



QUALITY CUTTING TOOLS
BY PROFESSIONALS
TO PROFESSIONALS



Solid Cutting
Tool Solution for
**Die & Mold
Industries**



HARDLine[®]
For Milling 50 & 62 HRC 

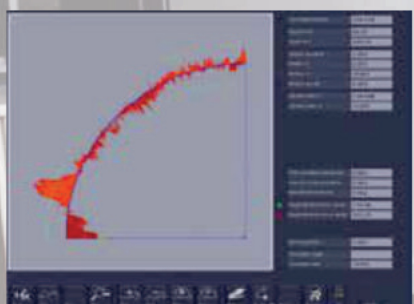
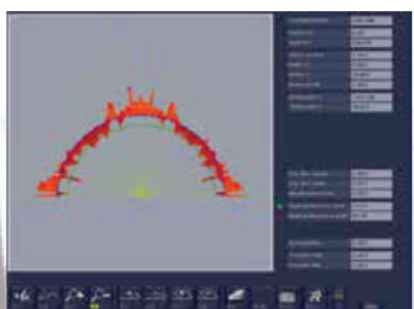


TruCut - ensures highest quality level has its own In-house Design & Development Facility utilizing latest software. This provides clear vision of the finished products

TruCut manufacturing facility includes 5 Axis / 4 Axis CNC Grinding Machines and full range of Manual Shop along side the expert team to ensure close tolerance at every Level

CNC Tool Grinders with advance geometry supported Grinding Machine included CNC grinding equipment in production line for advance geometry

All tools are inspected on Zoller-Germany CNC Tool Inspection Machine which optimize & control quality to precision level for longer tool life.



Ghasing

Helical Ball Ghasing for better Strength & Shearing Action

Rigid Flute

Appropriate Designed Rack Angle Determines the Size & Shape of Chip as well Pressure and Temperature on Tool for Advance Hi speed Productivity

TiSiN Coat

New TiSiN Coating Now has Higher Hardness Properties Combined with Improved Toughness and smooth chip flow for low Friction with Hardened Material upto 62 HRC

Premium Carbide

Untrafine Substract material used for its Properties of Wear Resistance & Toughness



Series : 122SB **50 HRC**
Ball End Mill - Standard Length



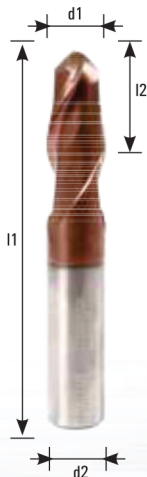
d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
1	3	2	50	0.5	2	122SB-0100
2	3	4	50	1	2	122SB-0200
3	3	6	50	1.5	2	122SB-0300
4	4	8	50	2	2	122SB-0400
6	6	12	50	3	2	122SB-0600
8	8	16	60	4	2	122SB-0800
10	10	20	75	5	2	122SB-1000
12	12	24	75	6	2	122SB-1200
16	16	32	100	8	2	122SB-1600

Series : 122LB / 122 ELB **50 HRC**
Ball End Mill - Long & Extra Long



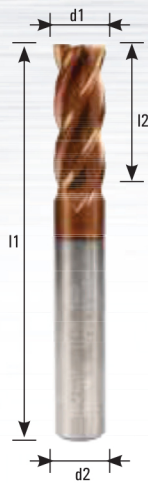
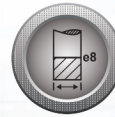
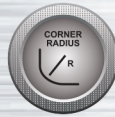
d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
3	3	6	75	1.5	2	122LB-0300
4	4	8	75	2	2	122LB-0400
6	6	12	75	3	2	122LB-0600
4	4	8	100	2	2	122ELB-0400
6	6	12	100	3	2	122ELB-0600
8	8	16	100	4	2	122ELB-0800
10	10	20	100	5	2	122ELB-1000
12	12	24	100	6	2	122ELB-1200

Series : 122XLB **50 HRC**
Ball End Mill - Extended Length



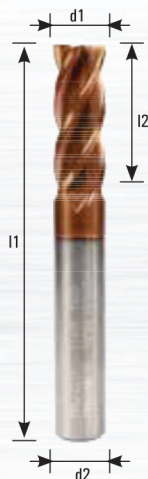
d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
6	6	12	150	3	2	122XLB-0600
8	8	16	150	4	2	122XLB-0800
10	10	20	150	5	2	122XLB-1000
12	12	24	150	6	2	122XLB-1200

Series : 124CRS **50 HRC** Corner Radius End Mill - Std Length



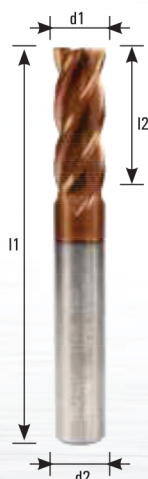
d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
3	3	8	50	0.5	4	124CRS-0305
3	3	8	50	1	4	124CRS-0310
4	4	11	50	0.5	4	124CRS-0405
4	4	11	50	1	4	124CRS-0410
5	5	13	50	0.5	4	124CRS-0505
5	5	13	50	1	4	124CRS-0510
6	6	16	50	0.5	4	124CRS-0605
6	6	16	50	1	4	124CRS-0610
8	8	20	75	1	4	124CRS-0810
10	10	25	75	1	4	124CRS-1010
12	12	30	75	1	4	124CRS-1210
12	12	30	75	2	4	124CRS-1220

