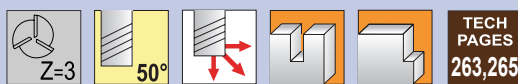


Series 253M, 853M

.1181" - .5512"
(3.000mm - 14.000mm)

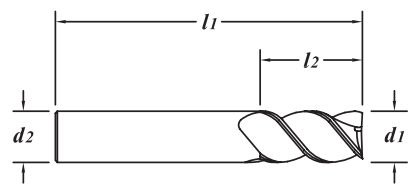


| TOLERANCES | |
|------------|----------------------------------|
| d_1 | +0.000" - .002" (+.000 - .050mm) |
| d_2 | h6 |

Recommended for aluminum and stainless steel

Square End

- Solid submicron grain carbide end mill - center cutting
- High performance machining
- Rigid work holding, machine stability and part integrity are critical!
- Slots aluminum at an axial depth of 25% of diameter
- Sharp corners (Can be modified with a corner radius)
- AlTiN Coating - page 128
- TiCN Coated - page 132



MATERIAL HARDNESS (Rc) 70 35 0

| EDP# | d_1 † Diameter | | d_2 Shank Diameter | l_1 Overall Length | l_2 Flute Length | 1-11 | 12-24 | 25-49 | 50-100 |
|-------|---------------------|--------|-------------------------|-------------------------|-----------------------|--------|-------|-------|--------|
| | Decimal | Metric | | | | | | | |
| 10340 | .1181 | 3.000 | 3.0 | 38 | 8 | 11.07 | 10.59 | 10.11 | 9.63 |
| 10350 | .1181 | 3.000 | 3.0 | 50 | 12 | 13.34 | 12.76 | 12.18 | 11.60 |
| 86130 | .1250 | 1/8" | 3.175 | 1/8" | 1-1/2" | 1/4" | 10.40 | 9.94 | 9.04 |
| 86140 | .1250 | 1/8" | 3.175 | 1/8" | 2" | 1/2" | 12.52 | 11.98 | 11.43 |
| 10380 | .1575 | 4.000 | 6.0 | 50 | 8 | 18.00 | 17.22 | 16.43 | 15.65 |
| 10390 | .1575 | 4.000 | 6.0 | 50 | 12 | 18.00 | 17.22 | 16.43 | 15.65 |
| 86150 | .1875 | 3/16" | 4.763 | 3/16" | 2" | 5/16" | 12.25 | 11.72 | 11.18 |
| 86160 | .1875 | 3/16" | 4.763 | 3/16" | 2" | 9/16" | 12.25 | 11.72 | 11.18 |
| 86180 | .1875 | 3/16" | 4.763 | 3/16" | 3" | 1" | 21.83 | 20.88 | 19.93 |
| 10400 | .1969 | 5.000 | 5.0 | 50 | 8 | 13.60 | 13.01 | 12.42 | 11.83 |
| 10410 | .1969 | 5.000 | 5.0 | 50 | 14 | 13.60 | 13.01 | 12.42 | 11.83 |
| 10010 | .2362 | 6.000 | 6.0 | 50 | 12 | 14.42 | 13.79 | 13.17 | 12.54 |
| 10020 | .2362 | 6.000 | 6.0 | 65 | 19 | 15.50 | 14.83 | 14.15 | 13.48 |
| 10030 | .2362 | 6.000 | 6.0 | 75 | 32 | 26.61 | 25.45 | 24.30 | 23.14 |
| 86200 | .2500 | 1/4" | 6.350 | 1/4" | 2" | 1/2" | 13.67 | 13.08 | 12.48 |
| 86220 | .2500 | 1/4" | 6.350 | 1/4" | 2-1/2" | 3/4" | 14.78 | 14.14 | 13.49 |
| 86240 | .2500 | 1/4" | 6.350 | 1/4" | 3" | 1-1/4" | 25.30 | 24.20 | 23.10 |
| 86260 | .3125 | 5/16" | 7.938 | 5/16" | 2" | 7/16" | 18.70 | 17.89 | 17.07 |
| 86270 | .3125 | 5/16" | 7.938 | 5/16" | 2-1/2" | 13/16" | 20.72 | 19.82 | 18.92 |
| 86280 | .3125 | 5/16" | 7.938 | 5/16" | 4" | 1-1/4" | 34.81 | 33.30 | 31.78 |
| 10420 | .3150 | 8.000 | 8.0 | 50 | 11 | 19.71 | 18.85 | 18.00 | 17.14 |
| 10040 | .3150 | 8.000 | 8.0 | 65 | 20 | 21.76 | 20.81 | 19.87 | 18.92 |
| 10050 | .3150 | 8.000 | 8.0 | 75 | 32 | 32.87 | 31.44 | 30.01 | 28.58 |
| 86300 | .3750 | 3/8" | 9.525 | 3/8" | 2" | 1/2" | 23.10 | 22.10 | 21.09 |
| 86320 | .3750 | 3/8" | 9.525 | 3/8" | 2-1/2" | 1" | 25.81 | 24.68 | 23.56 |
| 86340 | .3750 | 3/8" | 9.525 | 3/8" | 3-1/2" | 1-1/2" | 38.55 | 36.87 | 35.20 |
| 10060 | .3937 | 10.000 | 10.0 | 50 | 12 | 26.88 | 25.71 | 24.54 | 23.37 |
| 10070 | .3937 | 10.000 | 10.0 | 75 | 25 | 38.10 | 36.44 | 34.79 | 33.13 |
| 10080 | .3937 | 10.000 | 10.0 | 88 | 38 | 47.99 | 45.90 | 43.82 | 41.73 |
| 86360 | .4375 | 7/16" | 11.113 | 7/16" | 2-1/2" | 9/16" | 31.50 | 30.13 | 28.76 |
| 86370 | .4375 | 7/16" | 11.113 | 7/16" | 2-3/4" | 1" | 31.50 | 30.13 | 28.76 |
| 86380 | .4375 | 7/16" | 11.113 | 7/16" | 4" | 2" | 53.04 | 50.73 | 48.43 |
| 10090 | .4724 | 12.000 | 12.0 | 65 | 16 | 40.14 | 38.39 | 36.65 | 34.90 |
| 10100 | .4724 | 12.000 | 12.0 | 75 | 26 | 43.40 | 41.51 | 39.63 | 37.74 |
| 10110 | .4724 | 12.000 | 12.0 | 100 | 50 | 59.80 | 57.20 | 54.60 | 52.00 |
| 86400 | .5000 | 1/2" | 12.700 | 1/2" | 2-1/2" | 5/8" | 38.12 | 36.47 | 34.81 |
| 86420 | .5000 | 1/2" | 12.700 | 1/2" | 3" | 1" | 41.33 | 39.53 | 37.74 |
| 86440 | .5000 | 1/2" | 12.700 | 1/2" | 4" | 2" | 56.42 | 53.97 | 51.51 |
| 10430 | .5512 | 14.000 | 14.0 | 65 | 16 | 62.80 | 60.07 | 57.34 | 54.61 |
| 10440 | .5512 | 14.000 | 14.0 | 75 | 25 | 67.94 | 64.99 | 62.03 | 59.08 |
| 10450 | .5512 | 14.000 | 14.0 | 100 | 50 | 82.14 | 78.57 | 75.00 | 71.43 |

