

# DSM type



## “ Swing Mill ”

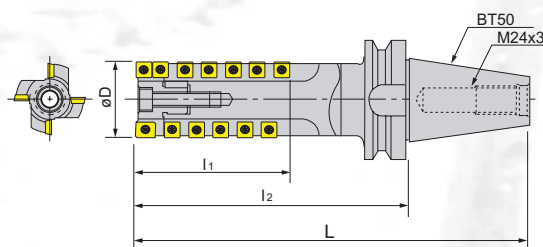


## “ Swing Mill ”



### ■ DSM Type

#### DSM-EC-BT type (With BT50 Shank)

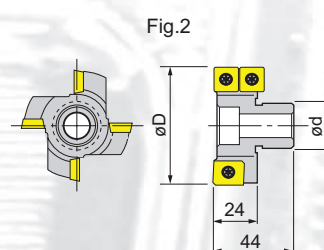
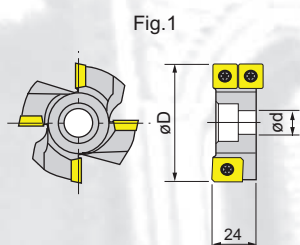


### ■ Body

Cat. No.	Stock	No. of applicable inserts		Dimensions (mm)				Parts	
		Corner blade	Peripheral blade	D	l <sub>1</sub>	l <sub>2</sub>	L	Clamp screw	Wrench
		IM-CP43N	IM-SP43GS						
DSM-50097EC-BT	●	2	18	50	97	165	266.8	CSW-510 (5.5 N-m)	A-20SD
DSM-63066EC-BT	●	2	12	63	66	150	251.8		
DSM-63097EC-BT	●	2	18	63	97	195	296.8		
DSM-63127EC-BT	●	2	24	63	127	230	331.8		
DSM-80117-ECBT	●	2	22	80	117	220	321.8		
DSM-80158EC-BT	●	2	30	80	158	250	351.8		

Note: See pag. 129 for cutting data.

● Stock in Japan



### ■ End-cap

Cat. No.	Stock	No. of applicable inserts		Dimensions (mm)		Fig.	Parts		
		Corner blade	Peripheral blade	øD	ød		Clamp bolt	Key	Key bolt
		IM-CP43N	IM-SP43GS						
EC-50	●	2	4	50	13	1	HSB-10	SWM-50	M2.5x0.45x12
EC-63	●	2	4	63	25	2	HSB-12	SWM-63	-
EC-80	●	2	4	80	30	2	HSB-12	SWM-80	-