Series: 124CRL/124CREL **50 HRC** Corner Radius End Mill - Long & Extra Long



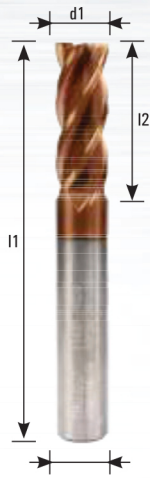
d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
3	3	8	75	1	4	124CRL-0310
4	4	11	75	1	4	124CRL-0410
6	6	16	75	1	4	124CRL-0610
4	4	11	100	1	4	124CREL-0410
6	6	16	100	1	4	124CREL-0610
8	8	20	100	1	4	124CREL-0810
10	10	25	100	1	4	124CREL-1010
12	12	30	100	1	4	124CREL-1210
12	12	30	100	2	4	124CREL-1220
16	16	32	100	1	4	124CREL-1610
16	16	32	100	2	4	124CREL-1620

Series: 124CRXL **50 HRC** Corner Radius End Mill - Extended Length



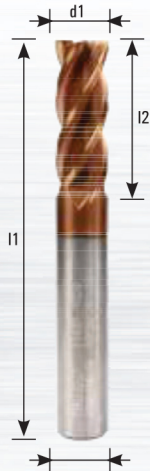
d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
6	6	16	150	1	4	124CRXL-0610
8	8	20	150	1	4	124CRXL-0810
10	10	25	150	1	4	124CRXL-1010
12	12	30	150	1	4	124CRXL-1210
12	12	30	150	2	4	124CRXL-1220
16	16	32	150	1	4	124CRXL-1610
16	16	32	150	2	4	124CRXL-1620

Series : 124SF **50 HRC**
Flat End Mill - Std Length



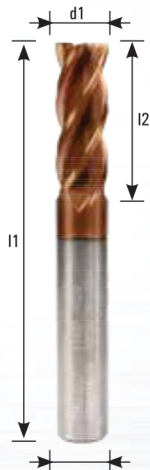
d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
1	3	3	50	--	4	124SF-0100
2	3	6	50	--	4	124SF-0200
3	3	8	50	--	4	124SF-0300
4	4	11	50	--	4	124SF-0400
6	6	16	50	-	4	124SF-0600
8	8	20	60	--	4	124SF-0800
10	10	25	75	--	4	124SF-1000
12	12	30	75	--	4	124SF-1200
16	16	40	100	--	4	124SF-1600

Series : 124LF & ELF **50 HRC**
Flat End Mill - Long & Extra Long



d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
3	3	8	75	--	4	124LF-0300
4	4	11	75	--	4	124LF-0400
6	6	16	75	--	4	124LF-0600
4	4	11	100	--	4	124ELF-0400
6	6	16	100	-	4	124ELF-0600
8	8	20	100	--	4	124ELF-0800
10	10	25	100	--	4	124ELF-1000
12	12	30	100	--	4	124ELF-1200

Series : 124XLF **50 HRC**
Flat End Mill - Extended Length



d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
6	6	16	150		4	124XLF-0600
8	8	20	150		4	124XLF-0800
10	10	25	150		4	124XLF-1000
12	12	30	150		4	124XLF-1200

Series : 112SB **62 HRC** Ball End Mill - Standard Length

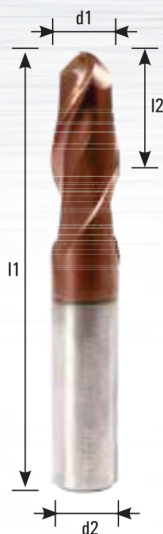


d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
1.00	4.00	2	50	0.50	2	112SB-0100
1.50	4.00	3	50	0.75	2	112SB-0150
2.00	4.00	4	50	1.00	2	112SB-0200
2.50	4.00	5	50	1.25	2	112SB-0250
3.00	4.00	6	50	1.50	2	112SB-0300
4.00	4.00	8	50	2.00	2	112SB-0400
5.00	5.00	10	50	2.50	2	112SB-0500
6.00	6.00	12	50	3.00	2	112SB-0600
8.00	8.00	16	60	4.00	2	112SB-0800
10.00	10.00	20	75	5.00	2	112SB-1000
12.00	12.00	24	75	6.00	2	112SB-1200
16.00	16.00	32	100	8.00	2	112SB-1600

Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

Series : 112LB & 112ELB **62 HRC** Ball End Mill - Long & Extra Long



d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
1.00	4.00	2	75	0.50	2	112LB-0100
1.50	4.00	3	75	0.75	2	112LB-0150
2.00	4.00	4	75	1.00	2	112LB-0200
2.00	4.00	4	100	1.00	2	112ELB-0200
2.50	4.00	5	75	1.25	2	112LB-0250
3.00	4.00	6	75	1.50	2	112LB-0300
3.00	4.00	6	100	1.50	2	112ELB-0300
4.00	4.00	8	75	2.00	2	112LB-0400
4.00	4.00	8	100	2.00	2	112ELB-0400
5.00	5.00	10	75	2.50	2	112LB-0500
6.00	6.00	12	75	3.00	2	112LB-0600
6.00	6.00	12	100	3.00	2	112ELB-0600
8.00	8.00	16	100	4.00	2	112ELB-0800
10.00	10.00	20	100	5.00	2	112ELB-1000
12.00	12.00	24	100	6.00	2	112ELB-1200

Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

Series : 112XLB **62 HRC** Ball End Mill - Extended Length

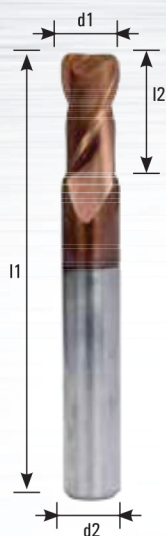


d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
6.00	6.00	12	150	3.00	2	112XLB-0600
8.00	8.00	16	150	4.00	2	112XLB-0800
10.00	10.00	20	150	5.00	2	112XLB-1000
12.00	12.00	24	150	6.00	2	112XLB-1200

Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

Series : 112SF **62 HRC** Flat End Mill - Standard Length

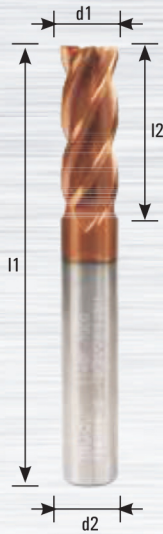


d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
1.00	4.00	4	50	--	2	112SF-0100
1.50	4.00	4	50	--	2	112SF-0150
2.00	4.00	6	50	--	2	112SF-0200
3.00	4.00	8	50	--	2	112SF-0300
4.00	4.00	11	50	--	2	112SF-0400
5.00	5.00	13	50	--	2	112SF-0500
6.00	6.00	16	50	--	2	112SF-0600
8.00	8.00	20	60	--	2	112SF-0800
10.00	10.00	25	75	--	2	112SF-1000
12.00	12.00	30	75	--	2	112SF-1200
16.00	16.00	40	100	--	2	112SF-1600

Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

Series : 114SF **62 HRC** Flat End Mill - Standard Length

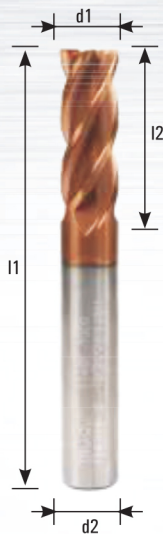


Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
1.00	4.00	3	50	--	4	114SF-0100
1.50	4.00	4	50	--	4	114SF-0150
2.00	4.00	6	50	--	4	114SF-0200
3.00	4.00	8	50	--	4	114SF-0300
4.00	4.00	11	50	--	4	114SF-0400
5.00	6.00	13	50	--	4	114SF-0500
6.00	6.00	16	50	--	4	114SF-0600
8.00	8.00	20	60	--	4	114SF-0800
10.00	10.00	25	75	--	4	114SF-1000
12.00	12.00	30	75	--	4	114SF-1200
16.00	16.00	40	100	--	4	114SF-1600
20.00	20.00	45	100	--	4	114SF-2000
25.00	25.00	45	100	--	4	114SF-2500

Series : 114LF & 114ELF **62 HRC** Flat End Mill - Long & Extra Long

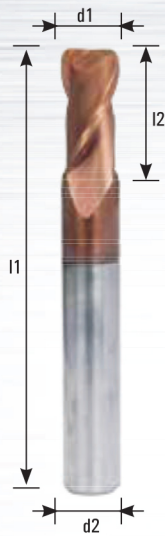


Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
6.00	6.00	16	75	--	4	114LF-0600
6.00	6.00	16	100	--	4	114ELF-0600
8.00	8.00	20	100	--	4	114LF-0800
8.00	8.00	20	150	--	4	114ELF-0800
10.00	10.00	25	100	--	4	114LF-1000
10.00	10.00	25	150	--	4	114ELF-1000
12.00	12.00	30	100	--	4	114LF-1200
12.00	12.00	30	150	--	4	114ELF-1200

Series : 112CRS **62 HRC** Corner Radius - Standard Length

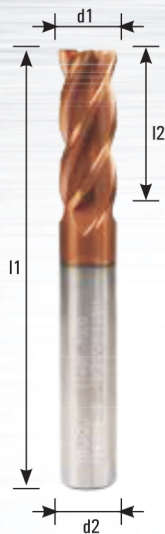


d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
3.00	3.00	6	50	0.20	2	112CRS-0302
3.00	3.00	6	50	0.50	2	112CRS-0305
4.00	4.00	8	50	0.20	2	112CRS-0402
4.00	4.00	8	50	0.50	2	112CRS-0405
6.00	6.00	12	50	0.50	2	112CRS-0605
6.00	6.00	12	50	1.00	2	112CRS-0610
6.00	6.00	12	50	1.50	2	112CRS-0615
8.00	8.00	16	60	0.50	2	112CRS-0805
8.00	8.00	16	60	1.00	2	112CRS-0810
8.00	8.00	16	60	1.50	2	112CRS-0815
10.00	10.00	20	75	1.00	2	112CRS-1010
10.00	10.00	20	75	1.50	2	112CRS-1015
10.00	10.00	20	75	2.00	2	112CRS-1020
12.00	12.00	24	75	1.00	2	112CRS-1210
12.00	12.00	24	75	1.50	2	112CRS-1215
12.00	12.00	24	75	2.00	2	112CRS-1220

Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

Series : 114CRS **62 HRC** Corner Radius - Standard Length

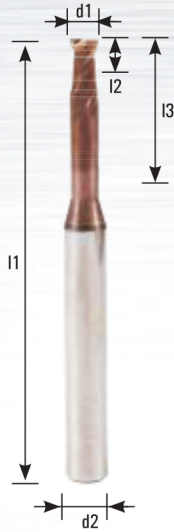


d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
6.00	6.00	12	50	0.50	4	114CRS-0605
6.00	6.00	12	50	1.00	4	114CRS-0610
6.00	6.00	12	50	1.50	4	114CRS-0615
8.00	8.00	16	60	0.50	4	114CRS-0805
8.00	8.00	16	60	1.00	4	114CRS-0810
8.00	8.00	16	60	1.50	4	114CRS-0815
10.00	10.00	20	75	1.00	4	114CRS-1010
10.00	10.00	20	75	1.50	4	114CRS-1015
10.00	10.00	20	75	2.00	4	114CRS-1020
12.00	12.00	24	75	1.00	4	114CRS-1210
12.00	12.00	24	75	1.50	4	114CRS-1215
12.00	12.00	24	75	2.00	4	114CRS-1220

Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

Series : 112FRN **62 HRC** Flat - Long Neck Cutter

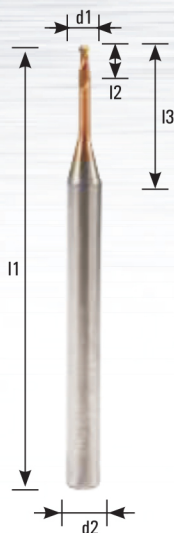


Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	l3 Neck Length	No of Flute	Item Code
1.00	4.00	1.5	50	6	2	112FRN-0106
1.00	4.00	1.5	50	8	2	112FRN-0108
1.00	4.00	1.5	50	10	2	112FRN-0110
1.50	4.00	2.0	50	8	2	112FRN-1508
1.50	4.00	2.0	50	12	2	112FRN-1512
1.50	4.00	2.0	50	16	2	112FRN-1516
2.00	4.00	3.0	50	6	2	112FRN-0206
2.00	4.00	3.0	50	8	2	112FRN-0208
2.00	4.00	3.0	50	10	2	112FRN-0210
2.00	4.00	3.0	50	12	2	112FRN-0212
2.00	4.00	3.0	50	16	2	112FRN-0216
2.00	4.00	3.0	50	20	2	112FRN-0220
2.50	4.00	4.0	50	8	2	112FRN-2508
2.50	4.00	4.0	50	12	2	112FRN-2512
2.50	4.00	4.0	50	16	2	112FRN-2516
2.50	4.00	4.0	50	20	2	112FRN-2520
3.00	6.00	4.5	60	10	2	112FRN-0310
3.00	6.00	4.5	60	16	2	112FRN-0316
3.00	6.00	4.5	60	20	2	112FRN-0320
4.00	6.00	6.0	60	10	2	112FRN-0410
4.00	6.00	6.0	60	16	2	112FRN-0416
4.00	6.00	6.0	60	20	2	112FRN-0420
5.00	6.00	8.0	60	16	2	112FRN-0516
5.00	6.00	8.0	60	25	2	112FRN-0525

Series : 112BRN **62 HRC** Ball - Long Neck Cutter

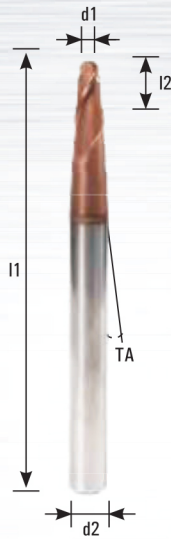


Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	l3 Neck Length	No of Flute	Item Code
1	4	1.5	50	6	2	112BRN-0106
1	4	1.5	50	8	2	112BRN-0108
1	4	1.5	50	10	2	112BRN-0110
1.5	4	2	50	8	2	112BRN-1508
1.5	4	2	50	12	2	112BRN-1512
1.5	4	2	50	16	2	112BRN-1516
2	4	3	50	6	2	112BRN-0206
2	4	3	50	8	2	112BRN-0208
2	4	3	50	10	2	112BRN-0210
2	4	3	50	12	2	112BRN-0212
2	4	3	50	16	2	112BRN-0216
2	4	3	50	20	2	112BRN-0220
2.5	4	4	50	8	2	112BRN-2508
2.5	4	4	50	12	2	112BRN-2512
2.5	4	4	50	16	2	112BRN-2516
2.5	4	4	50	20	2	112BRN-2520
3	6	4.5	60	10	2	112BRN-0310
3	6	4.5	60	16	2	112BRN-0316
3	6	4.5	60	20	2	112BRN-0320
4	6	6	60	10	2	112BRN-0410
4	6	6	60	16	2	112BRN-0416
4	6	6	60	20	2	112BRN-0420
5	6	8	60	16	2	112BRN-0516
5	6	8	60	25	2	112BRN-0525

Series : 132SB **62 HRC** Ball Taper Neck

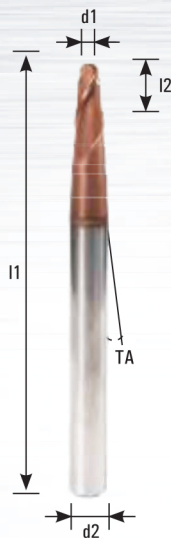


Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	Neck Taper Angle	Item Code
3.00	6.00	6	70	1.50	3	132SB-0330
3.00	6.00	6	90	1.50	1.3	132SB-0313
4.00	6.00	8	70	2.00	3	132SB-0430
4.00	6.00	8	90	2.00	1.3	132SB-0413
5.00	8.00	10	90	2.50	3	132SB-0530
5.00	8.00	10	110	2.50	1.3	132SB-0513
6.00	8.00	12	90	3.00	3	132SB-0630
6.00	8.00	12	110	3.00	1.3	132SB-0613
8.00	10.00	14	100	4.00	3	132SB-0830
8.00	10.00	14	120	4.00	1.3	132SB-0813
10.00	12.00	18	110	5.00	3	132SB-1030
10.00	12.00	18	130	5.00	1.3	132SB-1013
12.00	16.00	22	140	6.00	3	132SB-1230
12.00	16.00	22	160	6.00	1.3	132SB-1213

