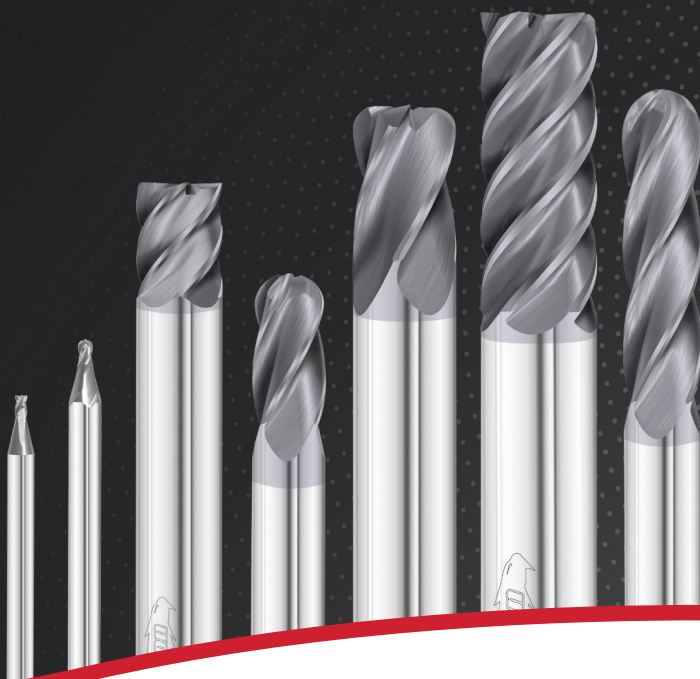


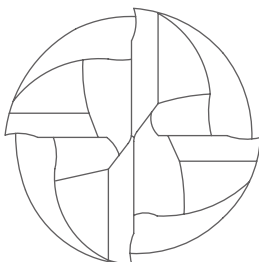
# GENERAL PURPOSE END MILLS



**FULLERTON**   
TOOL COMPANY

# 3200

## STUB LENGTH / SQUARE



**THE 3200** general purpose end mill has 4-flutes and was designed for use in titanium, super alloys, hardened steels, stainless steels, steels, cast iron, brass & copper, and low si aluminum.

It is offered in a variety of configurations and is available with single-end and double-end designs. The 3200 General Purpose end mill is stocked uncoated and with **FC-20, TiAIN, TiCN, and TiN** coatings.

**h6** tolerance for conventional and shrink fit applications. Available in Stub, Standard and Extra Long lengths.

Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

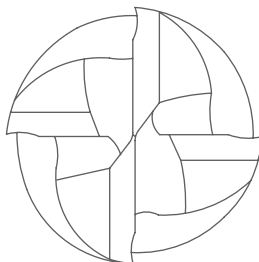
| TOLERANCES | DIAMETER        | SHANK | 30°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |



| D1    | L2   | D2   | L1    | EDP      |       |
|-------|------|------|-------|----------|-------|
|       |      |      |       | UNCOATED | TiAIN |
| 1/32  | 3/32 | 1/8  | 1 1/2 | 32439    | 36001 |
| 3/64  | 1/8  | 1/8  | 1 1/2 | 32440    | 36002 |
| 1/16  | 1/8  | 1/8  | 1 1/2 | 32441    | 36003 |
| 5/64  | 1/8  | 1/8  | 1 1/2 | 32519    | 36004 |
| 3/32  | 3/16 | 1/8  | 1 1/2 | 32442    | 36005 |
| 7/64  | 3/16 | 1/8  | 1 1/2 | 32530    | 36006 |
| 1/8   | 1/4  | 1/8  | 1 1/2 | 32443    | 36007 |
| 9/64  | 5/16 | 3/16 | 2     | 32537    | 36008 |
| 5/32  | 5/16 | 3/16 | 2     | 32444    | 36009 |
| 11/64 | 5/16 | 3/16 | 2     | 32538    | 36010 |
| 3/16  | 3/8  | 3/16 | 2     | 32445    | 36011 |
| 16/64 | 1/2  | 1/4  | 2 1/2 | 32539    | 36012 |
| 7/32  | 1/2  | 1/4  | 2 1/2 | 32446    | 36013 |
| 15/64 | 1/2  | 1/4  | 2 1/2 | 32545    | 36014 |
| 1/4   | 1/2  | 1/4  | 2 1/2 | 32447    | 36015 |
| 9/32  | 1/2  | 5/16 | 2 1/2 | 32594    | 36016 |
| 5/16  | 1/2  | 5/16 | 2 1/2 | 32448    | 36017 |
| 3/8   | 9/16 | 3/8  | 2 1/2 | 32449    | 36018 |
| 7/16  | 5/8  | 7/16 | 2 3/4 | 32450    | 36019 |
| 1/2   | 5/8  | 1/2  | 3     | 32451    | 36020 |

# 3200

## STUB LENGTH / SQUARE



Right Hand Spiral / Right Hand Cut  
 Dura Carb (Micrograin)  
 Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

