

MILLING - INDEXABLE

Cutter Series

SSC

Insert Series

SFC, SFJ

Width Range

0.079 - 0.118" (2.00 - 3.00 mm)

Radial Depth of Cut

0.75 - 2.00" (19.0 - 51.5 mm)

Adaption Range

Inch: 0.750, 1.000, 1.250"

Metric: 22.0, 27.0, 32.0 mm

Applications

Slitting & Sawing

Materials

- Steel
- Stainless Steel
- Cast Iron
- Non-Ferrous
- High-Temp Alloys
- Hardened Steel

WINCUT™

Featuring **CUTSPEED™** inserts

Narrow Width Coolant Thru Slitters

- » Internal-Coolant precisely directed to cutting edges by way of 3D-Additive-Technology for efficient chip evacuation
- » Radial Drive Adapters engineered to deliver coolant to Slitters
- » Flat cutter face allows for grooving up to 90° shoulders
- » Form-fitting insert seat with wide inserts for utmost durability
- » Positive and negative insert edge preps for cutting various materials and finishes
- » Modular design allows for adaption flexibility (Inch Radial Drive, Metric Radial Drive or Arbor mount)
- » Inserts used for Mills (WinCut Slitters) and Lathe (WinCut Parting & Grooving)



See it in
action! »



WINSPEED™
ADVANCED MACHINING

ingersoll-imc.com



Slot Coolant



Series SSC

2.0 MM THIN SLITTER



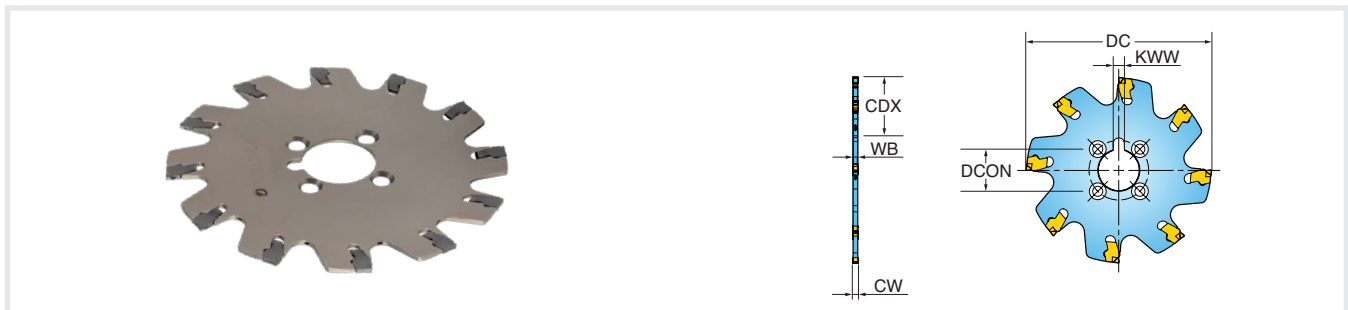
Part Number	DC Cutting Dia.	CW Cutting Width	CDX Cutting Depth Max.	ZNP Peripheral Insert Count	WB Body Width	DCON Bore Diameter	KWW Keyway	SSC Insert Seat Size
INCH								
SSC 80 2 22KR00-TB	80.00 mm	2.00 mm	19.0 mm	8	1.70 mm	22.00 mm	6.0 mm	2
SSC 100 2 22KR00-TB	100.00 mm	2.00 mm	29.0 mm	10	1.70 mm	22.00 mm	6.0 mm	2
SSC 125 2 27KR00-TB	125.00 mm	2.00 mm	39.0 mm	12	1.70 mm	27.00 mm	7.0 mm	2
SSC 160 2 32KR00-TB	150.00 mm	2.00 mm	51.5 mm	14	1.70 mm	32.00 mm	8.0 mm	2

Slot Coolant



Series SSC

3.0 MM THIN SLITTER



Part Number	DC Cutting Dia.	CW Cutting Width	CDX Cutting Depth Max.	ZNP Peripheral Insert Count	WB Body Width	DCON Bore Diameter	KWW Keyway	SSC Insert Seat Size
INCH								
SSC 80 3 22KR00-TB	80.00 mm	3.00 mm	19.0 mm	7	2.50 mm	22.00 mm	6.0 mm	3
SSC 100 3 22KR00-TB	100.00 mm	3.00 mm	29.0 mm	8	2.50 mm	22.00 mm	6.0 mm	3
SSC 125 3 27KR00-TB	125.00 mm	3.00 mm	39.0 mm	10	2.50 mm	27.00 mm	7.0 mm	3
SSC 160 3 32KR00-TB	150.00 mm	3.00 mm	51.5 mm	12	2.50 mm	32.00 mm	8.0 mm	3