● Stock in Japan

# “ Swing Mill ”

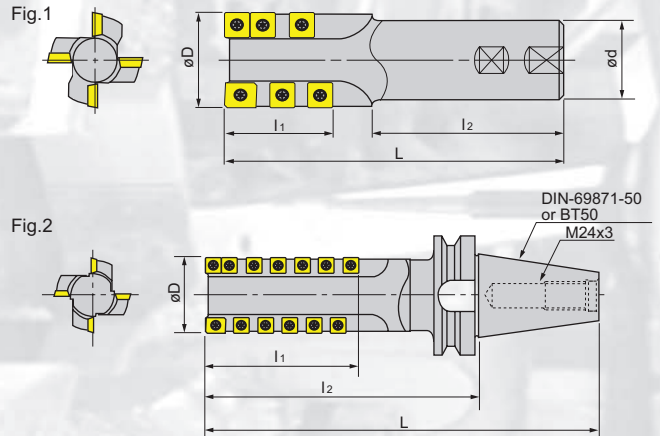


## ■ DSM Type

**DSM-W50 type (With Weldon shank)**

**DSM-BT type (With BT50 shank)**

**DSM-DIN type (DIN Standard)**

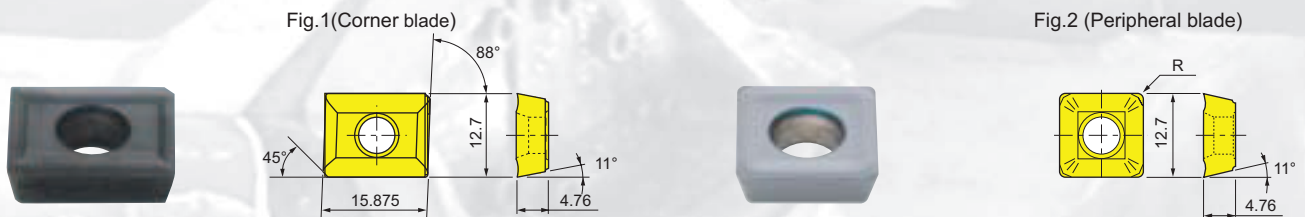


## ■ Body

Cat. No.	Stock	Fig.	No. of inserts		Dimensions (mm)					Parts	
			Corner blade	Peripheral blade	øD	l <sub>1</sub>	l <sub>2</sub>	L	ød or Taper shank	Clamp screw	Wrench
DSM-50066-W50	●	1	2	12	50	66	-	180	W50	CSW-510 (5.5 N-m)	A-20SD
DSM-50097-DIN	●		2	18	50	97	165	266.8	DIN50		
DSM-50097-BT	●		2	18	50	97	165	266.8	BT50		
DSM-63066-DIN	●		2	12	63	66	150	251.8	DIN50		
DSM-63066-BT	●		2	12	63	66	150	251.8	BT50		
DSM-63097-DIN	●	2	2	18	63	97	195	296.8	DIN50		
DSM-63097-BT	●		2	18	63	97	195	296.8	BT50		
DSM-63127-DIN	●		2	24	63	127	230	331.8	DIN50		
DSM-63127-BT	●		2	24	63	127	230	331.8	BT50		
DSM-80117-DIN	●		2	22	80	117	220	321.8	DIN50		
DSM-80117-BT	●		2	22	80	117	220	321.8	BT50		
DSM-80158-DIN	●		2	30	80	158	250	351.8	DIN50		
DSM-80158-BT	●		2	30	80	158	250	351.8	BT50		

Note: See pag. 129 for cutting data.

● Stock in Japan



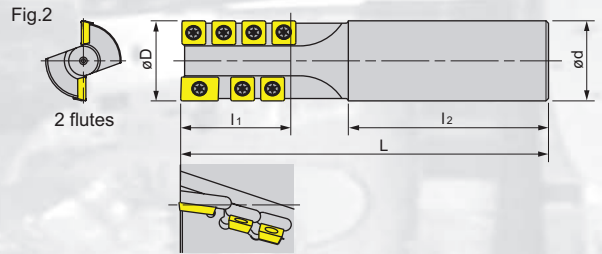
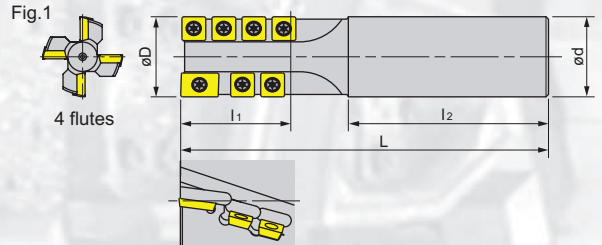
## ■ Inserts

Cat. No.	Coated			Fig.
	JC5015	JC5030	JC5040	
IM-CP43N	●	●	●	1
IM-SP43GS	●	●	●	2

## “ Swing Mill ”



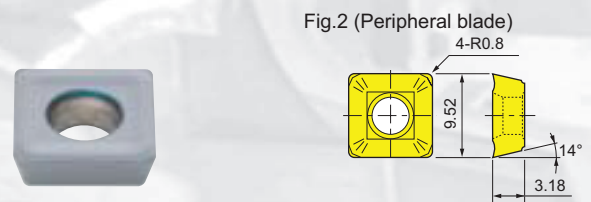
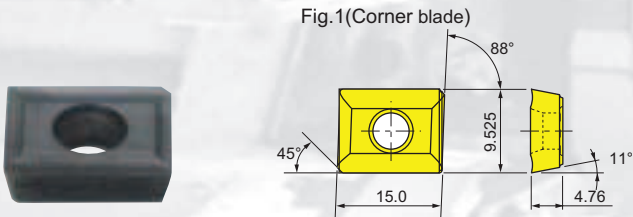
### ■ DSM-S Type



### ■ Body

Cat. No.	Stock	Fig.	No. of inserts		Dimensions (mm)					Parts	
			Corner blade	Peripheral blade	øD	l <sub>1</sub>	l <sub>2</sub>	L	ød	Clamp screw	Wrench
			IM-CP32N	IM-SP32GS							
DSM-32044-S32-1	●	2	1	6	32	44	80	147	32	CSW-407 (3.1 N-m)	A-15SD
DSM-32044-S32-2	●	1	2	12							
DSM-40052-S42	●	1	2	14							

