
- Stable and tight clamping of insert
- Good positioning of insert repeatedly

Technical Guide for FMR Tool

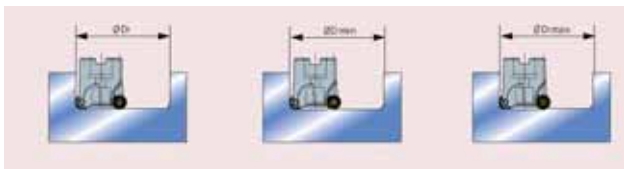


Recommended Cutting Conditions

ISO	C/B Grade	RDKT10T3M0-□□		RDKT1204M0-□□	
		V(m/min)	fz(mm/tooth)	V(m/min)	fz(mm/tooth)
P	NCM325	100 ~ 300	0.10 ~ 0.40	120 ~ 250	0.15 ~ 0.60
	NCM335	100 ~ 250	0.10 ~ 0.40	120 ~ 220	0.15 ~ 0.60
	PC3535	100 ~ 250	0.10 ~ 0.50	100 ~ 220	0.10 ~ 0.60
M	PC9530	80 ~ 180	0.05 ~ 0.50	80 ~ 180	0.10 ~ 0.60
K	NCM310K	200 ~ 300	0.08 ~ 0.35	200 ~ 280	0.1 ~ 0.55
	NCM320K	180 ~ 250	0.08 ~ 0.35	180 ~ 250	0.1 ~ 0.55
	PC6510	150 ~ 250	0.08 ~ 0.35	150 ~ 230	0.1 ~ 0.55
Aluminum	H01	400 ~ 1,200	0.05 ~ 0.65	400 ~ 1,000	0.1 ~ 0.7

* Designation of insert for aluminum machining is RDKT-MA.

Helical Cutting/Plunging



Tools	OD(Cutter diameter)	OD(Normal diameter)	OD-min	OD-max	Designation
FMR3000	25	40	32	48	RDKT10T3M0-□□
	32	54	46	62	
	40	70	62	78	
	50	90	82	98	
	63	116	108	124	
	100	190	182	198	
FMR4000	32	52	41	63	RDKT1204M0-□□
	40	68	57	79	
	50	88	77	98	
	63	114	103	125	
	80	148	137	159	
	100	188	177	199	
	125	238	227	249	

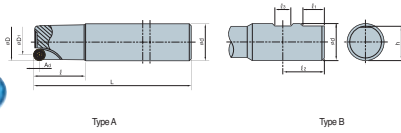
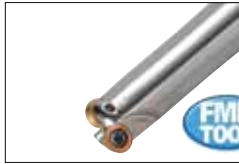


FMR Tool



MILLING TOOLS

FMRS1000/1500/2000/2500



Type A

Type B

(mm)

Designation	2007 £	ØD	ØD1	L	Ød	ℓ	ℓ1	ℓ2	ℓ3	h	A _d	Type	Insert
FMRS 1008RD-M	31.00	8	5.5	80	10	30	-	-	-	-	2.5	A	1
1008RD-L	31.00	8	5.5	100	10	50	-	-	-	-	2.5	A	1
1010RD-M	43.00	10	5	100	12	44	-	-	-	-	2.5	A	2
1010RD-L	43.00	10	5	120	12	64	-	-	-	-	2.5	A	2
1012RD-M	43.00	12	7	100	12	44	-	-	-	-	2.5	A	2
1012RD-L	43.00	12	7	160	16	80	-	-	-	-	2.5	A	2
1015RD-M	49.00	15	10	160	16	80	-	-	-	-	2.5	A	3
1015RD-L	49.00	15	10	200	16	100	-	-	-	-	2.5	A	3
1510RD-M	31.00	10	6	100	12	44	-	-	-	-	3.0	A	1
1510RD-L	31.00	10	6	120	12	64	-	-	-	-	3.0	A	1
1512RD-M	43.00	12	6	110	12	54	-	-	-	-	3.0	A	2
1512RD-L	43.00	12	6	160	16	80	-	-	-	-	3.0	A	2
1516RD-M	54.00	16	10	130	16	60	-	-	-	-	3.0	A	3
1516RD-L	55.00	16	10	180	20	90	-	-	-	-	3.0	A	3
1520RD-M	55.00	20	14	150	20	80	-	-	-	-	3.0	A	3
1520RD-L	55.00	20	14	200	20	90	-	-	-	-	3.0	A	3
2015RD-S	43.00	15	8	115	16	55	-	24	10	14.2	3.5	B	2
2015RD-M	45.00	15	8	150	20	80	-	-	-	-	3.5	A	2
2015RD-L	45.00	15	8	200	20	90	-	-	-	-	3.5	A	2
2020RD-S	54.00	20	14	125	20	65	-	25	11	18.2	3.5	B	3
2020RD-M	54.00	20	14	150	20	80	-	-	-	-	3.5	A	3
2020RD-L	54.00	20	14	200	25	90	-	-	-	-	3.5	A	3
2516RD-S	45.00	16	8	115	16	55	-	24	10	14.2	4	B	2
2516RD-M	45.00	16	8	150	16	80	-	-	-	-	4	A	2
2516RD-L	45.00	16	8	200	20	90	-	-	-	-	4	A	2
2520RD-S	45.00	20	12	125	20	65	-	25	11	18.2	4	B	2
2520RD-M	45.00	20	12	150	20	80	-	-	-	-	4	A	2
2520RD-L	45.00	20	12	200	25	100	-	-	-	-	4	A	2
2525RD-S	65.00	25	17	125	25	55	17	32	12	23	4	B	3
2525RD-M	65.00	25	17	200	25	90	-	-	-	-	4	A	3
2525RD-L	65.00	25	17	250	32	110	-	-	-	-	4	A	3

