Member IMC Group

Ingersoll Cutting Tools

Bass Tool & Supply, Inc.

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www.basstool.com

MAY/JUNE 2023

BLITZ PROMO

FREE TOOLS

LATEST TECHNOLOGY

Member IMC Group Ingersoll Cutting Tools **SOLIDDRILL3™**

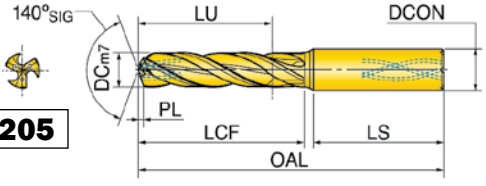
3-FLUTE SOLID CARBIDE DRILLS WITH 3 COOLANT HOLES

- Suitable for high feed and speed machining on cast iron and alloy steel
- Improved PVD coated layer with excellent anti-abrasion and crack resistance
- Sub-micron substrate with high wear resistance and optimum toughness

3xD

5xD

PVD COATING: IN2205



- 50% higher feed rates compared to 2-flute drills
- Self centering geometry
- Very high stability due to its reinforced edge design
- 3 coolant holes

DC CUTTING DIAMETER			PL	DCON	LS	3xD				5xD			
DEC.	INCH	MM	(mm)	(mm)	(mm)	LU (mm)	LCF (mm)	OAL (mm)	PART#:	LU (mm)	LCF (mm)	OAL (mm)	PART#:
0.1563	5/32	3.97	0.80	6	35	17	25	66	FR0397017T7R01	29	37	74	FR0397029T7R01
0.1575	-	4.00	0.82	6	35	17	25	66	FR0400017T7R01	29	37	74	FR0400029T7R01
0.1772	-	4.50	0.88	6	35	17	25	66	FR0450017T7R01	29	37	74	FR0450029T7R01
0.1875	3/16	4.76	0.90	6	35	17	25	66	FR0476017T7R01	29	37	74	FR0476029T7R01
0.1969	-	5.00	0.96	6	36	20	29	66	FR0500020T7R01	35	45	82	FR0500035T7R01
0.2008	-	5.10	0.98	6	36	20	29	66	FR0510020T7R01	35	45	82	FR0510035T7R01
0.2165	-	5.50	1.08	6	36	20	29	66	FR0550020T7R01	35	45	82	FR0550035T7R01
0.2188	7/32	5.56	1.09	6	36	20	29	66	FR0556020T7R01	35	45	82	FR0556035T7R01
0.2362	-	6.00	1.17	6	36	20	29	66	FR0600020T7R01	35	45	82	FR0600035T7R01
0.2500	1/4	6.35	1.20	8	36	24	35	79	FR0635024T0R01	43	54	91	FR0635043T0R01
0.2559	-	6.50	1.26	8	36	24	35	79	FR0650024T0R01	43	54	91	FR0650043T0R01
0.2677	-	6.80	1.29	8	36	24	35	79	FR0680024T0R01	43	54	91	FR0680043T0R01
0.2756	-	7.00	1.35	8	36	24	35	79	FR0700024T0R01	43	54	91	FR0700043T0R01
0.2813	9/32	7.14	1.38	8	36	29	42	79	FR0714029T0R01	43	54	91	FR0714043T0R01
0.2953	-	7.50	1.40	8	36	29	42	79	FR0750029T0R01	43	54	91	FR0750043T0R01
0.3126	5/16	7.94	1.48	8	36	29	42	79	FR0794029T0R01	43	54	91	FR0794043T0R01
0.3150	-	8.00	1.49	8	36	29	42	79	FR0800029T0R01	43	54	91	FR0800043T0R01
0.3346	-	8.50	1.63	10	40	35	48	89	FR0850035T1R01	49	62	103	FR0850049T1R01
0.3386	-	8.60	1.64	10	40	35	48	89	FR0860035T1R01	49	62	103	FR0860049T1R01
0.3438	11/32	8.73	1.65	10	40	35	48	89	FR0873035T1R01	49	62	103	FR0873049T1R01
0.3543	-	9.00	1.72	10	40	35	48	89	FR0900035T1R01	49	62	103	FR0900049T1R01
0.3740	-	9.50	1.75	10	40	35	48	89	FR0950035T1R01	49	62	103	FR0950049T1R01
0.3752	3/8	9.53	1.76	10	40	35	48	89	FR0953035T1R01	49	62	103	FR0953049T1R01
0.3937	-	10.00	1.85	10	40	35	48	89	FR1000035T1R01	49	62	103	FR1000049T1R01
0.4063	13/32	10.30	1.88	12	45	40	55	102	FR1030040T2R01	56	71	118	FR1030056T2R01
0.4134	-	10.50	1.98	12	45	40	55	102	FR1050040T2R01	56	71	118	FR1050056T2R01
0.4331	-	11.00	2.07	12	45	40	55	102	FR1100040T2R01	56	71	118	FR1100056T2R01
0.4375	7/16	11.11	2.08	12	45	40	56	102	FR1111040T2R01	56	72	118	FR1111056T2R01
0.4528	-	11.50	2.12	12	45	40	56	102	FR1150040T2R01	56	72	118	FR1150056T2R01
0.4688	15/32	11.91	2.20	12	45	40	56	102	FR1191040T2R01	56	72	118	FR1191056T2R01
0.4724	-	12.00	2.21	12	45	40	56	102	FR1200040T2R01	56	72	118	FR1200056T2R01

TWISTSFEED™

3-flute replaceable tip drills for 50% more productivity

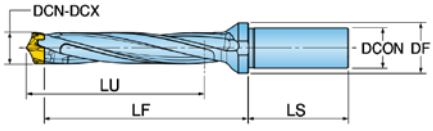
- 15.0-20.9 mm (.591"-.823") self-centering tips, 3xD and 5xD bodies
- Fast, simple, accurate tip replacement reduces downtime