Series : 132CR **62 HRC** Corner Radius - Taper Neck



Application :

- Hi-Tensile Steel upto 62 HRC
- Hi-Speed Machining
- Specially Designed for Die and Mould Machining

d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	Neck Taper Angle	Item Code
3.00	6.00	6	70	0.30	3	132CR-0330
3.00	6.00	6	90	0.30	1.3	132CR-0313
4.00	6.00	8	70	0.30	3	132CR-0430
4.00	6.00	8	90	0.30	1.3	132CR-0413
5.00	8.00	10	90	0.50	3	132CR-0530
5.00	8.00	10	110	0.50	1.3	132CR-0513
6.00	8.00	12	90	0.50	3	132CR-0630
6.00	8.00	12	110	0.50	1.3	132CR-0613
8.00	10.00	14	100	0.50	3	132CR-0830
8.00	10.00	14	120	0.50	1.3	132CR-0813
10.00	12.00	18	110	0.50	3	132CR-1030
10.00	12.00	18	130	1.00	1.3	132CR-1013
12.00	16.00	22	140	1.00	3	132CR-1230
12.00	16.00	22	160	1.00	1.3	132CR-1213

Series : 116SF **62 HRC** Flat - Standard Length



d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
6.00	6.00	16	50	-	6	116SF-0600
8.00	8.00	20	60	-	6	116SF-0800
10.00	10.00	25	75	-	6	116SF-1000
12.00	12.00	30	75	-	6	116SF-1200
16.00	16.00	40	100	-	8	116SF-1600

Application :

- Designed for High Hard Material upto 62 HRC
- Super Finishing Application

Series : 116LF **62 HRC** Flat - Long Length

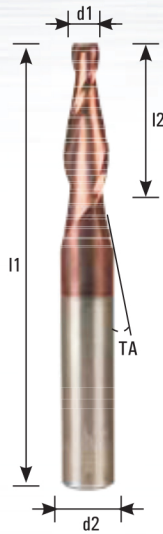


d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Radius	No of Flute	Item Code
6.00	6.00	25	65	-	6	116LF-0600
8.00	8.00	30	70	-	6	116LF-0800
10.00	10.00	35	75	-	6	116LF-1000
12.00	12.00	50	100	-	6	116LF-1200
16.00	16.00	60	100	-	8	116LF-1600

Application :

- Designed for High Hard Material upto 62 HRC
- Super Finishing Application

Series : 122TEM Taper End Mills



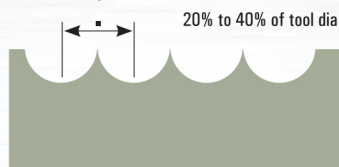
Application :

- Designed for Aluminium Extrusion Die Machining

d1 Tool Diameter	d2 Shank Diameter	l2 Length of Cut	l1 Overall Length	Taper Angle	No of Flute	Item Code
2.00	6.00	40	78	1°30'	2	122TEM-0206-1.3
3.00	6.00	40	78	1°30'	2	122TEM-0306-1.3
4.00	8.00	40	78	1°30'	2	122TEM-0408-1.3
5.00	8.00	40	78	1°30'	2	122TEM-0508-1.3
2.50	8.00	40	78	2°	2	122TEM-2508-2
3.00	8.00	40	78	2°	2	122TEM-0308-2
3.50	8.00	40	78	2°	2	122TEM-3508-2
2.00	8.00	40	78	3°	2	122TEM-0208-3
2.50	8.00	40	78	3°	2	122TEM-2508-3
3.00	8.00	40	78	3°	2	122TEM-0308-3
3.00	10.00	50	92	3°	2	122TEM-0310-3
3.50	8.00	40	78	3°	2	122TEM-3508-3
3.50	10.00	50	92	3°	2	122TEM-3510-3
4.00	10.00	50	92	3°	2	122TEM-0410-3
4.50	10.00	50	92	3°	2	122TEM-4510-3
2.00	10.00	40	83	5°	2	122TEM-0210-5
2.50	8.00	30	78	5°	2	122TEM-2508-5
2.50	10.00	40	83	5°	2	122TEM-2510-5
3.00	10.00	40	83	5°	2	122TEM-0310-5
3.00	12.00	50	92	5°	2	122TEM-0312-5
3.50	12.00	40	92	5°	2	122TEM-3512-5
4.00	10.00	30	83	5°	2	122TEM-0410-5
4.00	12.00	40	92	5°	2	122TEM-0412-5
4.00	14.00	50	104	5°	2	122TEM-0414-5
5.00	12.00	40	92	5°	2	122TEM-0512-5
5.00	14.00	50	104	5°	2	122TEM-0514-5
5.00	16.00	60	130	5°	2	122TEM-0516-5
6.00	14.00	40	104	5°	2	122TEM-0614-5
6.00	18.00	60	130	5°	2	122TEM-0618-5

Cutting Conditions:

Radial Step Over

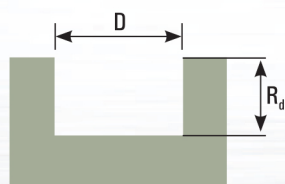


30-40 HRc Axial depth = 10% of tool diameter.
 40-50 HRc Axial depth = 5% of tool diameter.
 50-60 HRc Axial depth = 4% of tool diameter.