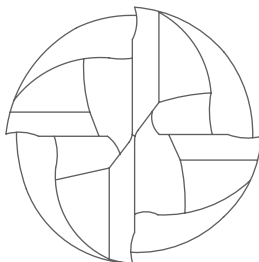
| TOLERANCES | DIAMETER                         | SHANK | 30°<br>HELIX |
|------------|----------------------------------|-------|--------------|
|            | +.0000"-.002"<br>+0.00mm -0.05mm |       |              |



| D1   | L2   | D2   | L1    | EDP      |       |
|------|------|------|-------|----------|-------|
|      |      |      |       | UNCOATED | TiAIN |
| 1/32 | 1/16 | 1/8  | 1 1/2 | 32139    | 32822 |
| 3/64 | 1/8  | 1/8  | 1 1/2 | 32140    | 32823 |
| 1/16 | 1/8  | 1/8  | 1 1/2 | 32141    | 32824 |
| 5/64 | 1/8  | 1/8  | 1 1/2 | 32142    | 32825 |
| 3/32 | 3/16 | 1/8  | 1 1/2 | 32143    | 32826 |
| 7/64 | 3/16 | 1/8  | 1 1/2 | 32144    | 32827 |
| 1/8  | 1/4  | 1/8  | 1 1/2 | 32145    | 32828 |
| 5/32 | 3/8  | 3/16 | 2     | 32146    | 32829 |
| 3/16 | 3/8  | 3/16 | 2     | 32147    | 32830 |
| 1/4  | 1/2  | 1/4  | 2     | 32148    | 32831 |
| 5/16 | 1/2  | 5/16 | 2 1/2 | 32149    | 32832 |
| 3/8  | 5/8  | 3/8  | 2 1/2 | 32150    | 32833 |
| 7/16 | 3/4  | 7/16 | 2 3/4 | 32151    | 32834 |
| 1/2  | 3/4  | 1/2  | 3     | 32152    | 32835 |
| 5/8  | 1    | 5/8  | 3 1/2 | 32153    | 32836 |
| 3/4  | 1    | 3/4  | 4     | 32154    | 32837 |
| 1    | 1    | 1    | 4     | 32155    | 32838 |

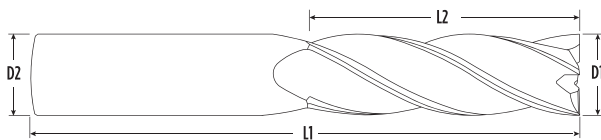
# 3200

## STANDARD LENGTH / SQUARE



Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

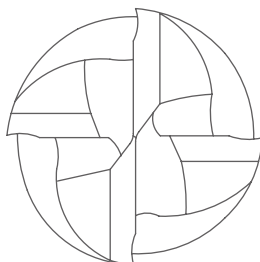
| TOLERANCES | DIAMETER        | SHANK | 30°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |



| D1    | L2    | D2    | L1    | EDP      |       |
|-------|-------|-------|-------|----------|-------|
|       |       |       |       | UNCOATED | TiAIN |
| 1/64  | 3/64  | 1/8   | 1 1/2 | 32001    | 30604 |
| 1/32  | 3/32  | 1/8   | 1 1/2 | 32002    | 30605 |
| 3/64  | 3/16  | 1/8   | 1 1/2 | 32003    | 30606 |
| 1/16  | 1/4   | 1/8   | 1 1/2 | 32004    | 30607 |
| 5/64  | 1/4   | 1/8   | 1 1/2 | 32005    | 30608 |
| 3/32  | 3/16  | 1/8   | 1 1/2 | 32006    | 30609 |
| 7/64  | 1/2   | 1/8   | 1 1/2 | 32007    | 30610 |
| 1/8   | 1/2   | 1/8   | 1 1/2 | 32008    | 30611 |
| 9/64  | 9/16  | 3/16  | 2     | 32009    | 30612 |
| 5/32  | 9/16  | 3/16  | 2     | 32010    | 30613 |
| 11/64 | 9/16  | 3/16  | 2     | 32650    | 30614 |
| 3/16  | 5/8   | 3/16  | 2     | 32011    | 30615 |
| 13/64 | 5/8   | 1/4   | 2 1/2 | 32667    | 30616 |
| 7/32  | 5/8   | 1/4   | 2 1/2 | 32012    | 30617 |
| 15/64 | 3/4   | 1/4   | 2 1/2 | 32666    | 30618 |
| 1/4   | 3/4   | 1/4   | 2 1/2 | 32013    | 30619 |
| 17/64 | 7/8   | 5/16  | 2 1/2 | 32918    | 30620 |
| 9/32  | 7/8   | 5/16  | 2 1/2 | 32014    | 30621 |
| 19/64 | 7/8   | 5/16  | 2 1/2 | 32919    | 30622 |
| 5/16  | 7/8   | 5/16  | 2 1/2 | 32015    | 30623 |
| 21/64 | 7/8   | 3/8   | 2 1/2 | 32920    | 30624 |
| 11/32 | 7/8   | 3/8   | 2 1/2 | 32016    | 30625 |
| 23/64 | 1     | 3/8   | 2 1/2 | 32921    | 30626 |
| 3/8   | 1     | 3/8   | 2 1/2 | 32017    | 30627 |
| 25/64 | 1     | 7/16  | 2 3/4 | 32922    | 30628 |
| 13/32 | 1     | 7/16  | 2 3/4 | 32900    | 30629 |
| 27/64 | 1     | 7/16  | 2 3/4 | 32923    | 30630 |
| 7/16  | 1     | 7/16  | 2 3/4 | 32018    | 30631 |
| 29/64 | 1     | 1/2   | 3     | 32924    | 30632 |
| 15/32 | 1     | 1/2   | 3     | 32910    | 30633 |
| 31/64 | 1     | 1/2   | 3     | 32925    | 30634 |
| 1/2   | 1     | 1/2   | 3     | 32019    | 30635 |
| 9/16  | 1 1/4 | 9/16  | 3 1/2 | 32020    | 30636 |
| 5/8   | 1 1/2 | 5/8   | 3 1/2 | 32021    | 30637 |
| 11/16 | 1 1/2 | 3/4   | 4     | 32022    | 30638 |
| 3/4   | 1 1/2 | 3/4   | 4     | 32023    | 30639 |
| 7/8   | 1 1/2 | 7/8   | 4     | 32024    | 30640 |
| 1     | 1 1/2 | 1     | 4     | 32025    | 30641 |
| 1 1/8 | 2     | 1     | 4 1/2 | 32026    | -     |
| 1 1/4 | 2     | 1 1/4 | 4 1/2 | 32027    | -     |
| 1 3/8 | 2     | 1 1/4 | 4 1/2 | 32028    | -     |
| 1 1/2 | 2     | 1 1/4 | 4 1/2 | 32029    | -     |