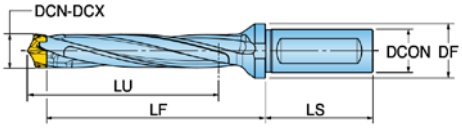
PC 297

PURCHASE
6 heads
& RECEIVE
*one corresponding drill body**
FREE

*3xD or 5xD

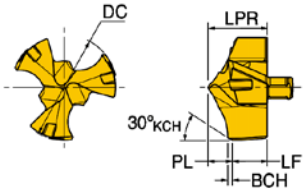
3xD **5xD**





SHANK	DCN Cutting Dia Min.	DCX Cutting Dia Max.	SSC Seat Size Code	LS Shank Length	DCON Shank Diameter	DF Flange Diameter	Key	3 x D PART#	3 x D LU Usable Length	3 x D LF Functional Length	5 x D PART#	5 x D LU Usable Length	5 x D LF Functional Length
WITH A FLAT	0.5906 (15.00 mm)	0.6260 (15.90 mm)	15	1.97	0.750	0.98	KFD14-15	FD150004518R01	1.93	2.58	FD150007518R01	3.11	3.76
	0.6299 (16.00 mm)	0.6654 (16.90 mm)	16	1.97	0.750	0.98	KFD16-17	FD160004818R01	2.05	2.76	FD160008018R01	3.31	4.02
	0.6693 (17.00 mm)	0.7047 (17.90 mm)	17	1.97	0.750	0.98	KFD16-17	FD170005118R01	2.17	2.94	FD170008518R01	3.50	4.28
	0.7087 (18.00 mm)	0.7441 (18.90 mm)	18	2.20	1.000	1.26	KFD18-19	FD1800054C8R01	2.28	3.15	FD1800090C8R01	3.70	4.56
	0.7480 (19.00 mm)	0.7835 (19.90 mm)	19	2.20	1.000	1.26	KFD18-19	FD1900057C8R01	2.40	3.31	FD1900095C8R01	3.90	4.80
	0.7874 (20.00 mm)	0.8228 (20.90 mm)	20	2.20	1.000	1.26	KFD20-21	FD2000060C8R01	2.52	3.47	FD2000100C8R01	4.09	5.04
CYLINDRICAL	0.5906 (15.00 mm)	0.6260 (15.90 mm)	15	1.97	0.750	0.98	KFD14-15	FD1500045S7R01	1.93	2.58	FD1500075S7R01	3.11	3.76
	0.6299 (16.00 mm)	0.6654 (16.90 mm)	16	1.97	0.750	0.98	KFD16-17	FD1600048S7R01	2.05	2.76	FD1600080S7R01	3.31	4.02
	0.6693 (17.00 mm)	0.6693 (17.90 mm)	17	1.97	0.750	0.98	KFD16-17	FD1700051S7R01	2.17	2.94	FD1700085S7R01	3.50	4.28
	0.7087 (18.00 mm)	0.7441 (18.90 mm)	18	2.20	1.000	1.26	KFD18-19	FD1800054S1R01	2.28	3.15	FD1800090S1R01	3.70	4.56
	0.7480 (19.00 mm)	0.7835 (19.90 mm)	19	2.20	1.000	1.26	KFD18-19	FD1900057S1R01	2.40	3.31	FD1900095S1R01	3.90	4.80
	0.7874 (20.00 mm)	0.8228 (20.90 mm)	20	2.20	1.000	1.26	KFD20-21	FD2000060S1R01	2.52	3.47	FD2000100S1R01	4.09	5.04

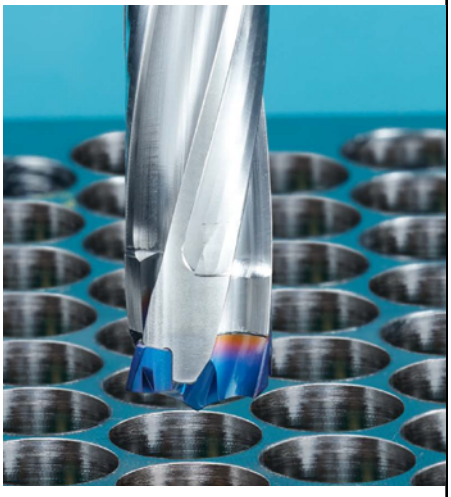
TWISTSFEED™ **3-FLUTE DRILL TIPS**



PART #	DC Cutting Diameter	SSC Seat Size Code	PL Point Length	LPR Projection Length	LF Functional Length	BCH Chamfer Length
FPC1500R01	0.5906 (15.00 mm)	15	0.130	0.331	0.200	0.020
FPC1510R01	0.5945 (15.10 mm)	15	0.130	0.331	0.200	0.020
FPC1520R01	0.5984 (15.20 mm)	15	0.130	0.331	0.200	0.020
FPC1530R01	0.6024 (15.30 mm)	15	0.130	0.331	0.200	0.020
FPC1540R01	0.6063 (15.40 mm)	15	0.130	0.331	0.200	0.020
FPC1550R01	0.6102 (15.50 mm)	15	0.131	0.331	0.200	0.020
FPC1560R01	0.6142 (15.60 mm)	15	0.131	0.331	0.200	0.020
FPC1570R01	0.6181 (15.70 mm)	15	0.131	0.331	0.200	0.020
FPC1580R01	0.6220 (15.80 mm)	15	0.131	0.331	0.200	0.020
FPC1588R01	0.6250 (15.88 mm)	15	0.131	0.331	0.200	0.020
FPC1590R01	0.6260 (15.90 mm)	15	0.131	0.331	0.200	0.020
FPC1600R01	0.6299 (16.00 mm)	16	0.146	0.354	0.208	0.028
FPC1610R01	0.6339 (16.10 mm)	16	0.146	0.354	0.208	0.028
FPC1620R01	0.6378 (16.20 mm)	16	0.146	0.354	0.208	0.028
FPC1630R01	0.6417 (16.30 mm)	16	0.146	0.354	0.208	0.028
FPC1640R01	0.6457 (16.40 mm)	16	0.146	0.354	0.208	0.028
FPC1650R01	0.6496 (16.50 mm)	16	0.146	0.354	0.208	0.028
FPC1660R01	0.6535 (16.60 mm)	16	0.146	0.354	0.208	0.028
FPC1670R01	0.6575 (16.70 mm)	16	0.146	0.354	0.208	0.028
FPC1680R01	0.6614 (16.80 mm)	16	0.146	0.354	0.208	0.028
FPC1690R01	0.6654 (16.90 mm)	16	0.146	0.354	0.208	0.028
FPC1700R01	0.6693 (17.00 mm)	17	0.154	0.374	0.221	0.028
FPC1710R01	0.6732 (17.10 mm)	17	0.154	0.374	0.221	0.028

