



# Swing Mill / RFC

## Helical Flute Indexable Endmill

### *Excellent for heavy removal in grooving and shoulder cuts*

DIJET's Swing Mill and RFC are designed for heavy metal removal to improve performance and provide a smooth, free-cutting geometry. The helical cutting action provides for fast, efficient chip dispersal while the staggered insert pattern distributes chip load allowing higher feed rates and longer insert life.

### Swing Mill



- *Screw-down inserts are economical and easy to load.*
- *Larger chip pockets provide maximum material removal.*
- *Staggered insert geometry permits smooth cutting action.*
- *Replaceable end cap design saves on tool costs.*

### RFC



- *High efficient side milling and full slot milling is possible at high feed rates.*
- *3D insert geometry improves sharpness and reduces power consumption.*
- *Rigid G-Body.*

# Swing Mill

**METRIC**

## DSM Type



Fig. 1

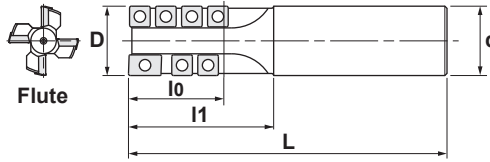


Fig. 3 (Solid Style)

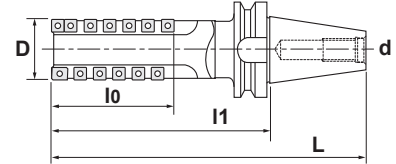


Fig. 2

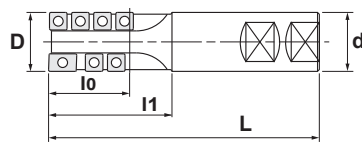
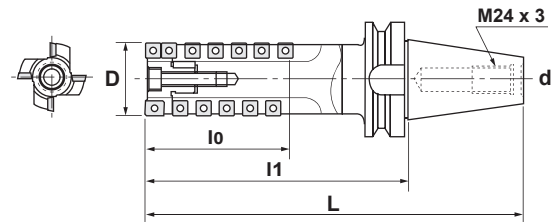


Fig. 4 (End Cap Style)



## Specifications

CATALOG NUMBER	STK	DIMENSIONS					FIG.	INSERT				PARTS	
		D	L	l0	d	l1		Nose	Q	Periphery	Q	Screw	Wrench
DSM-32044-S32-2	•	32	147	44	32	67	1	IM-CP32N	2	IM-SP32GS	12	CSW-407	A-15T
DSM-40052-S42	•	40	165	52	42	75	1	IM-CP32N	2	IM-SP32GS	14	CSW-407	A-15T
DSM-40052-W42	•	40	165	52	42	75	2	IM-CP32N	2	IM-SP32GS	14	CSW-407	A-15T
DSM-50097-DIN	•	50	266.8	97	DIN	165	3	IM-CP43N	2	IM-SP43GS	18	CSW-510	A-20SD
DSM-50097EC-BT	•	50	266.8	97	BT50	165	4	IM-CP43N	2	IM-SP43GS	18	CSW-510	A-20SD
DSM-63066-DIN	•	63	251.8	66	DIN	150	3	IM-CP43N	2	IM-SP43GS	12	CSW-510	A-20SD
DSM-63066EC-BT	■	63	251.8	66	BT50	150	4				12		
DSM-63097-DIN	•	63	296.8	97	DIN	195	3				18		
DSM-63097EC-BT	•	63	296.8	97	BT50	195	4				18		
DSM-63127-DIN	•	63	331.8	127	DIN	230	3				24		
DSM-63127EC-DIN	•	63	331.8	127	DIN	230	4				24		
DSM-63127EC-BT	■	63	331.8	127	BT50	230	4	24					
DSM-80117-DIN	•	80	321.8	117	DIN	220	3	IM-CP43N	2	IM-SP43GS	22	CSW-510	A-20SD
DSM-80117EC-BT	■	80	321.8	117	BT50	220	4				22		
DSM-80158-DIN	•	80	351.8	158	DIN	250	3				30		
DSM-80158EC-BT	■	80	351.8	158	BT50	250	4				30		

Note: All cutters are supplied without inserts.