Axial Depth

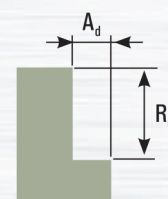


SLOTTING



Rd = Ø6mm to 12mm - 1.0D
 Rd = Ø16mm to 20mm - 1.2D

SIDE MILLING



Ad = 0.3D
 Rd = 1.5D

Formula for Feed Rate Calculation: Feed/mm/ Min = Rpm X No.of Tooth X Feed/Tooth

Series: 114SF/124SF

Cutter Diameter	Steels 30HRc		Steels 50HRc		Steels 50HRc	
	Rpm	Feed/Tooth	Rpm	Feed/Tooth	Rpm	Feed/Tooth
1.0	11040-13800	0.006-0.008	8540-10675	0.006-0.008	6451-8064	0.006-0.009
1.5	10368-12960	0.008-0.011	7920-9900	0.008-0.011	6144-7680	0.008-0.011
2.0	9093-11366	0.008-0.012	7864-9830	0.008-0.011	5530-6912	0.010-0.013
3.0	7373-9216	0.013-0.018	6864-8580	0.012-0.016	4792-5990	0.011-0.016
4.0	6672-8340	0.017-0.024	6096-7620	0.016-0.022	4301-5376	0.014-0.020
5.0	6144-7680	0.019-0.028	5616-7020	0.018-0.025	4138-5172	0.015-0.021
6.0	5952-7440	0.021-0.030	5664-7080	0.019-0.027	3744-4680	0.017-0.025
8.0	5400-4320	0.037-0.052	2765-3456	0.049-0.069	1744-2220	0.044-0.064
10.0	2784-3480	0.084-0.121	1440-1800	0.088-0.125	1056-1320	0.060-0.086
12.0	2352-2940	0.071-0.102	979-1224	0.072-0.103	758-948	0.047-0.066
16.0	1344-1680	0.075-0.107	643-804	0.078-0.120	470-588	0.061-0.086
20.0	883-1104	0.105-0.149	422-528	0.084-0.119	298-372	0.068-0.096
25.0	749-936	0.090-0.128	365-456	0.076-0.108	269-336	0.075-0.107

Series: 114LF&114ELF / 124LF & 124ELF

Cutter Diameter	Steels 30HRc		Steels 30 - 35 HRc		Steels 35 - 40HRc		Steels 40 - 45HRc		Steels 45 - 65HRc	
	Rpm	Feed/Tooth	Rpm	Feed/Tooth	Rpm	Feed/Tooth	Rpm	Feed/Tooth	Rpm	Feed/Tooth
6.0	4000-5000	0.035-0.050	3600-4500	0.032-0.045	3280-4100	0.026-0.036	3040-3800	0.022-0.031	2000-2500	0.019-0.027
8.0	2600-3250	0.068-0.084	2400-3000	0.067-0.083	1800-2250	0.067-0.083	1600-2000	0.060-0.075	1000-1250	0.052-0.065
10.0	1520-1900	0.100-0.125	1200-1500	0.100-0.125	1000-1250	0.088-0.110	800-1000	0.090-0.113	640-800	0.063-0.078
12.0	1280-1600	0.113-0.145	1080-1350	0.111-0.138	1000-1250	0.096-0.120	800-1000	0.100-0.125	480-600	0.075-0.094

Series: 114CRS / 124 CRS / 124 CRL / 124 CREL

Cutter Diameter	Steels 30HRc		Steels 50HRc		Steels 60HRc	
	Rpm	Feed/Tooth	Rpm	Feed/Tooth	Rpm	Feed/Tooth
0605	5152-6440	0.046-0.065	3942-4928	0.040-0.057	2061-2576	0.029-0.041
0610	5925-7406	0.046-0.065	4534-5667	0.040-0.057	2370-2962	0.029-0.041
0615	6182-7728	0.046-0.065	4731-5914	0.040-0.057	2473-3091	0.029-0.041
0805	3875-4844	0.069-0.098	2397-2996	0.056-0.079	1725-2156	0.037-0.053
0810	4457-5571	0.069-0.098	2757-3446	0.056-0.079	1984-2480	0.037-0.053
0815	4650-5813	0.069-0.098	2876-3595	0.056-0.079	2070-2587	0.037-0.053
1010	2833-3541	0.089-0.127	1613-2016	0.060-0.086	850-1063	0.062-0.088
1015	2957-3696	0.089-0.127	1720-2150	0.060-0.086	887-1109	0.062-0.088
1020	3203-4004	0.089-0.127	1864-2330	0.060-0.086	961-1201	0.062-0.088
1210	2396-2995	0.109-0.156	1134-1417	0.076-0.108	670-837	0.071-0.102
1215	2500-3125	0.109-0.156	1182-1478	0.076-0.108	699-874	0.071-0.102
1220	2708-3385	0.109-0.156	1282-1602	0.076-0.108	757-946	0.071-0.102

