

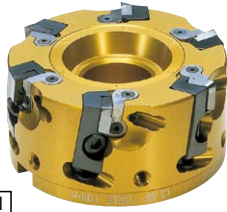
Radial +4°	3mm 90°	10mm 87°	P M K N S H
Axial +10°			

SUMIDIA Inserts Carbide Inserts

High-Efficiency Aluminum Cutter RF 4000 Type

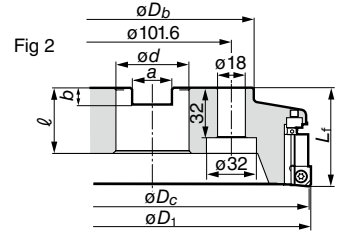
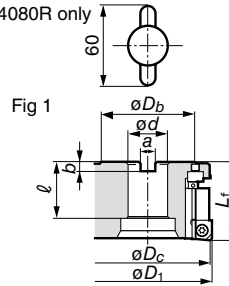
High Speed Milling Cutter RF4000 Series for Aluminum

High-speed Finishing for Non-Ferrous Metal



Body Imperial

RF4080R only



Cat. No.	Stock	Dimensions (mm)									No. of Teeth	Weight (kg)	Fig
		ϕD_c	ϕD_1	ϕD_b	L_f	ϕd	a	b	ℓ				
RF 4080R	●	80	82	60	50	25.40	9.5	6	30	6	0.7	1	
4100R	●	100	102	75	50	31.75	12.7	8	38	6	1.0	1	
4125R	●	125	127	75	63	38.10	15.9	10	38	8	1.6	1	
4160R	●	160	162	100	63	50.80	19.1	11	38	10	2.6	1	
RF 4200R	●	200	202	130	63	47.625	25.4	14	42	12	3.6	2	
4250R	●	250	252	130	63	47.625	25.4	14	42	16	6.0	2	
4315R	●	315	317	240	80	47.625	25.4	14	42	18	11.0	2	

Cartridges, blades and inserts are sold separately

* Please use a collar bolt for securing the cutter to the arbour.

Inserts / Cartridges

P Steel M Stainless Steel K Cast Iron N Non-Ferrous Metal S Exotic Alloy H Hardened Steel

Grade	Carbide					SUMIDIA	SUMICRYSTAL
	DLC-Coat	DL1000	DA1000	DA2200	SC10		
Application	High Speed/Light	N	N	N	N	N	
	General Purpose	N	N	N	N	N	
	Roughing	N	N	N	N	N	

Refer to page M44 for details of SUMICRYSTAL.

Cat. No.	H	Cartridge							
		DL1000	DA1000	DA2200	SC10	Fig			
SDET 1204ZDFR	●	●	—	—	—	3	RFR	●	8
NF-SNEW 1204ADFR	—	—	●	▲	—	4	RFF	●	9
120404ADFR-H	—	—	●	—	—	5	RFF(Others) RFFH(RF4080R)	●	9
1204ADFR-W	—	—	●	▲	—	6	RFF	●	9
SNEW 1204ADFR-WS	—	—	—	—	●	7	RFF	●	9

Cartridge

Fig 8



(RFR)

Fig 9



(RFF)

* When using large depth of cut ($a_p = 3\text{mm}$ or longer) with RF4080R, use RFFH unit. (RFF is possible for normal cutting.)

* Wiper inserts are indicated by a -W or -WS suffix. -H indicates deep cutting (a_p) insert

Fig 3

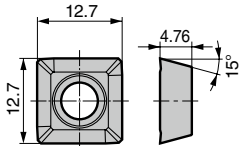


Fig 4

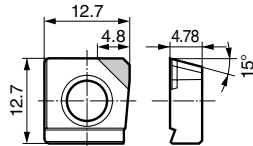


Fig 5

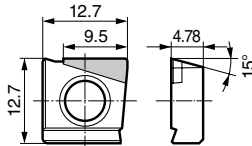


Fig 6 Surfing Insert

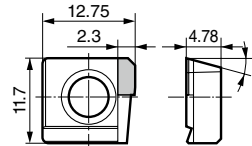
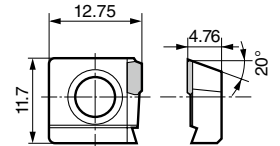


Fig 7 Surfing Insert



Spare Parts

Recommended Tightening Torque (N·m)

Part	Part No.	Torque (N·m)
Cover	RFC	
Stopper	RFS	
Main Clamp	BX 0620	10.0
Sub-clamp	BTD 0510	3.0
Cover Attachment	FBUP2 -A0-8	
Adjustment Screw	RFJ	
Screw	BFTX 0509N	6.0
Spanners	TH050, TH025, RFT	
Spanners	TTX20	

Blades / Dummy Blades

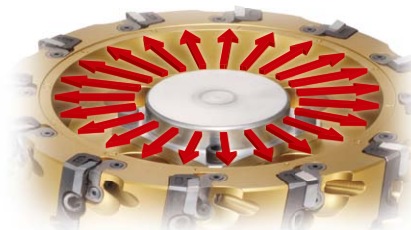
Description	Cat. No.	SUMIDIA
SUMIDIA Blade	RFB	●
SUMIDIA Wiper Blade	RFBW	●
Dummy Blade	RFD	●(Steel)

* Protect the body as well as maintain balance by using dummy blades for unused teeth.

Internal Coolant Attachments

Use an internal coolant holder or a standard clamp bolt with coolant hole when using internal coolant. Typical examples are given in the table below. For standards, contact each manufacturer directly.

Body Cat. No.	Internal Coolant Holder	Standard Clamp Bolt with Coolant Hole (Ext.)
RF 4080R	—	MBC-M12 TMBA-M12
RF 4100R	—	MBC-M16 TMBA-M16
RF 4125R	—	MBC-M20 TMBA-M20
RF 4160R	—	MBC-M24 TMBA-M24
RF 4200R	RF-CLT	—
RF 4250R	RF-CLT	—
RF 4315R	RF-CLT	—



Direction of Coolant Supply



Internal Coolant Holder
RF-CLT (Standard stocked item)



Standard Clamp Bolt with Coolant Hole
[Representative example] MBC-M12 to M24 (Sold Separately)

External Setting Parts

Cartridge design allows inserts to be mounted away from the machine with high precision.



Setting Gauge
RF-SET (Sold separately, Standard stocked item)



Clamp Jig
RF-JIG (Sold separately, Standard stocked item)

▲mark : To be replaced by new item (Please confirm stock availability)