## END CAPS

Fig. 1

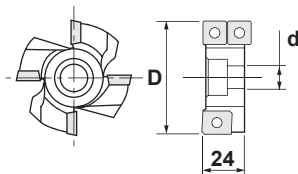
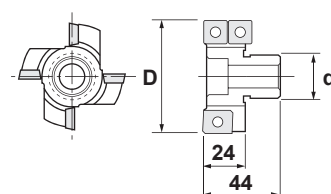


Fig. 2



## Specifications

APPLICABLE HOLDER	CATALOG NUMBER	STK	FIG.	DIMS		INSERTS				PARTS				
				D	d	Nose	Q	Periphery	Q	Screw	Wrench	Key	Key Screw	Clamp Bolt
DSM-50..EC	EC-50	•	1	50	13	IM-CP43N	2	IM-SP43GS	4	CS-W510	A-20SD	SWM-50	M2.5X0.45X12	HSB-10
DSM-63..EC	EC-63	•	2	63	25							SWM-63	-	HSB-12
DSM-80..EC	EC-80	■	2	80	30							SWM-80	-	HSB-12

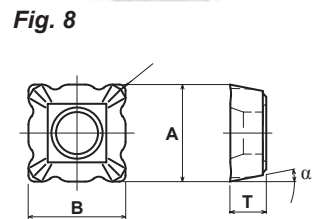
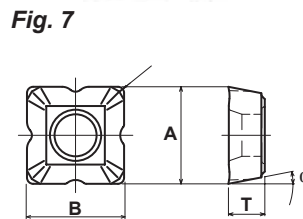
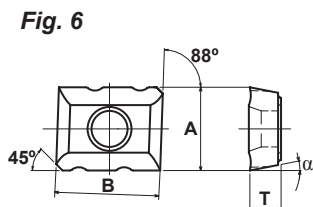
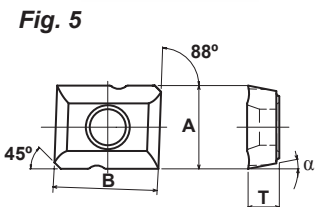
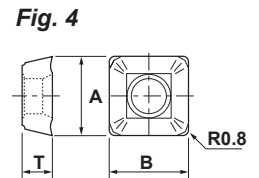
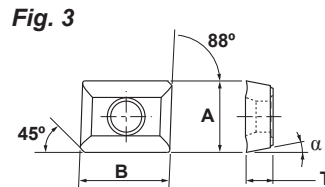
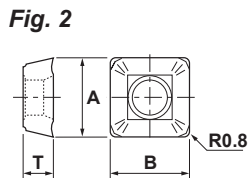
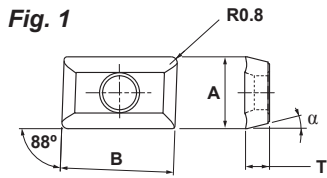
Note: All cutters are supplied without inserts.



**METRIC**

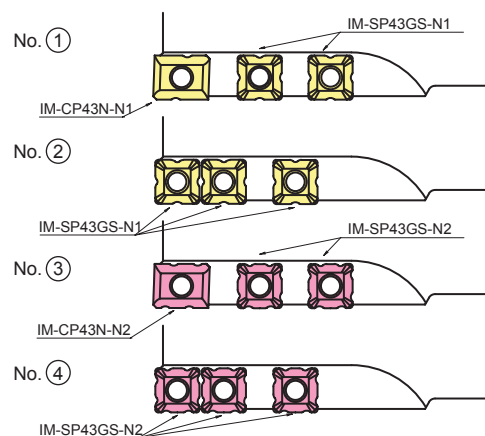
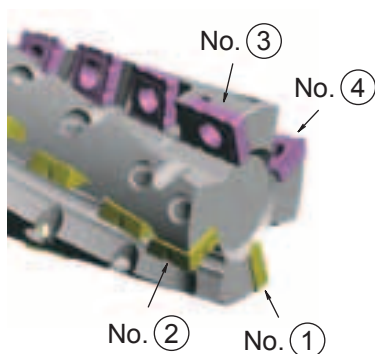
# Swing Mill