Inserts

SFC



Part Number	Application	RE Corner Radius	CW Cutting Width	SSC Insert Seat Size	NOI Number of Indexes	IH Insert Hand	Grade		
							K10	TT9080	TT8020
SFC2	Negative C-Type Chip Breaker	0.008	0.079	2	1	Neutral	•	•	•
SFC3	Negative C-Type Chip Breaker	0.008	0.118	3	1	Neutral	•	•	•

SFJ



Part Number	Application	RE Corner Radius	CW Cutting Width	SSC Insert Seat Size	NOI Number of Indexes	IH Insert Hand	Grade		
							K10	TT9080	TT8020
SFJ2	Positive J-Type Chip Breaker	0.008	0.079	2	1	Neutral	•	•	•
SFJ3	Positive J-Type Chip Breaker	0.008	0.118	3	1	Neutral	•	•	•

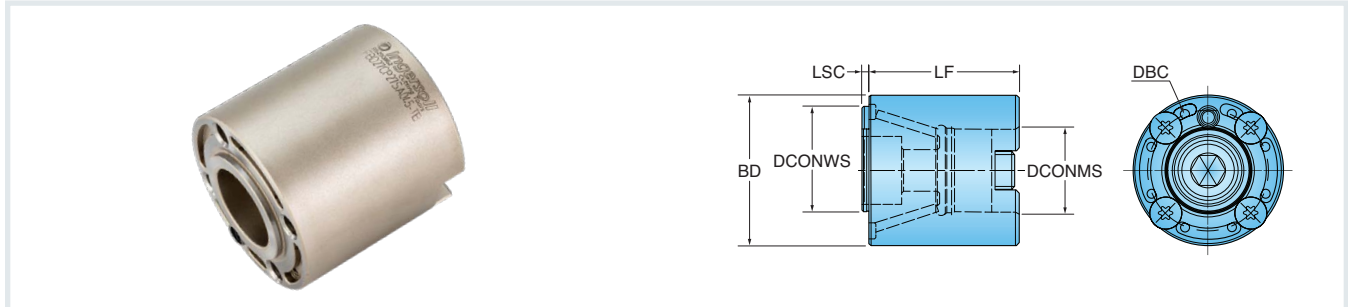
Hardware

Part Number	 Insert Extractor	 Hub Set
SSC 80 2 22KR00-TB	DR-0031	FL-0005
SSC 100 2 22KR00-TB	DR-0031	FL-0005
SSC 125 2 27KR00-TB	DR-0031	-
SSC 160 2 32KR00-TB	DR-0031	FL-0006
SSC 80 3 22KR00-TB	DR-0031	FL-0005
SSC 100 3 22KR00-TB	DR-0031	FL-0005
SSC 125 3 27KR00-TB	DR-0031	-
SSC 160 3 32KR00-TB	DR-0031	FL-0006



Series FBD

RADIAL DRIVE ADAPTER, COOLANT THRU

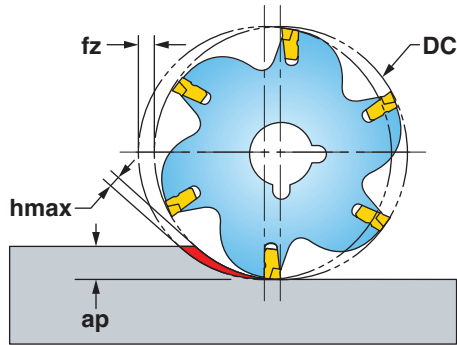


Part Number	DCONMS Connection Dia. Machine Side	DCONWS Connection Dia. Workpiece Side	LF Functional Length	LSC	DBC	BD Body Dia.	CNSC Coolant Entry Style Code	CXSC Coolant Exit Style Code
INCH								
FBD075CP22SA-12-TB	0.750	22.00 mm	1.250	1.80 mm	32 mm 4 pin	40.00 mm	1	3
FBD100CP27SA-17-TB	1.000	27.00 mm	1.750	1.80 mm	37 mm 4 pin	45.00 mm	1	3
FBD125CP32SA-22-TB	1.250	32.00 mm	2.250	1.80 mm	45 mm 4 pin	55.00 mm	1	3
METRIC								
FBD22CP22SA040-TB	22.00 mm	22.00 mm	40.00 mm	1.80 mm	32 mm 4 pin	40.00 mm	1	3
FBD27CP27SA045-TB	27.00 mm	27.00 mm	45.00 mm	1.80 mm	37 mm 4 pin	45.00 mm	1	3
FBD32CP32SA060-TB	32.00 mm	32.00 mm	60.00 mm	1.80 mm	45 mm 4 pin	55.00 mm	1	3

In order to utilize coolant through capability, radial drive FBD adapter must be implemented.