# 3200

# STANDARD LENGTH / FC20



**THE 3200FC20** is an affordable and versatile tooling solution that increases feed rates and improves tool life.

It is ideal for roughing and finishing in difficult-to-machine applications without the associated cost of high performance tooling.

Produces increased productivity at a great value.

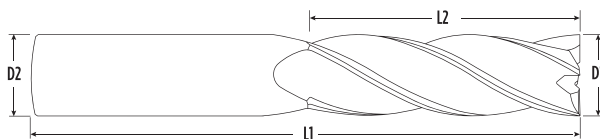
Right Hand Spiral / Right Hand Cut

Dura Carb (Micrograin)

Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

| TOLERANCES | DIAMETER        | SHANK | 30°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |





## SQUARE

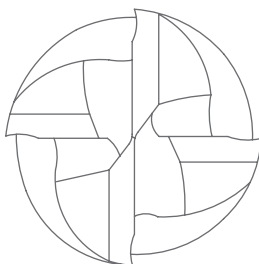
| D1   | L2    | D2   | L1    | EDP<br><b>FC20</b> |
|------|-------|------|-------|--------------------|
| 1/64 | 3/64  | 1/8  | 1 1/2 | 33500              |
| 1/32 | 3/32  | 1/8  | 1 1/2 | 33501              |
| 3/64 | 3/16  | 1/8  | 1 1/2 | 33502              |
| 1/16 | 1/4   | 1/8  | 1 1/2 | 33503              |
| 5/64 | 1/4   | 1/8  | 1 1/2 | 33504              |
| 3/32 | 3/8   | 1/8  | 1 1/2 | 33505              |
| 7/64 | 1/2   | 1/8  | 1 1/2 | 33506              |
| 1/8  | 1/2   | 1/8  | 1 1/2 | 33507              |
| 3/16 | 5/8   | 3/16 | 2     | 33508              |
| 1/4  | 3/4   | 1/4  | 2 1/2 | 33509              |
| 5/16 | 7/8   | 5/16 | 2 1/2 | 33510              |
| 3/8  | 1     | 3/8  | 2 1/2 | 33511              |
| 7/16 | 1     | 7/16 | 2 3/4 | 33512              |
| 1/2  | 1     | 1/2  | 3     | 33513              |
| 9/16 | 1 1/4 | 9/16 | 3 1/2 | 33514              |
| 5/8  | 1 1/2 | 5/8  | 3 1/2 | 33515              |
| 3/4  | 1 1/2 | 3/4  | 4     | 33516              |
| 7/8  | 1 1/2 | 7/8  | 4     | 33517              |
| 1    | 1 1/2 | 1    | 4     | 33518              |

## CORNER RADIUS

| D1  | L2 | D2  | L1    | .0150<br><b>FC20</b> | .0300<br><b>FC20</b> |
|-----|----|-----|-------|----------------------|----------------------|
| 3/8 | 1  | 3/8 | 2 1/2 | 33519                | -                    |
| 1/2 | 1  | 1/2 | 3     | -                    | 33520                |
| 5/8 | 1  | 5/8 | 3 1/2 | -                    | 33521                |
| 3/4 | 1  | 3/4 | 4     | -                    | 33522                |

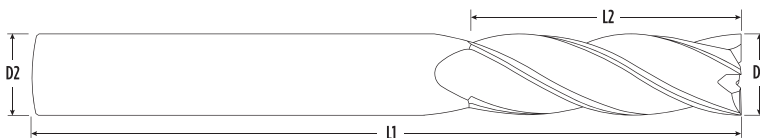
# 3200

# XL LENGTH / SQUARE



Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

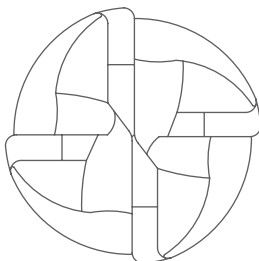
| TOLERANCES | DIAMETER        | SHANK | 30°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |



| D1    | L2    | D2    | L1    | EDP      |        |
|-------|-------|-------|-------|----------|--------|
|       |       |       |       | UNCOATED | TITAIN |
| 1/8   | 3/4   | 1/8   | 3     | 30232    | 30030  |
|       | 1     | 1/8   | 3     | 32252    | 30031  |
| 3/16  | 1     | 3/16  | 4     | 30238    | 30033  |
|       | 1 1/4 | 3/16  | 3     | 32253    | 30032  |
| 1/4   | 1     | 1/4   | 4     | 30200    | 30035  |
|       | 1 1/8 | 1/4   | 3     | 32550    | 30034  |
|       | 1 1/2 | 1/4   | 4     | 32254    | 30036  |
|       | 1 1/2 | 1/4   | 6     | 32551    | 30037  |
| 5/16  | 1     | 5/16  | 4     | 30201    | 30039  |
|       | 1 1/8 | 5/16  | 3     | 32574    | 30038  |
|       | 1 1/2 | 5/16  | 6     | 32552    | 30041  |
|       | 1 5/8 | 5/16  | 4     | 32255    | 30040  |
| 3/8   | 1     | 3/8   | 4     | 30202    | 30043  |
|       | 1 1/8 | 3/8   | 3     | 32578    | 30042  |
|       | 1 1/2 | 3/8   | 4     | 30220    | 30044  |
|       | 1 1/2 | 3/8   | 6     | 32553    | 30046  |
|       | 2     | 3/8   | 4     | 32256    | 30045  |
|       | 3     | 3/8   | 6     | 32257    | 30047  |
| 7/16  | 1     | 7/16  | 4     | 30203    | 30048  |
|       | 1 1/2 | 7/16  | 6     | 32554    | 30050  |
|       | 2     | 7/16  | 4     | 32258    | 30049  |
|       | 3     | 7/16  | 6     | 32259    | 30051  |
| 1/2   | 1     | 1/2   | 4     | 30204    | 30053  |
|       | 1 1/4 | 1/2   | 3     | 30239    | 30052  |
|       | 1 1/2 | 1/2   | 4     | 32582    | 30054  |
|       | 1 1/2 | 1/2   | 6     | 32555    | 30056  |
|       | 2     | 1/2   | 4     | 32260    | 30055  |
|       | 3     | 1/2   | 6     | 32261    | 30057  |
| 5/8   | 1 1/2 | 5/8   | 6     | 30224    | 30059  |
|       | 2 1/2 | 5/8   | 5     | 32262    | 30058  |
|       | 3     | 5/8   | 6     | 32263    | 30060  |
|       | 1 1/2 | 3/4   | 6     | 30226    | 30062  |
| 3/4   | 2     | 3/4   | 5     | 32250    | 30024  |
|       | 2 1/2 | 3/4   | 5     | 32264    | 30061  |
|       | 3     | 3/4   | 6     | 32265    | 30063  |
|       | 4     | 3/4   | 7     | 32266    | 30064  |
| 1     | 2     | 1     | 4 1/2 | 32267    | 30065  |
|       | 2 1/2 | 1     | 5     | 32268    | 30066  |
|       | 3     | 1     | 6     | 32269    | 30067  |
|       | 4     | 1     | 7     | 32270    | 30068  |
| 1 1/4 | 3     | 1 1/4 | 6     | 32271    | -      |

# 3200

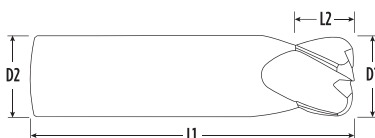
## STUB LENGTH / CORNER RADIUS



| D1   | L2   | D2   | L1    |
|------|------|------|-------|
| 3/32 | 3/16 | 3/32 | 1 1/2 |
| 1/8  | 1/4  | 1/8  | 1 1/2 |
| 3/16 | 3/8  | 3/16 | 2     |
| 1/4  | 1/2  | 1/4  | 2     |
| 5/16 | 1/2  | 5/16 | 2 1/2 |
| 3/8  | 5/8  | 3/8  | 2 1/2 |
| 1/2  | 3/4  | 1/2  | 3     |
| 5/8  | 1    | 5/8  | 3 1/2 |
| 1    | 1    | 1    | 4     |

| TOLERANCES | DIAMETER        | SHANK | 30°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |

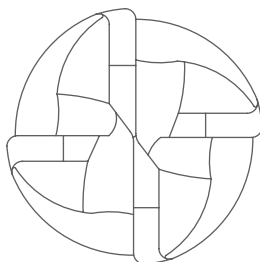
Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)



| .0050 | .0100 | .0150 | .0200 | .0300 | .0600 | .0900 | .1200 | .2500 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| TiAIN | TiAIN | TiAIN | TiAIN | TiAIN | TiAIN | TiAIN | TiAIN | TiAIN |
| -     | -     | -     | -     | 31509 | -     | -     | -     | -     |
| 31954 | 31955 | 31956 | 31957 | 31511 | -     | -     | -     | -     |
| 31958 | 31959 | 31960 | 31961 | 31519 | 31520 | -     | -     | -     |
| -     | -     | 31962 | 31963 | 31528 | 31529 | 31530 | -     | -     |
| -     | -     | 31964 | 31965 | 31544 | 31545 | 31546 | 31547 | -     |
| -     | -     | 31966 | 31967 | 31556 | 31557 | 31558 | 31559 | -     |
| -     | -     | 31968 | 31969 | 31584 | 31585 | 31586 | 31587 | -     |
| -     | -     | 31970 | 31971 | 31600 | 31601 | 31602 | 31603 | -     |
| -     | -     | 31972 | 31973 | 31612 | 31613 | 31614 | 31615 | 31974 |