PART #	DC Cutting Diameter	SSC Seat Size Code	PL Point Length	LPR Projection Length	LF Functional Length	BCH Chamfer Length
FPC1720R01	0.6772 (17.20 mm)	17	0.154	0.374	0.221	0.028
FPC1730R01	0.6811 (17.30 mm)	17	0.154	0.374	0.221	0.028
FPC1740R01	0.6850 (17.40 mm)	17	0.154	0.374	0.221	0.028
FPC1750R01	0.6890 (17.50 mm)	17	0.153	0.374	0.221	0.028
FPC1760R01	0.6929 (17.60 mm)	17	0.153	0.374	0.221	0.028
FPC1770R01	0.6969 (17.70 mm)	17	0.153	0.374	0.221	0.028
FPC1780R01	0.7008 (17.80 mm)	17	0.153	0.374	0.221	0.028
FPC1790R01	0.7047 (17.90 mm)	17	0.153	0.374	0.221	0.028
FPC1800R01	0.7087 (18.00 mm)	18	0.160	0.398	0.237	0.028
FPC1810R01	0.7126 (18.10 mm)	18	0.160	0.398	0.237	0.028
FPC1820R01	0.7165 (18.20 mm)	18	0.160	0.398	0.237	0.028
FPC1830R01	0.7205 (18.30 mm)	18	0.160	0.398	0.237	0.028
FPC1840R01	0.7244 (18.40 mm)	18	0.160	0.398	0.237	0.028
FPC1850R01	0.7283 (18.50 mm)	18	0.161	0.398	0.237	0.028
FPC1860R01	0.7323 (18.60 mm)	18	0.161	0.398	0.237	0.028
FPC1870R01	0.7362 (18.70 mm)	18	0.161	0.398	0.237	0.028
FPC1880R01	0.7402 (18.80 mm)	18	0.161	0.398	0.237	0.028
FPC1890R01	0.7441 (18.90 mm)	18	0.161	0.398	0.237	0.028
FPC1900R01	0.7480 (19.00 mm)	19	0.168	0.421	0.254	0.028
FPC1905R01	0.7500 (19.05 mm)	19	0.168	0.421	0.254	0.028
FPC1910R01	0.7520 (19.10 mm)	19	0.168	0.421	0.254	0.028
FPC1920R01	0.7559 (19.20 mm)	19	0.168	0.421	0.254	0.028
FPC1930R01	0.7598 (19.30 mm)	19	0.168	0.421	0.254	0.028
FPC1940R01	0.7638 (19.40 mm)	19	0.168	0.421	0.254	0.028
FPC1950R01	0.7677 (19.50 mm)	19	0.168	0.421	0.253	0.028
FPC1960R01	0.7717 (19.60 mm)	19	0.168	0.421	0.253	0.028
FPC1970R01	0.7756 (19.70 mm)	19	0.168	0.421	0.253	0.028
FPC1980R01	0.7795 (19.80 mm)	19	0.168	0.421	0.253	0.028
FPC1990R01	0.7835 (19.90 mm)	19	0.168	0.421	0.253	0.028
FPC2000R01	0.7874 (20.00 mm)	20	0.175	0.445	0.270	0.028
FPC2010R01	0.7913 (20.10 mm)	20	0.175	0.445	0.270	0.028
FPC2020R01	0.7952 (20.20 mm)	20	0.175	0.445	0.270	0.028
FPC2030R01	0.7992 (20.30 mm)	20	0.175	0.445	0.270	0.028
FPC2040R01	0.8031 (20.40 mm)	20	0.175	0.445	0.270	0.028
FPC2050R01	0.8071 (20.50 mm)	20	0.175	0.445	0.270	0.028
FPC2060R01	0.8110 (20.60 mm)	20	0.175	0.445	0.270	0.028
FPC2070R01	0.8150 (20.70 mm)	20	0.175	0.445	0.270	0.028
FPC2080R01	0.8189 (20.80 mm)	20	0.175	0.445	0.270	0.028
FPC2090R01	0.8228 (20.90 mm)	20	0.175	0.445	0.270	0.028

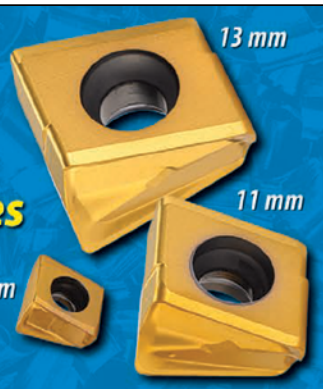
TWISTSFEED™



MAXSFEED™

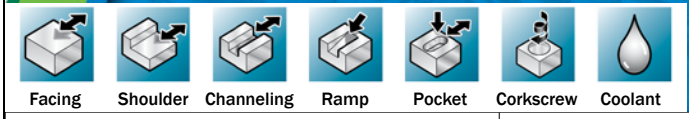
90° shoulder end & face mills with high feed rates

- Integrated wipers produce surface finishes in the single digits
- Secure dovetailed insert seating for maximum stability



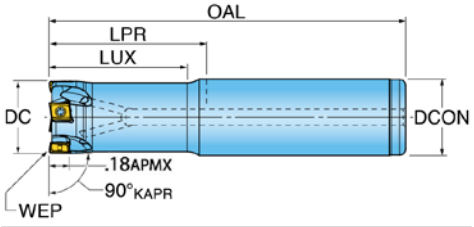
PC 295A **PURCHASE** *20 inserts* **& RECEIVE** *one corresponding end mill body* **FREE**

PC 295B **PURCHASE** *40 inserts* **& RECEIVE** *one corresponding face mill body* **FREE**



90° End Mill (Cylindrical Shank)

USE SERIES 05 INSERTS

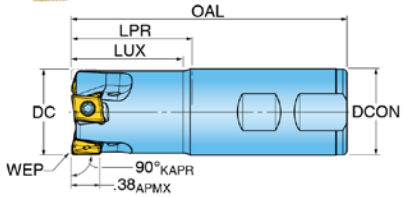


PART NUMBER	DC	LUX	LPR	OAL	ZEFF(1)	DCON	RMPX(2)
1EJ5A-05009S4R01	0.500	0.80	1.00	2.78	2	0.500	1.6
1EJ5A-05009S4R02	0.500	0.80	1.00	2.78	3	0.500	1.6
1EJ5A-07015S7R01	0.750	1.30	1.50	3.50	3	0.750	1.0
1EJ5A-07015S7R02	0.750	1.30	1.50	3.50	4	0.750	1.0
1EJ5A-10015S1R01	1.000	1.30	1.50	3.75	5	1.000	0.7
1EJ5A-10015S1R02	1.000	1.30	1.50	3.75	6	1.000	0.7