Operating Guidelines

Chip Thinning



For radial depths of cut (ap) less than 1/4 of cutter diameter (DC), increase feed rates by the following %, or use the Chip Thinning Calculator to ensure h_{max} is within the fz range:

<https://www.imc-i.com/mpwr/Milling/HChipThickness>

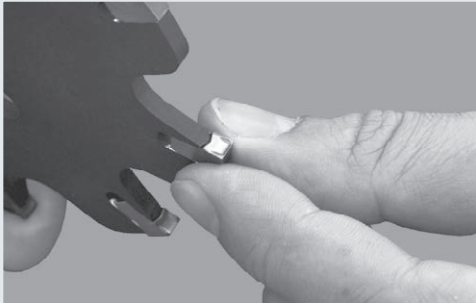
Depth of Cut (ap) x Cutter Dia. (DC)	1/4	1/6	1/8	1/10	1/20
Increase Feed Rate by	0%	15%-	30%	45%	100%

Materials				Vc Cutting Speed SFM		fz* Feed/Tooth (inch)		Harder «---» Tougher			Coolant
ISO	Material Group #VDI 3323	Type	Examples	Dry Machining	Wet Machining	CW - Width		K10	TT9080	TT8020	
						0.0787 (2mm)	0.1180 (3mm)				
P	1-5	Non-alloy steel	1018, A36, 1045, A572, 1070	800-950	650-800	0.003-0.007	0.003-0.010		2	1	No
	6-9	Low-alloy steel	4140, 4340, P20, 8620, 300M	700-850	500-650						
	10, 11	High-alloy steel	H13, A2, D2, M2, T1	500-600	350-450						
M	12, 13	Stainless steel (ferritic & martensitic)	410, 416, 440	400-600	250-450	0.002-0.005	0.002-0.007		2	1	Yes
	14	Stainless steel (austenitic)	303, 304, 316, 15-5, 17-4								May not be required at high speeds
K	15, 16	Gray cast iron	CLS. 20, 30, 45	600-800	500-650	0.003-0.007	0.003-0.010		1	2	No
	17, 18	Ductile cast iron	60-40-18, 100-70-03	450-700	350-550						Yes
N	21-30	Aluminum	7075, 6061	2500-5000	1600-2600	0.002-0.005	0.002-0.007	1			Yes
S	31-35	High-temp alloys	Inconel, Hastelloy, Monel	350-400	200-250	0.002-0.005	0.002-0.007		1	2	Yes
	36, 37	Titanium alloys	6Al-4V, 5Al-5Mo-5V-3Cr	125-150	100-125				2	1	
H	38, 39	Hardened steel >48	A2, O1, D2	100-125	-	0.002-0.005	0.002-0.007			1	No

Note: Feed and speed recommendations are starting operating parameters. They are only guidelines from which further optimization should take place. Operating parameters are influenced by many machining variables. These variables may cause for reductions in feeds and speed or dramatic increases. Additionally, DOC and WOC may need to be revised to optimize the tools performance.

Technical Information

INSERT LOADING PROCEDURE



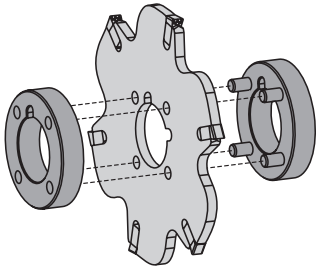
1. Be sure insert pockets are free of dirt prior to assembly.
2. Manually place insert into seat and tap into position using a plastic hammer.

INSERT REMOVAL PROCEDURE



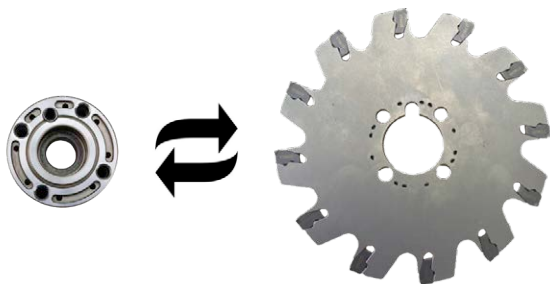
1. To remove inserts from the cutter body, first, place insert extractor into space behind the insert.
2. Turn the extractor 90° until the insert is dislodged from the pocket.
3. One extractor is provided with each cutter.

CUTTER MOUNTING



When using drive flange-style cutter bodies, the use of a drive flange set is highly recommended to provide more bearing surface for the drive key. Without the drive flange set, the drive flange key or arbor may be damaged when the cutter is run at high speeds.

COOLANT THROUGH!



The Coolant Thru Feature can only be utilized when the splitter is mounted on Series FBD radial drive adapter.