For full insert range please see page 87

INDEXABLE MILLING TOOLS FMR Tool



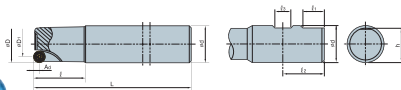
BRIGHT IDEAS!

Speeds and feeds

Please phone for a technical catalogue ... your tools will last much longer at the optimum cutting conditions



FMRS3000/4000



Type A

Type B

(mm)

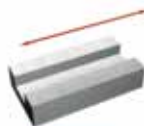
Designation	2007 £	O D	O D ₁	L	O d	l	l ₁	l ₂	l ₃	h	A _d	Type	Insert	
FMRS	3021RD-M	22.00	21	11	150	20	40	-	-	-	5	A	1	
	3021RD-M2	25.00	21	11	150	20	40	-	-	-	-	A	2	
	3021RD-L	26.00	21	11	200	20	50	-	-	-	5	A	1	
	3021RD-L2	29.00	21	11	200	20	50	-	-	-	-	A	2	
	3025RD-S	47.00	25	15	115	25	35	17	32	12	23	5	B	2
	3025RD-M	53.00	25	15	200	25	70	-	-	-	-	5	A	2
	3025RD-L	59.00	25	15	250	25	100	-	-	-	-	5	A	2
	3026RD-M	53.00	26	16	200	25	70	-	-	-	-	5	A	2
	3026RD-L	59.00	26	16	250	25	100	-	-	-	-	5	A	2
	3032RD-S	59.00	32	22	125	32	40	19	36	14	30	5	B	3
	3032RD-M	65.00	32	22	200	32	70	-	-	-	-	5	A	3
	3032RD-L	70.00	32	22	300	32	150	-	-	-	-	5	A	3
	3040RD-S	70.00	40	30	125	32	40	19	36	14	30	5	B	4
	3040RD-M	82.00	40	30	200	32	70	-	-	-	-	5	A	4
	3040RD-L	99.00	40	30	300	32	150	-	-	-	-	5	A	4
	4032RD-S	52.00	32	20	125	32	40	19	36	14	30	6	B	2
	4032RD-M	54.00	32	20	200	32	70	-	-	-	-	6	A	2
	4032RD-L	59.00	32	20	300	32	150	-	-	-	-	6	A	2
	4033RD-S	52.00	33	21	125	32	40	19	36	14	30	6	B	2
	4033RD-M	54.00	33	21	200	32	70	-	-	-	-	6	A	2
4033RD-L	59.00	33	21	300	32	150	-	-	-	-	6	A	2	
4040RD-S	62.00	40	28	125	32	40	19	36	14	30	6	B	3	
4040RD-M	66.00	40	28	200	32	70	-	-	-	-	6	A	3	
4040RD-L	70.00	40	28	300	32	150	-	-	-	-	6	A	3	
4050RD-S	75.00	50	38	150	42	50	19	40	14	40	6	B	4	
4050RD-M	80.00	50	38	250	42	100	-	-	-	-	6	A	4	
4050RD-L	85.00	50	38	300	42	150	-	-	-	-	6	A	4	