(1) ZEFF = Effective teeth (2) RMPX = Max. ramping angle

90° End Mill (Weldon Shank)

USE SERIES 11 INSERTS

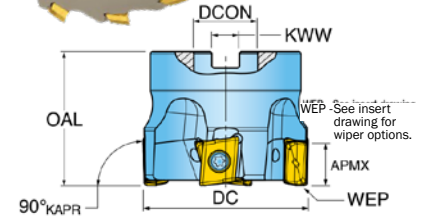


PART NUMBER	DC	LUX	LPR	OAL	ZEFF(1)	DCON	RMPX(2)
1EJ5C-1001780R01	1.000	1.55	1.75	4.00	2	1.000	2.0
1EJ5C-1001784R01	1.000	1.75	1.75	3.75	2	0.750	2.0
1EJ5C-1003780R01	1.000	3.55	3.75	6.00	2	1.000	2.0
1EJ5C-1201780R01	1.250	1.75	1.75	4.00	3	1.000	1.4
1EJ5C-1201781R01	1.250	1.55	1.75	4.00	3	1.250	1.4
1EJ5C-1204281R01	1.250	4.05	4.25	6.50	3	1.250	1.4
1EJ5C-1501781R01	1.500	1.55	1.75	4.00	4	1.250	1.1
1EJ5C-1501781R02	1.500	1.55	1.75	4.00	3	1.250	1.1
1EJ5C-1504281R02	1.500	4.05	4.25	6.50	3	1.250	1.1

(1) ZEFF = Effective teeth (2) RMPX = Max. ramping angle

90° Face Mill

USE SERIES 11 AND SERIES 13 INSERTS



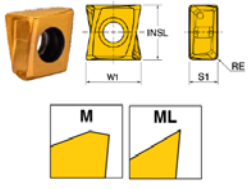
USING SERIES 11 INSERTS

PART #	DC	OAL	APMX	ZEFF(1)	DCON	KWW	RMPX(2)
EJ5C-01R01	1.500	1.570	.48	5	0.500	0.250	1.1
EJ6C-01R01	1.500	1.570		4	0.500	0.250	1.1
EJ5C-02R01	2.000	1.570		6	0.750	0.312	0.8
EJ6C-02R01	2.000	1.570		5	0.750	0.312	0.8
EJ5C-02R02	2.500	1.570		7	0.750	0.312	0.6
EJ6C-02R02	2.500	1.570		6	0.750	0.312	0.6
EJ5C-03R01	3.000	2.375		9	1.000	0.375	0.5
EJ6C-03R01	3.000	2.375		7	1.000	0.375	0.5
EJ5C-04R01	4.000	2.375		13	1.500	0.625	0.3
EJ6C-04R01	4.000	2.375		9	1.500	0.625	0.3

USING SERIES 13 INSERTS

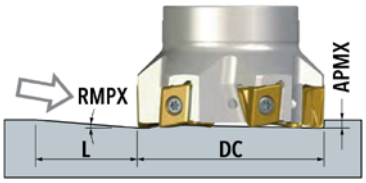
PART #	DC	OAL	APMX	ZEFF(1)	DCON	KWW	RMPX(2)
EJ5D-02R01	2.000	1.570	.38	5	0.750	0.312	1.0
EJ6D-02R01	2.000	1.570		4	0.750	0.312	1.0
EJ5D-02R02	2.500	1.570		6	0.750	0.312	0.8
EJ5D-02R03	2.500	1.570		6	1.000	0.375	0.8
EJ6D-02R02	2.500	1.570		5	0.750	0.312	0.8
EJ5D-03R01	3.000	2.000		7	1.000	0.375	0.6
EJ6D-03R01	3.000	2.000		5	1.000	0.375	0.6
EJ5D-04R01	4.000	2.375		9	1.500	0.625	0.4
EJ6D-04R01	4.000	2.375		7	1.250	0.500	0.4
EJ6D-04R02	4.000	2.375		7	1.500	0.625	0.4
EJ6D-05R01	5.000	2.500		11	1.500	0.625	0.3
EJ6D-06R01	6.000	2.500		13	1.500	0.625	0.3

INSERTS

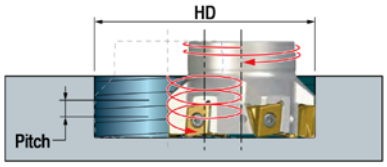


SERIES	PART NUMBER	APPLICATION	RE	BS Wiper Length	INSL	W1	S1	GRADES IN4015	IN2515	IN4005	IN2510	IN2505	IN4030	IN2530	IN4035	IN2535
05	CGM101R001-ML	General Purpose	0.015		0.240	0.200	0.200				•			•		
	CGX101R001-M	Utility	0.015		0.240	0.200	0.200				•	•		•		
11	CGM313R001-M	General Purpose	0.031	0.079	0.433	0.436	0.236	•	•	•		•	•	•		
	CGM313R001-ML	General Purpose	0.031	0.079	0.433	0.436	0.236	•	•	•		•	•	•		
	CGM313R002-M	General Purpose	0.062	0.047	0.433	0.436	0.236	•	•	•		•	•	•		
	CGM313R002-ML	General Purpose	0.062	0.047	0.433	0.436	0.236	•	•	•		•	•	•		
	CGX313R001-M	Utility	0.031	0.079	0.433	0.436	0.236	•	•	•		•	•	•		
	CGX313R002-M	Utility	0.062	0.047	0.433	0.436	0.236	•	•	•		•	•	•		
13	CGM324R001-M	General Purpose	0.031	0.099	0.531	0.518	0.281	•	•	•		•	•	•		
	CGM324R001-ML	General Purpose	0.031	0.099	0.531	0.518	0.281	•	•	•		•	•	•	•	•
	CGM324R002-M	General Purpose	0.062	0.067	0.531	0.518	0.281	•	•	•		•	•	•		
	CGM324R002-ML	General Purpose	0.062	0.067	0.531	0.518	0.281	•	•	•		•	•	•	•	•
	CGM324R004-M	General Purpose	0.125	0.005	0.531	0.518	0.281	•	•	•		•	•	•		
	CGM324R004-ML	General Purpose	0.125	0.005	0.531	0.518	0.281	•	•	•		•	•	•	•	•
	CGX324R001-M	Utility	0.031	0.099	0.531	0.518	0.281	•	•	•		•	•	•		
	CGX324R002-M	Utility	0.062	0.067	0.531	0.518	0.281	•	•	•		•	•	•		