3200

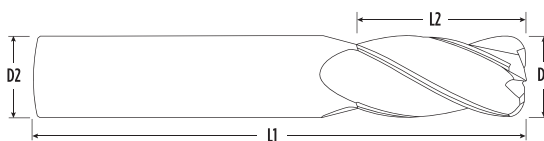
## STANDARD LENGTH / CORNER RADIUS



| D1   | L2    | D2   | L1    | .0050 | .0100 |
|------|-------|------|-------|-------|-------|
|      |       |      |       | TiAlN | TiAlN |
| 3/32 | 3/16  | 1/8  | 1 1/2 | -     | -     |
|      | 3/8   | 1/8  | 1 1/2 | -     | -     |
| 7/64 | 1/2   | 1/8  | 1 1/2 | -     | -     |
| 1/8  | 1/2   | 1/8  | 1 1/2 | 31710 | 31711 |
| 5/32 | 9/16  | 3/16 | 2     | 31713 | 31714 |
| 3/16 | 5/8   | 3/16 | 2     | 31717 | 31718 |
| 7/32 | 5/8   | 1/4  | 2 1/2 | -     | -     |
| 1/4  | 3/4   | 1/4  | 2 1/2 | -     | -     |
| 5/16 | 7/8   | 5/16 | 2 1/2 | -     | -     |
| 3/8  | 1     | 3/8  | 2 1/2 | -     | -     |
| 7/16 | 1     | 7/16 | 2 3/4 | -     | -     |
| 1/2  | 1     | 1/2  | 3     | -     | -     |
| 5/8  | 1 1/2 | 5/8  | 3 1/2 | -     | -     |
| 3/4  | 1 1/2 | 3/4  | 4     | -     | -     |
| 1    | 1 1/2 | 1    | 4     | -     | -     |

| TOLERANCES | DIAMETER        | SHANK | 30°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |

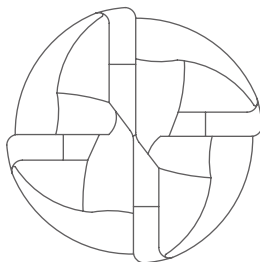
Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)



| .0150 | .0200 | .0300 | .0450 | .0600 | .0900 | .1200 | .1250 | .2500 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| TiAlN | TiAlN | TiAlN | TiAlN | TiAlN | TiAlN | TiAlN | TiAlN | TiAlN |
| -     | -     | 31509 | -     | -     | -     | -     | -     | -     |
| -     | -     | 31510 | -     | -     | -     | -     | -     | -     |
| -     | -     | 31500 | -     | -     | -     | -     | -     | -     |
| 33804 | 33813 | 31712 | -     | -     | -     | -     | -     | -     |
| 31715 | 31716 | 31517 | -     | 31518 | -     | -     | -     | -     |
| 33805 | 33814 | 33822 | -     | 31719 | -     | -     | -     | -     |
| 31720 | 31721 | 31525 | -     | 31526 | 31527 | -     | -     | -     |
| 33806 | 33815 | 33790 | 33827 | 30970 | 30976 | -     | -     | -     |
| 33807 | 33816 | 33823 | 33828 | 30977 | 30978 | 31633 | -     | -     |
| 33808 | 33817 | 33791 | 33829 | 33792 | 30971 | 30972 | -     | -     |
| 31722 | 31723 | 31572 |       | 31573 | 31574 | 31575 | -     | -     |
| 33809 | 33818 | 33793 | 33830 | 33794 | 33837 | 30973 | 33841 | -     |
| 33810 | 33819 | 33824 | 33831 | 33834 | 33838 | 30974 | 33842 | -     |
| 33811 | 33820 | 33825 | 33832 | 33835 | 33839 | 30975 | 33843 | 31724 |
| 33812 | 33821 | 33826 | 33833 | 33836 | 33840 | 31725 | 33844 | 31726 |

3200

## XL LENGTH / CORNER RADIUS

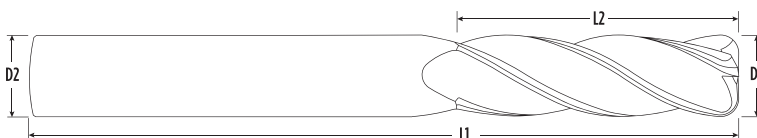


| D1   | L2    | D2   | L1    |
|------|-------|------|-------|
| 1/8  | 3/4   | 1/8  | 3     |
|      | 1     | 1/8  | 3     |
| 3/16 | 1     | 3/16 | 4     |
|      | 1 1/4 | 3/16 | 3     |
| 1/4  | 1 1/8 | 1/4  | 3     |
|      | 1 1/2 | 1/4  | 4     |
| 5/16 | 1 1/8 | 5/16 | 3     |
|      | 1 5/8 | 5/16 | 4     |
| 3/8  | 1 1/8 | 3/8  | 3     |
|      | 1 1/2 | 3/8  | 4     |
|      | 2     | 3/8  | 4     |
| 7/16 | 2     | 7/16 | 4     |
|      | 3     | 7/16 | 6     |
| 1/2  | 1 1/2 | 1/2  | 4     |
|      | 2     | 1/2  | 4     |
|      | 3     | 1/2  | 6     |
| 5/8  | 2 1/2 | 5/8  | 5     |
|      | 3     | 5/8  | 6     |
| 3/4  | 2 1/2 | 3/4  | 5     |
|      | 3     | 3/4  | 6     |
|      | 2     | 1    | 4 1/2 |
| 1    | 2 1/2 | 1    | 5     |
|      | 3     | 1    | 6     |

| TOLERANCES | DIAMETER        | SHANK | 30°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   |       |              |
|            | +0.00mm -0.05mm |       |              |
|            |                 | h6    |              |