## INSERTS



CATALOG NUMBER	DIMENSIONS				FIG.	COATED						
	A	B	T	$\alpha$		JC5030	JC5040	JC3562	JC5015	JC8015	JC3521	JC8050
IM-CP32N	9.52	15	3.18	14°	1	•	•		•		■	
IM-SP32GS	9.52	9.52	3.18	14°	2	•	•		•		■	
IM-CP43N	12.7	15.875	4.76	11°	3	•	•	■	•	■	■	
IM-SP43GS	12.7	12.7	4.76	11°	4	•	•	•	•	■	•	
IM-CP43N-N1	12.7	15.875	4.76	11°	5		•			■		•
IM-CP43N-N2	12.7	15.875	4.76	11°	6		•			■		•
IM-SP43GS-N1	12.7	12.7	4.76	11°	7		•			■		•
IM-SP43GS-N2	12.7	12.7	4.76	11°	8		•			■		•

### Instructions for Loading Notched Inserts

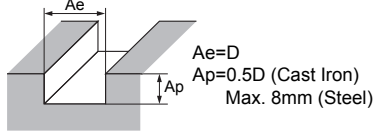
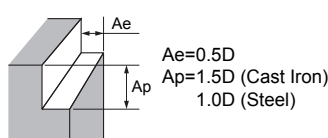
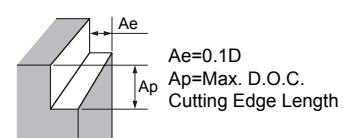


**Note: Do not mix - N1 and -N2 inserts in same flute.**

# Swing Mill

**METRIC**

## Recommended Cutting Data

**Fig.1 Grooving**

**Fig.2 Shoulder Cutting**

**Fig.3 Narrow Shoulder Cutting**


WORK MATERIAL	INSERT GRADE	FIG.	TOOL DIAMETER					
			Ø32 (4 Flute)			Ø40		
			Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)	Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)
Cast Iron (150HB)	JC5015	1	90	900	230	90	720	220
	JC5030	2	110	1,090	280	110	880	340
		3	110	1,090	440	110	880	440
Nodular Cast Iron (~ 220HB)	JC5015	1	75	750	150	75	600	150
	JC5030	2	90	900	230	90	720	260
		3	90	900	330	90	720	320
Carbon & Alloy Steel (~ 250HB)	JC5040	1	-	-	-	85	680	160
	JC5030	2	100	990	240	100	800	240
		3	100	990	330	100	800	320
Tool Steel (~ 255HB)	JC5040	1	-	-	-	60	480	100
	JC5030	2	70	700	175	70	560	150
		3	70	700	230	70	560	190
Low Carbon Steel (~ 200HB)	JC5040	1	-	-	-	90	720	170
	JC5030	2	110	1,090	260	110	880	270
		3	110	1,090	380	110	880	350

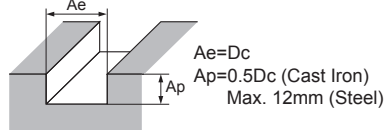
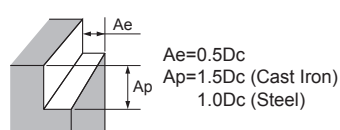
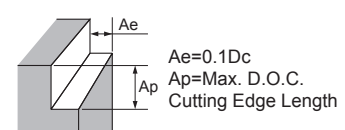
WORK MATERIAL	INSERT GRADE	FIG.	TOOL DIAMETER								
			Ø50			Ø63			Ø80		
			Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)	Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)	Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)
Cast Iron (150HB)	JC5015	1	80	510	230	80	400	180	80	320	140
	JC3521 JC5030	2	90	570	280	90	450	220	90	360	180
		3	90	570	450	90	450	370	90	360	300
Nodular Cast Iron (~ 220HB)	JC5015	1	70	460	200	70	360	160	70	290	130
	JC3521 JC5030	2	80	510	250	80	400	200	80	320	160
		3	80	510	420	80	400	330	80	320	250
Carbon & Alloy Steel (~ 250HB)	JC5040	1	70	460	170	70	360	130	70	290	100
	JC5030	2	80	510	250	80	400	200	80	320	160
		3	80	510	420	80	400	330	80	320	250
Tool Steel (~ 255HB)	JC5040	1	45	290	90	45	220	70	45	180	50
	JC5030	2	50	320	130	50	250	100	50	200	80
		3	50	320	210	50	250	160	50	200	130
Low Carbon Steel (~ 200HB)	JC5040	1	80	510	190	80	400	150	80	320	120
	JC5030	2	90	570	280	90	450	220	90	360	180
		3	90	570	450	90	450	370	90	360	300