STRAIGHT RAMPING MAXSFEED HELICAL RAMPING



SERIES	DCX Cutter Diameter	RMPX Ramp Angle Max.	L	APMX Depth of Cut Max
05	0.500	1.60	6.620	0.185
	0.750	0.97	10.930	0.185
	1.000	0.69	15.360	0.185
11	1.000	1.99	11.080	0.385
	1.250	1.41	15.640	0.385
	1.500	1.08	20.420	0.385
	2.000	0.76	29.020	0.385
	2.500	0.58	38.030	0.385
	3.000	0.47	46.930	0.385
	4.000	0.34	64.880	0.385
13	2.000	0.98	28.000	0.479
	2.500	0.75	36.590	0.479
	3.000	0.6	45.740	0.479
	4.000	0.44	62.370	0.479
	5.000	0.34	80.720	0.479
	6.000	0.28	98.020	0.479

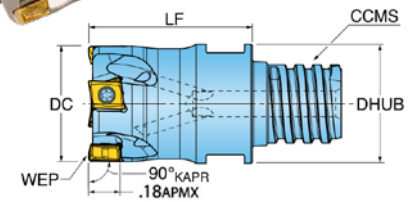


SERIES	DCX Cutter Diameter	HD Min.	HD Max.	HD Min. w/o Cusp.	HD Max. w/o Cusp.	Max Pitch Per Revolution
05	0.500	0.808	1.000	0.970	0.970	0.037
	0.750	1.306	1.500	1.470	1.470	0.034
	1.000	1.806	2.000	1.970	1.970	0.032
11	1.000	1.568	2.000	1.780	1.938	0.093
	1.250	2.066	2.500	2.280	2.438	0.082
	1.500	2.566	3.000	2.780	2.938	0.076
	2.000	3.566	4.000	3.780	3.938	0.071
	2.500	4.566	5.000	4.780	4.938	0.068
	3.000	5.566	6.000	5.780	5.938	0.066
	4.000	7.566	8.000	7.780	7.938	0.063
13	2.000	3.470	4.000	3.740	3.938	0.091
	2.500	4.470	5.000	4.740	4.938	0.087
	3.000	5.470	6.000	5.740	5.938	0.084
	4.000	7.470	8.000	7.740	7.938	0.082
	5.000	9.470	10.000	9.740	9.938	0.079
	6.000	11.470	12.000	11.740	11.938	0.078

Modular 90° End Mills (ChipSurfer)

USE WITH CHIPSURFER SHANKS

USE SERIES 05 INSERTS



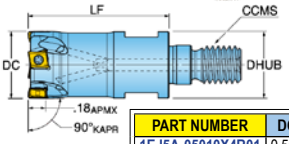
PART NUMBER	DC	LF	ZEFF	CCMS(1)	DHUB	RMPX(2)
1EJ5A-05006T8R01	0.500	0.65	2	T08	0.49	1.6
1EJ5A-05006T8R02	0.500	0.65	3	T08	0.49	1.6
1EJ5A-07010TSR01	0.750	1.00	3	T12	0.73	1.0
1EJ5A-07010TSR02	0.750	1.00	4	T12	0.73	1.0

(1) CCMS - ChipSurfer connection size (2) RMPX = Max. ramping angle

(1) L in this table is the length the cutter travels to reach the max. depth of cut while traveling at the max ramp angle listed for the cutter.
(2) Pitch: The max. pitch is determined to not exceed the max. depth of cut (APMX) and to not exceed the max. ramp angle (RMPX).

Modular 90° End Mills (Top-On Style)

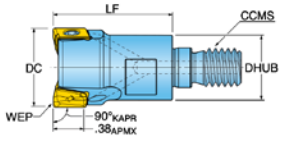
USE SERIES 05 INSERTS



PART NUMBER	DC	LF	Z(1)	CCMS(2)	DHUB
1EJ5A-05010X4R01	0.500	1.00	2	6mm	0.465
1EJ5A-05010X4R02	0.500	1.00	3	6mm	0.465
1EJ5A-07015X6R01	0.750	1.50	3	10mm	0.700
1EJ5A-07015X6R02	0.750	1.50	4	10mm	0.700
1EJ5A-10015X7R01	1.000	1.50	5	12mm	0.820
1EJ5A-10015X7R02	1.000	1.50	6	12mm	0.820

Modular 90° End Mills (Top-On Style)

PART NUMBER	DC	LF	Z	CCMS
1EJ5C-10015X7R01	1.000	1.500	2	12mm
1EJ5C-12017X8R01	1.250	1.750	3	16mm



USE SERIES 11 INSERTS

MAXSFEED

13 OPERATING GUIDELINES

Materials				V_C Cutting Speed SFM	f_z Feed/ Tooth (inch)	Harder ⟷ Tougher								Coolant	Geometry	
ISO	Mat'l Group #VDI 3323	Type	Examples			IN4015	IN2515	IN4005	IN2505	IN4030	IN2530	IN4035	IN2535		MM	ML
P	1 thru 5	Non-alloy Steel	1018, A36, 1045, A572, 1070	400-850	.005-.014			2	1	4	3			NO	1	2
	6 thru 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-700	.005-.012			2	1	4	3			NO	1	2
	10, 11	High-alloy Steel	H13, A2, D2, M2, T1	300-600	.005-.012			2	1	4	3			NO	1	2
M	12 thru 13	"Stainless Steel (Ferritic & Martensitic)"	410, 416, 440	350-700	.005-.012					4	3	2	1	YES	2	1
	14	Stainless Steel (Austenitic)	303, 304, 316, 15-5,17-4	300-600	.005-.012					4	3	2	1	May not be required at high speeds	2	1
K	15 thru 16	Gray Cast Iron	CLS. 20, 30, 45	400-750	.005-.015	1	2	3						NO	2	1
	17 thru 18	Nodular Cast Iron	60-40-18, 100-70-03	300-650	.005-.015		1	3	2					NO	1	2
N	21 thru 30	Aluminum	7075, 6061	1000+	.004-.015		1		2					YES		1
S	31 thru 35	High-Temp Alloys	Inconel, Hastelloy, Monel	75-150	.004-.008						3	2	1	YES	2	1
	36 thru 37	Titanium Alloys	6AL-4V, 5Al-5Mo-5V-3Cr	75-200	.004-.008						3	2	1	YES		1
H	38 thru 39	Hardened Steel >48	A2, 01, D2	150-400	.002-.004				1		2			NO	1	