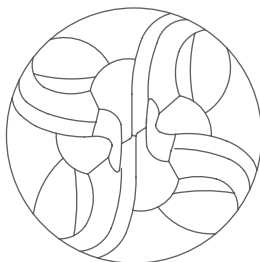
Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)



| .0050 | .0100 | .0150 | .0200 | .0300 | .0600 | .0900 | .1200 | .2500 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| TiAIN | TiAIN | TiAIN | TiAIN | TiAIN | TiAIN | TiAIN | TiAIN | TiAIN |
| 31856 | 31857 | 31858 | 31859 | 31513 | -     | -     | -     | -     |
| 31852 | 31853 | 31854 | 31855 | 31515 | -     | -     | -     | -     |
| 31866 | 31867 | 31868 | 31869 | 31522 | 31523 | -     | -     | -     |
| 31860 | 31861 | 31862 | 31863 | 31864 | 31865 | -     | -     | -     |
| -     | -     | 31872 | 31873 | 31532 | 31533 | 31534 | -     | -     |
| -     | -     | 31870 | 31871 | 31540 | 31541 | 31542 | -     | -     |
| -     | -     | 31874 | 31875 | 31548 | 31549 | 31550 | 31551 | -     |
| -     | -     | 31876 | 31877 | 31552 | 31553 | 31554 | 31555 | -     |
| -     | -     | 31880 | 31881 | 31560 | 31561 | 31562 | 31563 | -     |
| -     | -     | 31878 | 31879 | 31564 | 31565 | 31566 | 31567 | -     |
| -     | -     | 31882 | 31883 | 31568 | 31569 | 31570 | 31571 | -     |
| -     | -     | 31884 | 31885 | 31576 | 31577 | 31578 | 31579 | -     |
| -     | -     | 31886 | 31887 | 31580 | 31581 | 31582 | 31583 | -     |
| -     | -     | 31888 | 31889 | 31588 | 31589 | 31590 | 31591 | -     |
| -     | -     | 31890 | 31891 | 31592 | 31593 | 31594 | 31595 | -     |
| -     | -     | 31892 | 31893 | 31596 | 31597 | 31598 | 31599 | -     |
| -     | -     | 31894 | 31895 | 31604 | 31605 | 31606 | 31607 | -     |
| -     | -     | 31896 | 31897 | 31608 | 31609 | 31610 | 31611 | -     |
| -     | -     | 31898 | 31899 | 31616 | 31617 | 31618 | 31619 | 31900 |
| -     | -     | 31901 | 31902 | 31620 | 31621 | 31622 | 31623 | 31903 |
| -     | -     | -     | -     | -     | 31647 | 31648 | 31649 | -     |
| -     | -     | -     | -     | -     | 31643 | -     | 31645 | -     |
| -     | -     | 31904 | 31905 | 31501 | 31502 | 31503 | 31504 | 31906 |

3200

# STUB LENGTH / BALL



Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

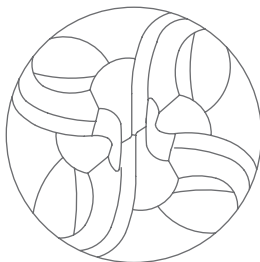
| TOLERANCES | DIAMETER        | SHANK | 30°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |



| D1   | L2   | D2   | L1    | EDP      |       |
|------|------|------|-------|----------|-------|
|      |      |      |       | UNCOATED | TITAN |
| 1/32 | 1/16 | 1/8  | 1 1/2 | 32112    | 32864 |
| 3/64 | 1/8  | 1/8  | 1 1/2 | 32156    | 32865 |
| 1/16 | 1/8  | 1/8  | 1 1/2 | 32157    | 32866 |
| 5/64 | 1/8  | 1/8  | 1 1/2 | -        | 32867 |
| 3/32 | 3/16 | 1/8  | 1 1/2 | 32159    | 32868 |
| 7/64 | 3/16 | 1/8  | 1 1/2 | -        | 32869 |
| 1/8  | 1/4  | 1/8  | 1 1/2 | 32161    | 32870 |
| 5/32 | 3/8  | 3/16 | 2     | 32162    | 32871 |
| 3/16 | 3/8  | 3/16 | 2     | -        | 32872 |
| 1/4  | 1/2  | 1/4  | 2     | 32164    | 32873 |
| 5/16 | 1/2  | 5/16 | 2 1/2 | -        | 32874 |
| 3/8  | 5/8  | 3/8  | 2 1/2 | -        | 32875 |
| 7/16 | 3/4  | 7/16 | 2 3/4 | -        | 32876 |
| 1/2  | 3/4  | 1/2  | 3     | -        | 32877 |
| 5/8  | 1    | 5/8  | 3 1/2 | 32169    | 32878 |
| 3/4  | 1    | 3/4  | 4     | 32170    | 32879 |
| 1    | 1    | 1    | 4     | 32171    | 32880 |