RDC110T3M0-MA
RDKT10T3M0-□

RDC1204M0-MA
RDKT1204M0-□

Do you want a FREE milling body? Please phone for more information

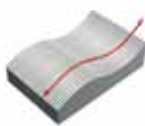
For inserts see pages 87 - 88



Full Slotting and Shouldering



Ramping

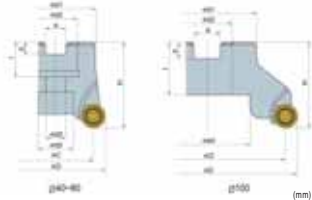


Copying



Helical Ramping

FMRCM3000/4000



Designation	2007 £	ØD	ØC	ØD ₂	Ød	H	a	b	Ød ₁	Ød ₂	E	
FMRCM												
3040RD	55.00	40	30	36	16	40	8.0	5.6	9	14	20	3
3050RD	59.00	50	40	42	22	50	10.4	6.3	11	16.5	20	4
3063RD	69.00	63	53	49	22	50	10.4	6.3	11	16.5	20	5
3080RD	79.00	80	70	57	27	50	12.4	7.0	14	19	22	6
3100RD	89.00	100	90	67	32	50	14.4	8.0	-	45	32	7
3040RD-H	61.00	40	30	36	16	40	8.0	5.6	9	14	20	4
3050RD-H	65.00	50	40	42	22	50	10.4	6.3	11	16.5	20	5
3063RD-H	79.00	63	53	49	22	50	10.4	5(6.3)	11	16.5	20	6
3080RD-H	89.00	80	70	57	27	50	12.4	7.0	14	19	22	7
3100RD-H	99.00	100	90	67	32	50	14.4	8.0	-	45	32	8
FMRCM												
4050RD	69.00	50	38	42	22	50	10.4	6.3	11	16.5	20	4
4063RD	85.00	63	51	49	22	50	10.4	6.3	11	16.5	20	4
4080RD	89.00	80	68	57	27	50	12.4	7.0	14	19	22	5
4100RD	99.00	100	88	67	32	50	14.4	8	-	45	32	6
4125RD	119.00	125	113	87	40	63	16.4	9	-	56	35	7
4063RD-M	89.00	63	51	49	22	50	10.4	6.3	11	16.5	20	5
4080RD-M	99.00	80	68	57	27	50	12.4	7.0	14	19	22	6
4100RD-M	110.00	100	88	67	32	50	14.4	8.0	-	45	32	7
4125RD-M	125.00	125	113	87	40	63	16.4	9.0	-	56	35	8

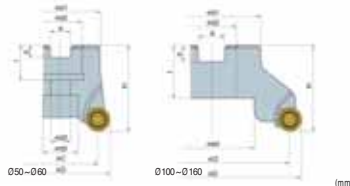
Specs	Insert	Screw	Wrench
FMRCM 3000 FMRCM 4000	RD□10T30-M□ RD□T1204M0-M□	FTGA03508(FTGA03507 for Ø21) FTKA0410	TW15S TW15S

For full insert range please see pages 87 - 88

BRIGHT IDEAS!
 Tool not performing well
 or lasting long enough?
 Please phone for technical advice
 and let us solve your problem



FMRCM5000/6000

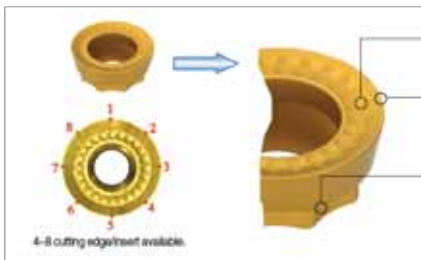


MILLING TOOLS

Designation	2007 £	ØD	ØC	ØD2	Ød	H	a	b	Ød1	Ød2	E	⊙	
FMRCM	5050RD	99.00	50	34	42	22	50	10.4	6.3	11	16.5	20	3
	5063RD	109.00	63	47	49	22	50	10.4	6.3	11	16.5	20	4
	5080RD	115.00	80	64	57	27	50	12.4	7.0	14	19	22	5
	5100RD	129.00	100	84	67	32	50	14.4	8.0	-	45	32	6
	5125RD	179.00	125	109	87	40	63	16.4	9.0	-	56	35	7
	5063RD-H	119.00	63	47	49	22	50	10.4	6.3	11	16.5	20	5
FMRCM	5080RD-H	125.00	80	64	57	27	50	12.4	7.0	14	19	22	6
	5100RD-H	135.00	100	84	67	32	50	14.4	8.0	-	45	32	7
	5125RD-H	199.00	125	109	87	40	63	16.4	9.0	-	56	35	8
	6063RD	79.00	63	43	49	22	50	10.4	6.3	11	16.5	20	3
	6080RD	99.00	80	60	57	27	50	12.4	7.0	14	19	22	4
	6100RD	129.00	100	80	67	32	50	14.4	8.0	-	45	32	5
FMRCM	6125RD	179.00	125	105	87	40	63	16.4	9.0	-	56	35	6
	6160RD	255.00	160	140	107	40	63	16.4	9.0	-	78	35	7
	6063RD-M	89.00	63	43	49	22	50	10.4	6.3	11	16.5	20	4
	6080RD-M	99.00	80	60	57	27	50	12.4	7.0	14	19	22	5
	6100RD-M	129.00	100	80	67	32	50	14.4	8.0	-	45	32	6
	6125RD-M	179.00	125	105	87	40	63	16.4	9.0	-	56	35	7
6160RD-M	269.00	160	140	107	40	63	16.4	9.0	-	78	35	8	

Holder	Insert	Screw	Wrench
FMRCM 5000 FMRCM 6000	RDHW1605M0□, RDKT1605M0-MM RDHW2006M0□, RDKT2006M0-MM	FTGA03508(FTGA03507 for Ø21) FTKA0410	TW15S TW15S

Do you want a FREE milling body? Please phone for more information



Unique C/B for low cutting force

Sharp edge for low cutting resistance

Rotation prevention system

INDEXABLE MILLING TOOLS FMR Tool