Series: 112BRN&112FRN

Cutter Diameter	Steels 45-52HRc		Steels 52-62HRc	
	Rpm	Feed/Tooth	Rpm	Feed/Tooth
1.0	7040-8800	0.010-0.014	6336-7920	0.010-0.014
1.5	5520-6900	0.010-0.013	3960-4950	0.012-0.017
2.0	4480-5600	0.026-0.037	4032-5040	0.026-0.037
2.5	3840-4800	0.031-0.044	3456-4320	0.031-0.043
3.0	5760-7200	0.018-0.026	5184-6480	0.018-0.026
4.0	5760-7200	0.018-0.026	5184-6480	0.018-0.026
5.0	7987-9984	0.045-0.064	5632-7040	0.038-0.054

Series: 132SB & 132CR

Cutter Diameter	Steels 45-52HRc		Steels 52-62HRc	
	Rpm	Feed/Tooth	Rpm	Feed/Tooth
3.0	5760-7200	0.018-0.026	5184-6480	0.018-0.026
4.0	5760-7200	0.018-0.026	5184-6480	0.018-0.026
5.0	7987-9984	0.045-0.064	5632-7040	0.038-0.054
6.0	7782-9728	0.043-0.062	5120-6400	0.039-0.055
8.0	4096-5120	0.105-0.150	2560-3200	0.091-0.130
10.0	2048-2560	0.158-0.225	1638-2048	0.109-0.156
12.0	1800-2250	0.175-0.250	1584-1980	0.119-0.170

Formula for Feed Rate Calculation: $\text{Feed/mm/Min} = \text{Rpm} \times \text{No. of Tooth} \times \text{Feed/Tooth}$

Series: 112CRS

Cutter Diameter	Steels 30HRc		Steels 50HRc		Steels 60HRc	
	Rpm	Feed/Tooth	Rpm	Feed/Tooth	Rpm	Feed/Tooth
0302	5096-6370	0.049-0.069	3842-4802	0.043-0.061	2940-3675	0.023-0.033
0305	5096-6370	0.054-0.077	3842-4802	0.054-0.076	2940-3675	0.023-0.033
0402	4900-6125	0.056-0.080	3646-4557	0.040-0.056	2666-3332	0.026-0.037
0405	4900-6125	0.056-0.080	3646-4557	0.040-0.057	2666-3332	0.026-0.037
0605	4508-5635	0.091-0.130	3450-4312	0.080-0.114	1803-2254	0.057-0.082
0610	5184-6480	0.091-0.130	3967-4959	0.080-0.114	2074-2592	0.057-0.082
0615	5410-6762	0.091-0.130	4139-5174	0.080-0.114	2164-2705	0.057-0.082
0805	3391-4239	0.138-0.197	2098-2622	0.111-0.159	1510-1887	0.075-0.107
0810	3900-4875	0.138-0.197	2412-3015	0.111-0.159	1736-2170	0.075-0.106
0815	4069-5086	0.138-0.197	2517-3146	0.111-0.159	1811-2264	0.075-0.106
1010	2479-3099	0.177-0.252	1442-1803	0.120-0.172	744-930	0.123-0.176
1015	2587-3234	0.178-0.254	1506-1882	0.120-0.172	776-970	0.123-0.176
1020	2803-3504	0.178-0.254	1630-2038	0.120-0.172	841-1051	0.123-0.176
1210	2097-2621	0.218-0.311	992-1240	0.197-0.281	586-733	0.143-0.204
1215	2187-2734	0.218-0.311	1035-1294	0.151-0.216	611-764	0.143-0.204
1220	2370-2962	0.218-0.311	1121-1401	0.151-0.216	662-828	0.143-0.204