MAXSFEED

05 OPERATING GUIDELINES

Materials				V_C Cutting Speed SFM	f_z Feed/ Tooth (inch)	Harder ⟷ Tougher			Coolant	Geometry	
ISO	Mat'l Group #VDI 3323	Type				IN2510	IN2505	IN2530		MM	ML
P	1 thru 5	Non-alloy Steel	1018, A36, 1045 A572, 1070	400-850	.0015-.0030		1	2	NO	2	1
	6 thru 9	Low-alloy Steel	4140, 4340, P20, 8620, 300M	350-500	.0015-.0030		1	2	NO	2	1
	10, 11	High-alloy Steel	H13, A2, D2, M2, T1	250-500	.0015-.0030		1	2	NO	1	2
M	12 thru 13	"Stainless Steel (Ferritic & Martensitic)"	410, 416, 440	350-550	.0015-.0030		2	1	YES	2	1
	14	Stainless Steel (Austenitic)	303, 304, 316, 15-5,17-4	300-500	.0015-.0030		2	1	May not be required at high speeds	2	1
K	15 thru 16	Gray Cast Iron	CLS. 20, 30, 45	500-700	.0015-.0030	1	2	3	NO	2	1
	17 thru 18	Nodular Cast Iron	60-40-18, 100-70-03	400-650	.0015-.0030	2	1	3	NO	1	2
N	21 thru 30	Aluminum	7075, 6061	1000+	.0015-.0030	1		2			1
S	31 thru 35	High-Temp Alloys	Inconel, Hastelloy, Monel	60-130	.0015-.0030		2	1	YES	2	1
	36 thru 37	Titanium Alloys	6AL-4V, 5Al-5Mo-5V-3Cr	65-150	.0015-.0030		2	1	YES	2	1
H	38 thru 39	Hardened Steel >48	A2, 01, D2	150-400	.0015-.0030		1	2	NO	1	

11 OPERATING GUIDELINES

V_C Cutting Speed SFM	f_z Feed/ Tooth (inch)	Harder ⟷ Tougher							Coolant	Geometry	
		IN4015	IN2515	IN4005	IN2505	IN4030	IN2530	IN2535		MM	ML
400-850	.005-.012			2	1		3		NO	1	2
300-600	.005-.010			2	1		3		NO	1	2
300-600	.005-.010			2	1		3		NO	1	2
350-700	.005-.012					3	2	1	YES	2	1
300-600	.005-.012					3	2	1	May not be required at high speeds	2	1
400-750	.005-.012	1	2	3					NO	2	1
300-650	.005-.012		1	3	2				NO	1	2
1000+	.004-.015		1		2				YES		1
75-150	.004-.008				3		2	1	YES	2	1
75-200	.004-.008				3		2	1	YES		1
150-400	.002-.004				1		2		NO	1	

CUTSFEED™

Maximum rigidity for parting off diameters up to120 mm (4.72")

- 3-point insert contact increases stiffness, accuracy and repeatability
- Thicker insert allows higher feed rates and up to 75% longer tool life

PC 294A PURCHASE *1 CutSFeed block & 10 inserts* & RECEIVE *one triangle blade* FREE

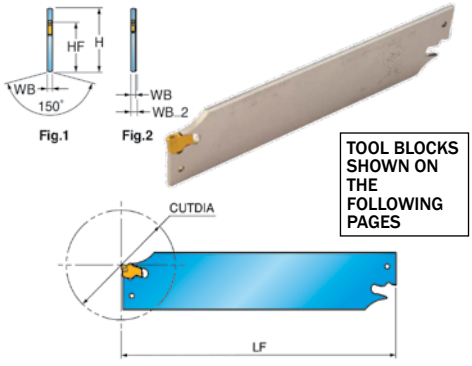
PC 294B PURCHASE *1 CutSFeed block & 20 inserts* & RECEIVE *one CoolBurst triangle blade* FREE

PC 294C PURCHASE *20 inserts* & RECEIVE *one traditional blade or square shank holder* FREE

PC 294D PURCHASE *40 inserts* & RECEIVE *one CoolBurst holder (traditional blade or square shank)* FREE


Parting Grooving

BLADES FOR PARTING AND DEEP GROOVING

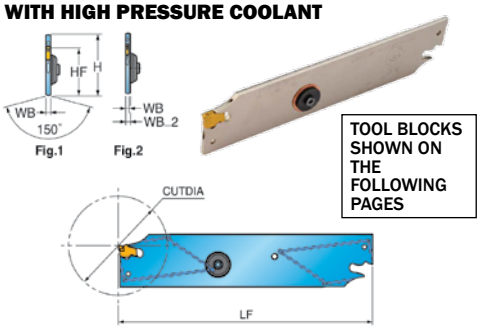


TOOL BLOCKS SHOWN ON THE FOLLOWING PAGES

PART #	Insert Seat Size	Dimension (inch)						Fig.	Block	Insert
		H	HF	LF	WB	WB_2	CUTDIA			
SFGB-32-1.6	1*	1.26	.97	5.9	.051	.098	1.496	2	TTBU	SFC SFJ
SFGB-32-2	2	1.26	.97	5.9	.071	.098	1.968	2		
SFGB-32-3	3	1.26	.97	5.9	.098	-	3.937	1		

* SFC 1.6 insert only

BLADES FOR PARTING & DEEP GROOVING WITH HIGH PRESSURE COOLANT



TOOL BLOCKS SHOWN ON THE FOLLOWING PAGES

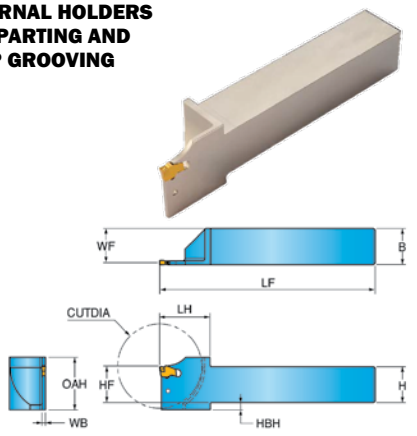
PART #	Insert Seat Size	Dimension (inch)						Fig.	Block	Insert
		H	HF	LF	WB	WB_2	CUTDIA			
SFGB-32-2-TB	2	1.26	.97	5.9	.051	.098	1.968	2	TTBU_TB	SF_2
SFGB-32-3-TB	3	1.26	.97	5.9	.071	-	3.937	1		SF_3