| EDP# | $d1$ † | | $d2$ Shank Diameter | $l1$ Overall Length | $l2$ Flute Length | 1-11 | 12-24 | 25-49 | 50-100 | |
|-------|---------|----------|---------------------------|---------------------------|-------------------------|--------|--------|--------|--------|--------|
| | Decimal | Diameter | | | | | | | | Metric |
| 86460 | .5625 | 9/16" | 14.288 | 9/16" | 3" | 7/8" | 68.18 | 65.22 | 62.25 | 59.29 |
| 86470 | .5625 | 9/16" | 14.288 | 9/16" | 3-1/2" | 1-1/4" | 70.59 | 67.52 | 64.45 | 61.38 |
| 86480 | .5625 | 9/16" | 14.288 | 9/16" | 6" | 2-1/2" | 107.10 | 102.44 | 97.79 | 93.13 |
| 86500 | .6250 | 5/8" | 15.875 | 5/8" | 3" | 7/8" | 72.90 | 69.73 | 66.56 | 63.39 |
| 86520 | .6250 | 5/8" | 15.875 | 5/8" | 3-1/2" | 1-1/4" | 79.71 | 76.24 | 72.78 | 69.31 |
| 86540 | .6250 | 5/8" | 15.875 | 5/8" | 6" | 2-1/2" | 116.28 | 111.22 | 106.17 | 101.11 |
| 10120 | .6299 | | 16.000 | 16.0 | 75 | 20 | 76.72 | 73.38 | 70.05 | 66.71 |
| 10130 | .6299 | | 16.000 | 16.0 | 88 | 32 | 83.69 | 80.05 | 76.41 | 72.77 |
| 10140 | .6299 | | 16.000 | 16.0 | 150 | 65 | 116.28 | 111.22 | 106.17 | 101.11 |
| 10160 | .7087 | | 18.000 | 18.0 | 100 | 38 | 122.71 | 117.37 | 112.04 | 106.70 |
| 10170 | .7087 | | 18.000 | 18.0 | 150 | 75 | 174.82 | 167.22 | 159.62 | 152.02 |
| 86600 | .7500 | 3/4" | 19.050 | 3/4" | 3-1/2" | 1" | 116.87 | 111.79 | 106.71 | 101.63 |
| 86620 | .7500 | 3/4" | 19.050 | 3/4" | 4" | 1-1/2" | 116.87 | 111.79 | 106.71 | 101.63 |
| 86640 | .7500 | 3/4" | 19.050 | 3/4" | 6" | 3" | 185.24 | 177.19 | 169.13 | 161.08 |
| 10460 | .7874 | | 20.000 | 20.0 | 75 | 22 | 142.17 | 135.99 | 129.81 | 123.63 |
| 10180 | .7874 | | 20.000 | 20.0 | 100 | 38 | 156.03 | 149.25 | 142.46 | 135.68 |
| 10190 | .7874 | | 20.000 | 20.0 | 150 | 75 | 195.14 | 186.66 | 178.17 | 169.69 |
| 10210 | .9843 | | 25.000 | 25.0 | 100 | 28 | 181.26 | 173.38 | 165.50 | 157.62 |
| 10480 | .9843 | | 25.000 | 25.0 | 100 | 50 | 181.26 | 173.38 | 165.50 | 157.62 |
| 10490 | .9843 | | 25.000 | 25.0 | 150 | 82 | 300.71 | 287.64 | 274.56 | 261.49 |
| 86690 | 1.000 | 1" | 25.400 | 1" | 4" | 1-1/8" | 174.82 | 167.22 | 159.62 | 152.02 |
| 86720 | 1.000 | 1" | 25.400 | 1" | 4" | 2" | 174.82 | 167.22 | 159.62 | 152.02 |
| 86740 | 1.000 | 1" | 25.400 | 1" | 6" | 3-1/4" | 314.94 | 301.25 | 287.55 | 273.86 |

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MATERIAL HARDNESS (Rc)

0