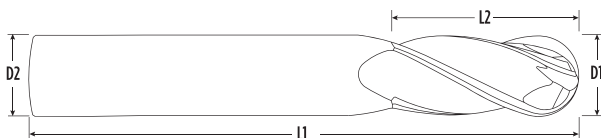
# 3200

## STANDARD LENGTH / BALL



Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

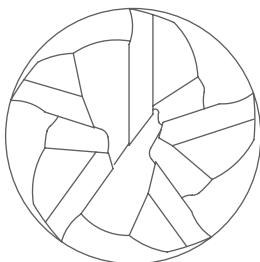
| TOLERANCES | DIAMETER                         | SHANK | 30°<br>HELIX |
|------------|----------------------------------|-------|--------------|
|            | +.0000"-.002"<br>+0.00mm -0.05mm | h6    |              |



| D1    | L2    | D2    | L1    | EDP      |       |
|-------|-------|-------|-------|----------|-------|
|       |       |       |       | UNCOATED | TITAN |
| 1/32  | 3/32  | 1/8   | 1 1/2 | 32030    | 30717 |
| 3/64  | 3/16  | 1/8   | 1 1/2 | 32031    | 30718 |
| 1/16  | 1/4   | 1/8   | 1 1/2 | 32032    | 30719 |
| 5/64  | 1/4   | 1/8   | 1 1/2 | 32033    | 30720 |
| 3/32  | 3/16  | 1/8   | 1 1/2 | 32034    | 30721 |
| 7/64  | 1/2   | 1/8   | 1 1/2 | -        | 30722 |
| 1/8   | 1/2   | 1/8   | 1 1/2 | 32036    | 30723 |
| 9/64  | 9/16  | 3/16  | 2     | 32037    | 30724 |
| 5/32  | 9/16  | 3/16  | 2     | 32038    | 30725 |
| 11/64 | 9/16  | 3/16  | 2     | -        | 30726 |
| 3/16  | 5/8   | 3/16  | 2     | 32039    | 30727 |
| 13/64 | 5/8   | 1/4   | 2 1/2 | 32652    | 30728 |
| 7/32  | 5/8   | 1/4   | 2 1/2 | 32040    | 30729 |
| 15/64 | 3/4   | 1/4   | 2 1/2 | -        | 30730 |
| 1/4   | 3/4   | 1/4   | 2 1/2 | 32041    | 30731 |
| 17/64 | 7/8   | 5/16  | 2 1/2 | -        | 30732 |
| 9/32  | 7/8   | 5/16  | 2 1/2 | 32042    | 30733 |
| 19/64 | 7/8   | 5/16  | 2 1/2 | -        | 30734 |
| 5/16  | 7/8   | 5/16  | 2 1/2 | 32043    | 30735 |
| 21/64 | 7/8   | 3/8   | 2 1/2 | 32932    | 30736 |
| 11/32 | 7/8   | 3/8   | 2 1/2 | 32044    | 30737 |
| 23/64 | 1     | 3/8   | 2 1/2 | -        | 30738 |
| 3/8   | 1     | 3/8   | 2 1/2 | 32045    | 30739 |
| 25/64 | 1     | 7/16  | 2 3/4 | -        | 30740 |
| 13/32 | 1     | 7/16  | 2 3/4 | -        | 30741 |
| 27/64 | 1     | 7/16  | 2 3/4 | -        | 30742 |
| 7/16  | 1     | 7/16  | 2 3/4 | 32046    | 30743 |
| 29/64 | 1     | 1/2   | 3     | -        | 30744 |
| 15/32 | 1     | 1/2   | 3     | -        | 30745 |
| 31/64 | 1     | 1/2   | 3     | -        | 30746 |
| 1/2   | 1     | 1/2   | 3     | 32047    | 30747 |
| 9/16  | 1 1/4 | 9/16  | 3 1/2 | 32048    | 30748 |
| 5/8   | 1 1/2 | 5/8   | 3 1/2 | 32049    | 30749 |
| 11/16 | 1 1/2 | 3/4   | 4     | -        | 30750 |
| 3/4   | 1 1/2 | 3/4   | 4     | 32051    | 30751 |
| 7/8   | 1 1/2 | 7/8   | 4     | 32052    | 30752 |
| 1     | 1 1/2 | 1     | 4     | 32053    | 30753 |
| 11/8  | 2     | 1     | 4 1/2 | 32054    | -     |
| 1 1/4 | 2     | 1 1/4 | 4 1/2 | 32055    | -     |
| 13/8  | 2     | 1 1/4 | 4 1/2 | 32056    | -     |
| 1 1/2 | 2     | 1 1/4 | 4 1/2 | 32057    | -     |

# 3845

## STUB LENGTH / SQUARE



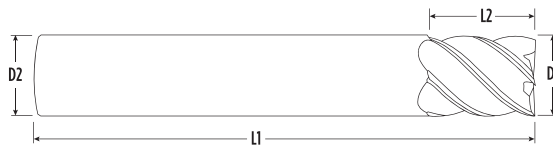
**DESIGNED** with eccentric relief.  
**PRODUCES SUPERIOR** part finishes at extraordinary feed rates.  
**HIGH HELIX** for effective chip evacuation.  
**TiAIN** coating available for extended tool life.  
**h6** tolerance for conventional and shrink fit applications.

Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

# ALLOY

## FINISHER

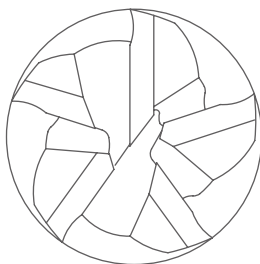
| TOLERANCES | DIAMETER        | SHANK | 45°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |



| D1   | L2   | D2   | L1    | EDP   |
|------|------|------|-------|-------|
|      |      |      |       | TiAlN |
| 1/8  | 1/4  | 1/8  | 1 1/2 | 38173 |
| 3/16 | 5/16 | 3/16 | 2     | 38175 |
| 1/4  | 1/2  | 1/4  | 2     | 38174 |
| 3/8  | 1/2  | 3/8  | 2 1/2 | 38176 |
| 1/2  | 5/8  | 1/2  | 3     | 38178 |
| 5/8  | 3/4  | 5/8  | 3 1/2 | 38177 |
| 3/4  | 1    | 3/4  | 4     | 38179 |

# 3845

## STANDARD LENGTH / SQUARE



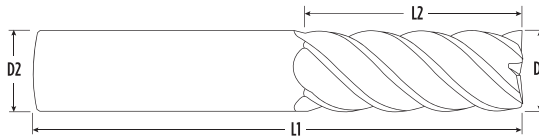
Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

# ALLOY

## FINISHER

| TOLERANCES | DIAMETER                                          | SHANK | 45°<br>HELIX |
|------------|---------------------------------------------------|-------|--------------|
|            | $+.0000"-.002"$<br>$+0.00\text{mm}-0.05\text{mm}$ |       |              |

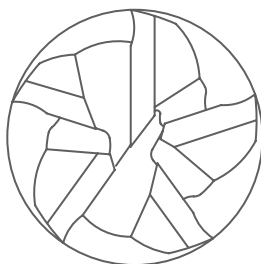




| D1   | L2    | D2   | L1    | EDP   |
|------|-------|------|-------|-------|
|      |       |      |       | TIAIN |
| 1/8  | 1/2   | 1/8  | 1 1/2 | 38150 |
| 5/32 | 9/16  | 5/32 | 2     | 38152 |
| 3/16 | 9/16  | 3/16 | 2     | 38154 |
| 7/32 | 3/4   | 7/32 | 2 1/2 | 38156 |
| 1/4  | 3/4   | 1/4  | 2 1/2 | 38158 |
| 5/16 | 13/16 | 5/16 | 2 1/2 | 38160 |
| 3/8  | 1     | 3/8  | 2 1/2 | 38162 |
| 1/2  | 1 1/4 | 1/2  | 3     | 38166 |
| 5/8  | 1 5/8 | 5/8  | 3 1/2 | 38168 |
| 3/4  | 1 5/8 | 3/4  | 4     | 38170 |
| 1    | 2     | 1    | 4     | 38172 |

# 3845

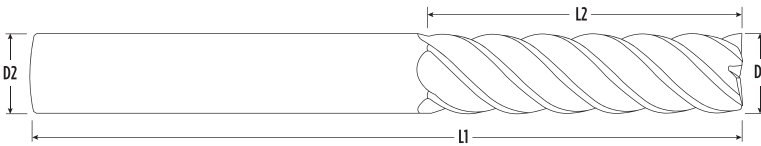
# XL LENGTH / SQUARE



Right Hand Spiral / Right Hand Cut  
Dura Carb (Micrograin)  
Speeds and Feeds, see [fullertontool.com](http://fullertontool.com)

## ALLOY FINISHER

| TOLERANCES | DIAMETER        | SHANK | 45°<br>HELIX |
|------------|-----------------|-------|--------------|
|            | +.0000"-.002"   | h6    |              |
|            | +0.00mm -0.05mm |       |              |



| D1   | L2    | D2   | L1 | EDP   |
|------|-------|------|----|-------|
|      |       |      |    | TiAIN |
| 1/4  | 1 1/4 | 1/4  | 4  | 38180 |
| 5/16 | 1 1/4 | 5/16 | 3  | 38188 |
| 3/8  | 2     | 3/8  | 4  | 38182 |
| 3/8  | 1 1/2 | 3/8  | 4  | 38183 |
| 3/8  | 1 1/4 | 3/8  | 3  | 38189 |
| 3/8  | 3     | 3/8  | 5  | 38190 |
| 1/2  | 2     | 1/2  | 4  | 38072 |
| 1/2  | 2     | 1/2  | 4  | 38184 |
| 1/2  | 3 1/8 | 1/2  | 6  | 38186 |
| 1/2  | 3     | 1/2  | 6  | 38191 |
| 5/8  | 2 1/2 | 5/8  | 5  | 38185 |
| 5/8  | 3     | 5/8  | 6  | 38192 |
| 3/4  | 2 1/2 | 3/4  | 5  | 38181 |
| 3/4  | 3     | 3/4  | 6  | 38193 |
| 1    | 2 1/2 | 1    | 5  | 38071 |
| 1    | 2 1/2 | 1    | 5  | 38187 |
| 1    | 3     | 1    | 6  | 38194 |
| 1    | 4     | 1    | 6  | 38195 |