**Note: For DSM-80158-DIN:** Fig. 1 - apply 40% of all conditions  
 Fig. 2 - apply 50% of all conditions  
 Fig. 3 - apply 60% of all conditions


**METRIC**

# Swing Mill

## Recommended Cutting Data for Notched Inserts

**Fig.1 Grooving**

**Fig.2 Shoulder Cutting**

**Fig.3 Narrow Shoulder Cutting**


WORK MATERIAL	INSERT GRADE	FIG.	L (mm) Overhung Length	TOOL DIAMETER								
				Ø50			Ø63			Ø80		
				Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)	Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)	Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)
Gray Cast Iron (GG250) 150HB	JC8015 *JC8050	1	2D	55	350	180	55	280	140	55	220	110
		2	2D	55	350	210	55	280	170	55	220	130
		3	2D	100	640	480	100	510	380	100	400	300
		1	4D	55	350	140	55	280	110	55	220	90
		2	4D	55	350	180	55	280	140	55	220	110
		3	4D	100	640	380	100	510	310	100	400	240
Nodular Cast Iron (GGG450) Below 150HB	JC8015 *JC8050	1	2D	50	320	160	50	250	130	50	200	100
		2	2D	50	320	190	50	250	150	50	200	120
		3	2D	80	510	380	80	400	300	80	320	240
		1	4D	50	320	130	50	250	100	50	200	80
		2	4D	50	320	160	50	250	130	50	200	100
		3	4D	80	510	310	80	400	240	80	320	190
Carbon Steel, Alloy Steel (C50, 1.7223) Below 250HB	JC5040 *JC8050	1	2D	50	320	160	50	250	130	50	200	100
		2	2D	50	320	100	50	250	80	50	200	60
		3	2D	80	510	200	80	400	160	80	320	130
		1	4D	50	320	130	50	250	100	50	200	80
		2	4D	50	320	80	50	250	60	50	200	50
		3	4D	80	510	150	80	400	120	80	320	100
Die Steel (1.2344, 1.2379) Below 255HB	JC5040 *JC8050	1	2D	50	320	160	50	250	130	50	200	100
		2	2D	50	320	100	50	250	80	50	200	60
		3	2D	80	510	200	80	400	160	80	320	130
		1	4D	50	320	130	50	250	100	50	200	80
		2	4D	50	320	80	50	250	60	50	200	50
		3	4D	80	510	150	80	400	120	80	320	100
Low Carbon Steel (C15, 17100) Below 200HB	JC5040 *JC8050	1	2D	60	380	190	60	300	150	60	240	120
		2	2D	60	380	110	60	300	90	60	240	70
		3	2D	120	720	290	120	610	240	120	480	190
		1	4D	60	380	150	60	300	120	60	240	100
		2	4D	60	380	100	60	300	80	60	240	60
		3	4D	120	720	210	120	610	180	120	480	140

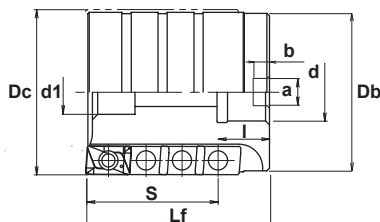
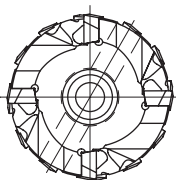
\* For interrupted cutting.