Spare Parts

NOTE:
TOOL BLOCKS ARE SHOWN ON THE FOLLOWING PAGES

Sealing Screw Set	Extractor
SGC340	ETG3-4

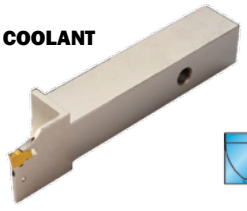
EXTERNAL HOLDERS FOR PARTING AND DEEP GROOVING

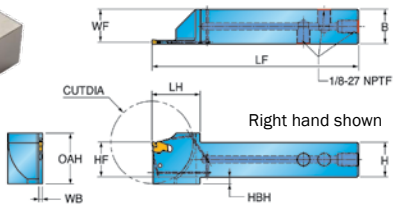


PART #	Insert Seat Size	H	HF	B	LF	LH	WF	WB	HBH	CUTDIA	OAH	Insert
SFER/L-19-1.6T22-D45	1	.75	.75	.75	6.0	1.16	.724	.051	.14	1.77	1.14	SF_1.6
SFER/L-25.4-2T25-D50	2	1.00	1.00	1.00	6.0	1.26	.965	.071	-	1.97	1.26	SF_2
SFER/L-25.4-3T30-D60	3	1.00	1.00	1.00	6.0	1.38	.953	.094	.18	2.36	1.44	SF_3

EXTERNAL HOLDERS FOR PARTING & DEEP GROOVING WITH HIGH-PRESSURE COOLANT

Wrench	Extractor	Plug
L-W3/16	ETG 3-4	NPTF1/8





Right hand shown

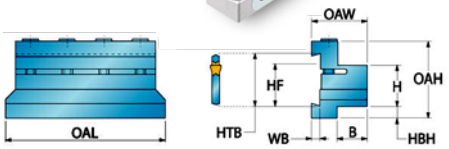
PART #	Insert Seat Size	Dimensions (inch)										Insert
		H	HF	B	LF	LH	WF	WB	HBH	CUTDIA	OAH	
SFER/L-25.4-2T25-D50-TB	2	1.00	1.00	1.00	6.0	1.26	.965	.071	-	1.97	1.26	SF_2
SFER/L-25.4-3T30-D60-TB	3	1.00	1.00	1.00	6.0	1.38	.953	.094	.18	2.36	1.44	SF_3

Ingersoll Cutting Tools — CUTSFEED™ PARTING & GROOVING

TOOL BLOCKS FOR PARTING & GROOVING BLADES

ToCLAMP™ ULTRA PLUS SERIES: TTBN

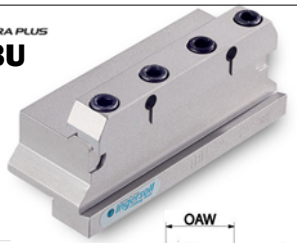
- One piece

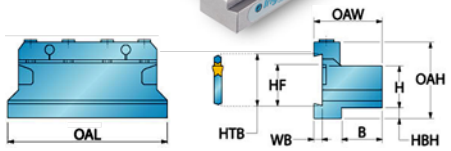


PART #	H	HTB	HF	B	HBH	OAH	WB	OAL	OAW
TTBN19-26	0.750	1.020	0.84	0.750	0.350	1.500	0.160	3.430	1.300
TTBN19-32	0.750	1.260	0.98	0.750	0.550	1.890	0.220	3.940	1.380
TTBN25.4-32	1.000	1.260	0.98	0.790	0.300	1.890	0.220	4.330	1.420
TTBN31.8-32	1.250	1.260	0.98	1.100	0.130	1.890	0.220	4.720	1.730

ToCLAMP™ ULTRA PLUS SERIES: TTBU

- Removeable top clamp

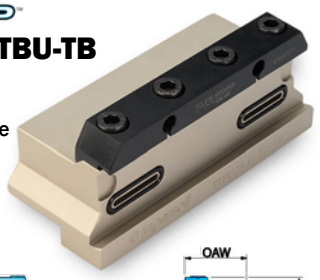


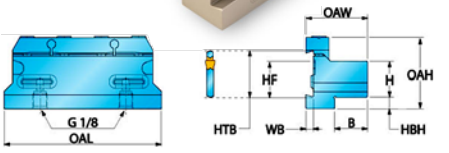


PART #	H	HTB	HF	B	HBH	OAH	WB	OAL	OAW
TTBU19-26	0.750	1.020	0.84	0.830	0.350	1.690	0.160	3.390	1.500
TTBU19-32	0.750	1.260	0.98	0.750	0.540	1.970	0.210	3.940	1.500
TTBU25.4-26	1.000	1.020	0.84	0.910	0.190	1.770	0.160	4.330	1.650
TTBU25.4-32	1.000	1.260	0.98	0.910	0.290	1.970	0.210	4.330	1.650
TTBU25.4-45	1.000	1.770	1.50	0.910	1.060	2.760	0.210	4.330	1.650
TTBU31.8-32	1.250	1.260	0.98	1.140	0.200	2.130	0.210	4.330	1.890
TTBU38.1-52	1.500	2.070	1.50	1.540	0.940	3.200	0.335	5.120	2.520

ToCLAMP™ SERIES: TTBU-TB

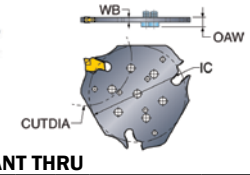
- Removeable top clamp
- High pressure coolant





PART #	H	HTB	HF	B	HBH	OAH	WB	OAL
TTBU19-32-TB	0.750	1.260	0.75	0.750	0.625	2.020	0.209	3.440
TTBU25.4-32-TB	1.000	1.260	1.00	0.910	0.300	1.950	0.209	4.330
TTBU32.8-32-TB	1.250	1.260	1.25	1.140	0.207	2.100	0.209	4.330

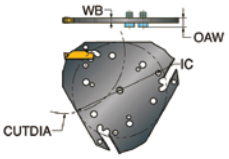
TRIANGULAR BLADES FOR CUT-SPEED INSERT



WITHOUT COOLANT THRU

PART #	Insert Seat Size	IC	WB	CUTDIA	OAW	Insert	Block*
SFTB-D52-2	2	2.094	.071	2.05	.193	SFC SFJ	THTBR/L
SFTB-D52-3	3	2.094	.098	2.05	.220		
SFTB-D82-2	2	2.531	.071	3.23	.193		
SFTB-D82-3	3	2.531	.098	3.23	.220		
SFTB-D120-2	2	3.364	.071	4.72	.193		
SFTB-D120-3	3	3.364	.098	4.72	.220		