● Stock in Japan



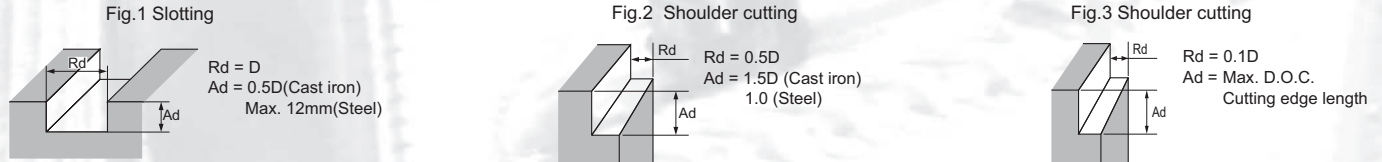
### ■ Inserts

Cat. No.	Coated			Fig.
	JC5015	JC5030	JC5040	
IM-CP32N	●	●	●	1
IM-SP32GS	●	●	●	2

# “ Swing Mill ”

## ■ Recommended cutting conditions for:

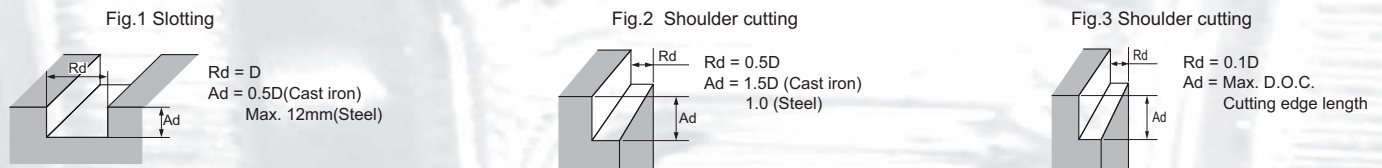
### DSM-EC-BT - DSM-W50 - DSM-DIN - DSM-BT



Work materials	Insert grade	Application (Fig.)	Tool dia.								
			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 (HB150)	JC5015 JC5030	1	80	510	230	80	400	180	80	320	140
		2	90	570	280	90	450	220	90	360	180
		3	90	570	450	90	450	370	90	360	300
Nodular cast iron (Below HB220)	JC5015 JC5030	1	70	460	200	70	360	160	70	290	130
		2	80	510	250	80	400	200	80	320	160
		3	80	510	420	80	400	330	80	320	250
Carbon steel Alloy steel (Below HB250)	JC5030	1	70	460	170	70	360	130	70	290	100
		2	80	510	250	80	400	200	80	320	160
		3	80	510	420	80	400	330	80	320	250
Tool steel (Below HB255)	JC5030	1	45	290	90	45	220	70	45	180	50
		2	50	320	130	50	250	100	50	200	80
		3	50	320	210	50	250	160	50	200	130
Low carbon steel (Below HB200)	JC5030	1	80	510	190	80	400	150	80	320	120
		2	90	570	280	90	450	220	90	360	180
		3	90	570	450	90	450	370	90	360	300

## ■ Recommended cutting conditions for:

### DSM-S



Work materials	Insert grade	Application (Fig.)	Tool dia.								
			ø32 (4 flutes)			ø32 (2 flutes)			ø40		
			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 (HB150)	JC5030	1	90	900	230	90	900	165	90	720	220
		2	110	1,090	280	110	1,090	220	110	880	340
		3	110	1,090	440	110	1,090	330	110	880	440
Nodular cast iron (Below HB220)	JC5030	1	75	750	150	75	750	110	75	600	150
		2	90	900	230	90	900	170	90	720	260
		3	90	900	330	90	900	250	90	720	320
Carbon steel Alloy steel (Below HB250)	JC5030	1	—	—	—	85	850	110	85	680	160
		2	100	990	240	100	990	170	100	800	240
		3	10	990	330	100	990	250	100	800	320
Tool steel (Below HB255)	JC5030	1	—	—	—	60	600	70	60	480	100
		2	70	700	175	70	700	110	70	560	150
		3	70	700	230	70	700	160	70	560	190
Low carbon steel (Below HB200)	JC5030	1	—	—	—	90	900	135	90	720	170
		2	110	1,090	260	110	1,090	200	110	880	270
		3	110	1,090	380	110	1,090	270	110	880	350

■ **Note**