# RFC Styles

**METRIC**

RFC Type

**G-Body**



## Specifications

CATALOG NUMBER	STK	DIMENSIONS								INSERTS			PARTS		
		Dc	Db	d1	S	Lf	d	a	b	l	INSERT	Q	Flutes	Screw	Wrench
RFC5050R-22	•	50	45	17	50	90	22	10.4	6.3	20	ZPMT170508R	12	3	DSW-4510H	A-20SD
RFC6350R-32	•	63	60	17	50	70	22	10.4	6.3	20		16	4		
RFC8060R-27	•	80	60	20	60	80	27	12.4	7	22		25	5		

Note: All cutters are supplied without inserts.

Fig. 1

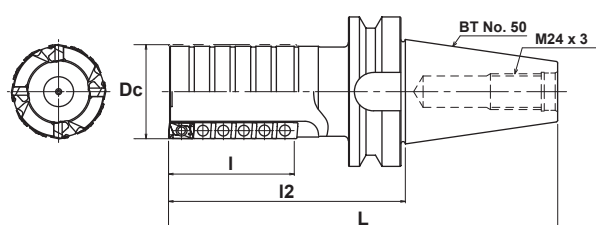
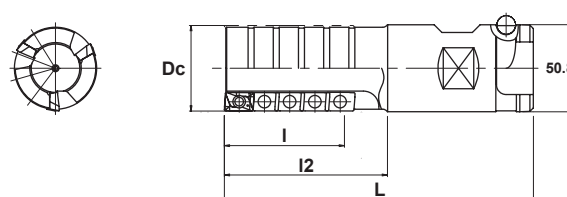


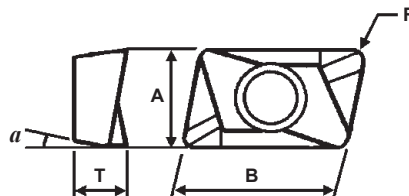
Fig. 2



## Specifications

CATALOG NUMBER	STK	DIMENSIONS				FIG.	INSERT	Q	Flutes	PARTS	
		Dc	I	I2	L					Screw	Wrench
RFC50100-BT	■	50	100	173.2	275	1	ZPMT170508R	21	3	DSW-4510H	A-20SD
RFC63120-BT	■	63	120	193.2	295	1		36	4		
RFC50100-C508	■	50	100	145	230	2		21	3		

Note: All cutters are supplied without inserts.


**METRIC**
**RFC Styles**
**INSERT**

**Specifications**

CATALOG NUMBER	DIMENSIONS					COATED	
	A	B	T	R	$\alpha$	JC5015	JC5040
ZPMT170508R	11	17	5.56	0.8	11°	•	•

**Recommended Cutting Data**

WORK MATERIAL	INSERT GRADE	TYPE OF CUT	DIAMETER								
			50mm			63mm			80mm		
			Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)	Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)	Vc (m/min)	N (min <sup>-1</sup> )	Vf (mm/min)
Cast Iron (GG25) (150HB)	JC5015 (JC5040)	Ae=0.5Dc (max) Ap=1.0Dc (max)	140	890	610	140	710	650	140	560	640
		Ae=0.1Dc Ap=Full Dia.	140	890	880	140	710	940	140	560	920
Ductile Iron (GGG70) Below 220HB	JC5015 (JC5040)	Ae=0.5Dc (max) Ap=1.0Dc (max)	120	760	520	120	610	560	120	480	550
		Ae=0.1Dc Ap=Full Dia.	120	760	750	120	610	810	120	480	790
Carbon Steel, Alloy Steel (C50, C55, 1.7225) Below 250HB	JC5040	Ae=0.5Dc (max) Ap=1.0Dc (max)	110	700	420	110	560	450	110	440	440
		Ae=0.1Dc Ap=Full Dia.	110	700	690	110	560	670	110	440	660
Die Steel (1.2344, 1.2379) Below 255HB	JC5040	Ae=0.5Dc (max) Ap=1.0Dc (max)	100	640	230	100	510	250	100	400	240
		Ae=0.1Dc Ap=Full Dia.	100	640	350	100	510	370	100	400	360