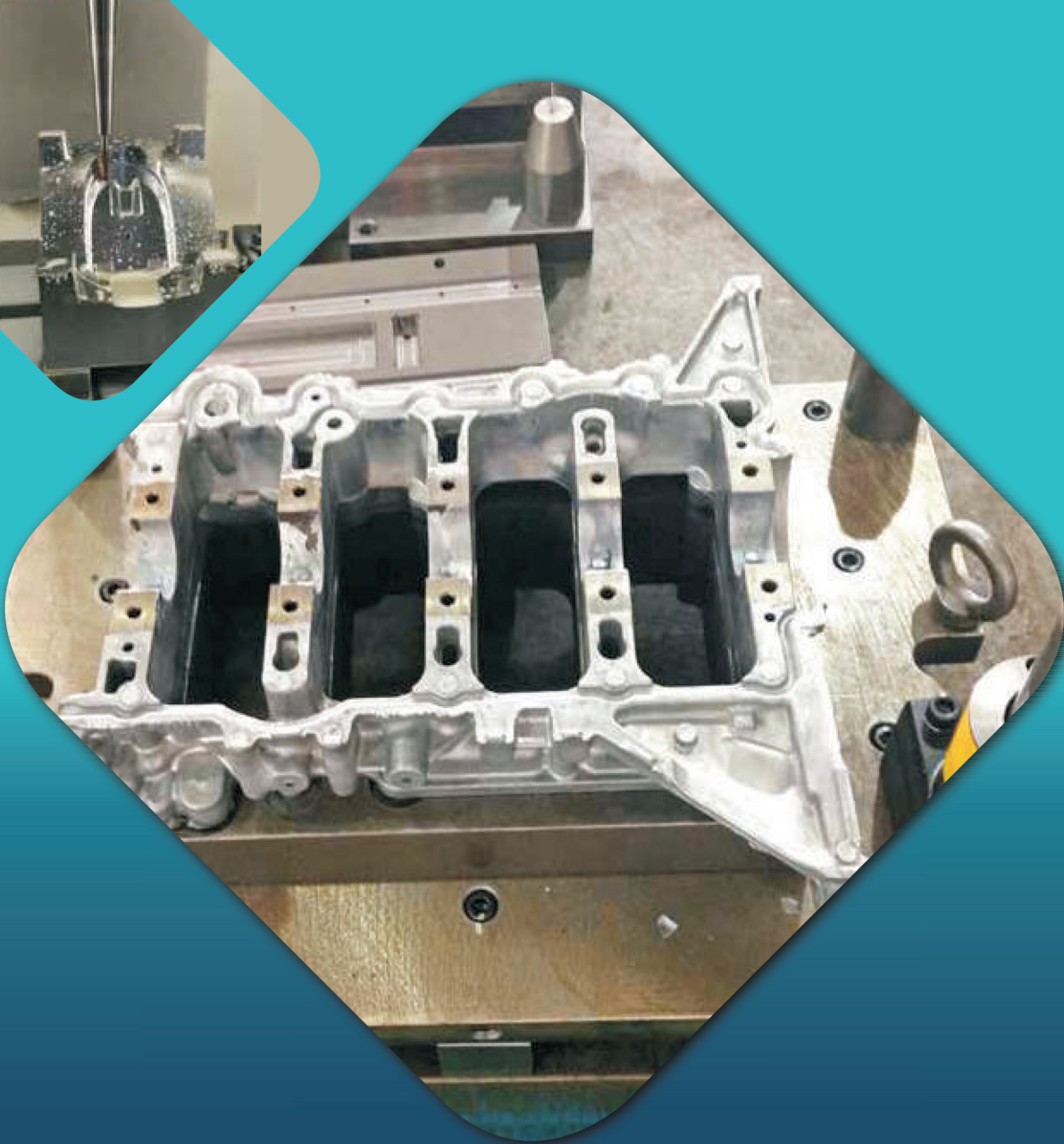
Series: 112SB & 112LB

Cutter Diameter	Steels 30-40HRc		Steels 40-50HRc		Steels 50-60HRc	
	Rpm	Feed/Tooth	Rpm	Feed/Tooth	Rpm	Feed/Tooth
1.0	20000-40000	0.020-0.024	20000-40000	0.016-0.020	20000-40000	0.012-0.016
1.5	20000-40000	0.030-0.036	20000-40000	0.024-0.030	20000-38600	0.018-0.024
2.0	20000-38100	0.040-0.048	20000-38100	0.032-0.040	19400-28900	0.024-0.032
3.0	16100-25400	0.060-0.072	19300-25400	0.048-0.060	12900-19300	0.036-0.048
4.0	12100-19100	0.080-0.096	14500-19100	0.064-0.080	9700-14500	0.048-0.064
5.0	9600-15300	0.100-0.120	11600-15300	0.080-0.100	7800-11600	0.060-0.080
6.0	8000-12700	0.120-0.144	9700-12700	0.096-0.120	6500-9600	0.072-0.096
8.0	6000-9500	0.160-0.192	7200-9500	0.128-0.160	4900-7200	0.096-0.128
10.0	4800-7600	0.200-0.240	5800-7600	0.160-0.200	3900-5800	0.120-0.160
12.0	4000-6400	0.240-0.288	4800-6400	0.192-0.240	3200-4800	0.144-0.192
16.0	3500-5700	0.280-0.300	3500-5700	0.220-0.260	3000-4200	0.160-0.220

Series: 112ELB & 112XLB

Cutter Diameter	Steels 30-40HRc		Steels 40-50HRc		Steels 50-60HRc	
	Rpm	Feed/Tooth	Rpm	Feed/Tooth	Rpm	Feed/Tooth
1.0	20000-40000	0.020-0.024	20000-40000	0.016-0.020	20000-40000	0.012-0.016
1.5	20000-40000	0.030-0.036	20000-40000	0.024-0.030	20000-38600	0.018-0.024
2.0	20000-38100	0.040-0.048	20000-38100	0.032-0.040	19400-28900	0.024-0.032
3.0	16100-25400	0.060-0.072	19300-25400	0.048-0.060	12900-19300	0.036-0.048
4.0	12100-19100	0.080-0.096	14500-19100	0.064-0.080	9700-14500	0.048-0.064
5.0	9600-15300	0.100-0.120	11600-15300	0.080-0.100	7800-11600	0.060-0.080
6.0	8000-12700	0.120-0.144	9700-12700	0.096-0.120	6500-9600	0.072-0.096
8.0	6000-9500	0.160-0.192	7200-9500	0.128-0.160	4900-7200	0.096-0.128
10.0	4800-7600	0.200-0.240	5800-7600	0.160-0.200	3900-5800	0.120-0.160
12.0	4000-6400	0.240-0.288	4800-6400	0.192-0.240	3200-4800	0.144-0.192
16.0	3500-5700	0.280-0.300	3500-5700	0.220-0.260	3000-4200	0.160-0.220

Formula for Feed Rate Calculation: Feed/mm/ Min = Rpm X No.of Tooth X Feed/Tooth



Authorised Distributor



ProCut

Premium Tools for CNC VMC