* Blocks shown on the following pages



WITH HIGH-PRESSURE COOLANT THRU

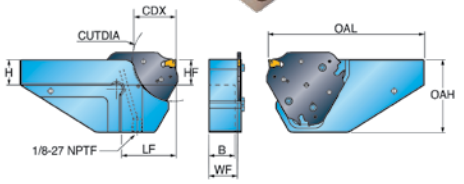
PART #	Insert Seat Size	IC	WB	CUTDIA	OAW	Insert	Block*
SFTB-D52-2-TB	2	2.094	.071	2.05	.193	SFC SFJ	THTBR/L-TB
SFTB-D52-3-TB	3	2.094	.098	2.05	.220		
SFTB-D82-2-TB	2	2.531	.071	3.23	.193		
SFTB-D82-3-TB	3	2.531	.098	3.23	.220		
SFTB-D120-2-TB	2	3.364	.071	4.72	.193		
SFTB-D120-3-TB	3	3.364	.098	4.72	.220		

* Blocks shown on the following pages

CUTSFEED™ & ToCLAMP™ SERIES: THTBR/L-TB

HOLDERS FOR TRIANGULAR BLADES WITH HIGH-PRESSURE COOLANT

BLADES SHOWN BELOW AND ON PREVIOUS PAGE



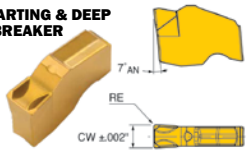
PART #	H	HF	B	OAL	OAH	WF	LF	CUTDIA	Blade
THTBR/L-19-D52-TB	.750	.750	.689	5.0	2.05	.925	1.57	2.05	SFTB TGTB
THTBR/L-25.4-D52-TB	1.00	1.00	.886	5.4	2.05	1.122	1.57	2.05	
THTBR/L-19-D82-TB	.750	.750	.689	5.5	2.84	.925	2.03	3.23	
THTBR/L-25.4-D82-TB	1.00	1.00	.886	6.0	2.84	1.122	2.03	3.23	
THTBR/L-25.4-D120-TB	1.00	1.00	.886	6.5	3.74	1.122	2.64	4.72	SFTB
THTBR/L-31.8-D120-TB	1.25	1.25	1.142	6.5	3.74	1.378	2.64	4.72	

CUTSFEED™ INSERTS

SINGLE-ENDED INSERTS FOR PARTING & DEEP GROOVING WITH C-TYPE CHIP BREAKER

FOR HIGH FEED RATES

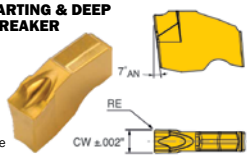
PART#	Insert Seat Size	CW	RE
SFC-1.6	1	.063	.008
SFC-2	2	.079	.008
SFC-3	3	.118	.008



SINGLE-ENDED INSERTS FOR PARTING & DEEP GROOVING WITH J-TYPE CHIP BREAKER

FOR GUMMY MATERIALS

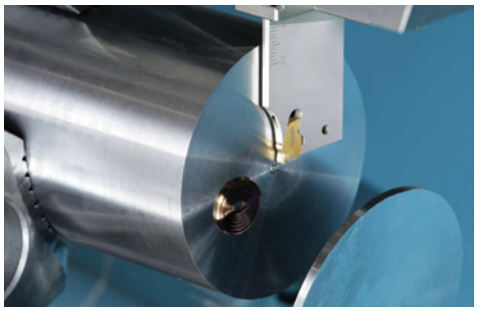
PART#	Insert Seat Size	CW	RE
SFJ-2	2	.079	.008
SFJ-3	3	.118	.008



CARBIDE GRADES

TT9080 – PVD coated for general purpose in variety of materials

TT8020 – PVD coated with very tough substrate for difficult applications



COOLBURST™ CONNECTORS

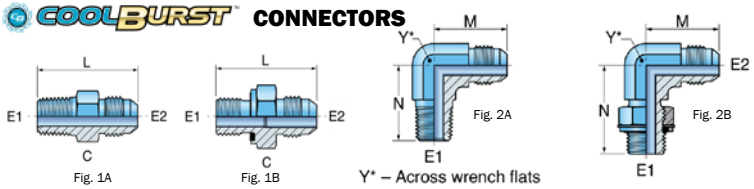
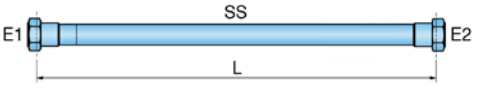


Fig.	PART #	End Size E1	End Size E2	C (hex)	L	Max Pressure (psi)
1A	TB-4-FTX-S	1/8-27 NPTF	1/4 (37° Flare)	1/2"	1.22"	6000
1B	TB-4F42EDMX-S	1/8-28 BSPP	1/4 (37° Flare)	14mm	30.2mm	7200

Fig.	PART #	End Size E1	End Size E2	Y	M	N	Max Pressure (psi)
2A	TB-4-CTX-S	1/8-27 NPTF	1/4 (37° Flare)	7/16"	0.89"	0.78"	6000
2B	TB-4C4OMX-S	1/8-28 BSPP	1/4 (37° Flare)	11mm	22.6mm	26.5mm	3600

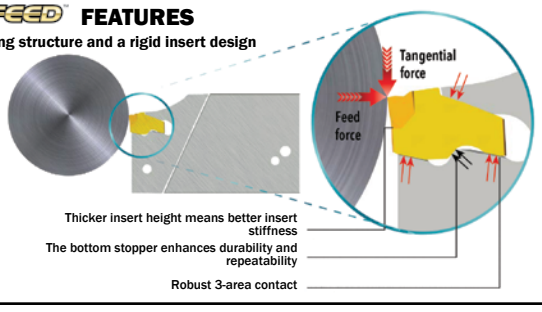
COOLBURST™ FLEXIBLE HIGH-PRESSURE HOSES



PART #	Dimension (inch) L	Dimension (inch) E1	Dimension (inch) E2	Max Pressure (psi)
TB-HOSE-7/16-7/16-8.0SS	8.0 inch	1/4 (37° Flare)	1/4 (37° Flare)	3000
TB-HOSE-7/16-7/16-10.0SS	10.0 inch	1/4 (37° Flare)	1/4 (37° Flare)	3000

CUTSFEED™ FEATURES

Robust clamping structure and a rigid insert design



Upper and lower dual high pressure coolant channels