

# Cutting Tools



## ADJUSTABLE ROUND DIES

Carbon Steel, Standard Thread

| 13/16" O.D. |           |
|-------------|-----------|
| Size        | Model No. |
| 2-56        | 314-3000  |
| 5-40        | 314-3001  |
| 2-64        | 314-3002  |
| 8-32        | 314-3003  |
| 6-40        | 314-3004  |
| 8-36        | 314-3005  |
| 10-32       | 314-3006  |
| 12-24       | 314-3008  |
| 12-28       | 314-3010  |
| 14-20       | 314-3012  |
| 14-24       | 314-3014  |
| 1/4-20      | 314-3016  |
| 1/4-28      | 314-3018  |
| 5/16-24     | 314-3020  |

| 1" O.D. |           | 1" O.D. |           |
|---------|-----------|---------|-----------|
| Size    | Model No. | Size    | Model No. |
| 5-40    | 314-3102  | 3/16-18 | 314-3121  |
| 5-44    | 314-3104  | 1/4-20  | 314-3122  |
| 6-32    | 314-3106  | 1/4-28  | 314-3123  |
| 8-32    | 314-3108  | 5/16-18 | 314-3124  |
| 8-36    | 314-3110  | 5/16-24 | 314-3126  |
| 10-32   | 314-3111  | 3/8-16  | 314-3127  |
| 12-24   | 314-3112  | 3/8-24  | 314-3128  |
| 12-28   | 314-3114  | 7/16-14 | 314-3130  |
| 14-20   | 314-3116  | 7/16-20 | 314-3132  |
| 14-24   | 314-3118  | 1/2-13  | 314-3134  |
| 3/16-24 | 314-3120  | 1/2-20  | 314-3136  |

| 1-1/2" O.D. |           |
|-------------|-----------|
| Size        | Model No. |
| 12-24       | 314-3208  |
| 12-28       | 314-3210  |
| 14-20       | 314-3212  |
| 14-24       | 314-3214  |
| 1/4-20      | 314-3216  |
| 1/4-28      | 314-3218  |
| 5/16-18     | 314-3220  |
| 5/16-24     | 314-3222  |
| 3/8-24      | 314-3224  |
| 7/16-14     | 314-3225  |
| 7/16-20     | 314-3226  |
| 1/2-13      | 314-3227  |
| 9/16-18     | 314-3228  |
| 5/8-11      | 314-3229  |
| 5/8-18      | 314-3230  |

| 2" O.D. |           |
|---------|-----------|
| Size    | Model No. |
| 3/4-16  | 314-3232  |
| 14-20   | 314-3312  |
| 14-28   | 314-3314  |
| 5/16-24 | 314-3315  |
| 5/16-18 | 314-3316  |
| 3/8-24  | 314-3318  |
| 3/8-16  | 314-3319  |
| 7/16-20 | 314-3320  |
| 7/16-28 | 314-3322  |
| 1/2-13  | 314-3324  |
| 1/2-20  | 314-3326  |
| 3/4-10  | 314-3328  |
| 3/4-16  | 314-3330  |
| 7/8-14  | 314-3332  |
| 1-8     | 314-3334  |

| 2-1/2" O.D. |           |
|-------------|-----------|
| Size        | Model No. |
| 9/16-12     | 314-3428  |
| 9/16-18     | 314-3430  |
| 5/8-11      | 314-3432  |
| 5/8-18      | 314-3434  |
| 1-12        | 314-3436  |
| 1-1/4-7     | 314-3438  |
| 1-1/4-12    | 314-3440  |
| 1-1/2-12    | 314-3442  |

| 3" O.D.  |           |
|----------|-----------|
| Size     | Model No. |
| 1-1/4-12 | 314-3538  |
| 1-1/4-7  | 314-3539  |
| 1-1/8-7  | 314-3540  |
| 1-3/8-6  | 314-3542  |
| 1-3/8-12 | 314-3544  |
| 1-1/2-6  | 314-3545  |
| 1-5/8-5  | 314-3546  |

## ADJUSTABLE ROUND DIES

High Speed Steel, Standard Thread



| 13/16" O.D. |           |
|-------------|-----------|
| Size        | Model No. |
| 0-80        | 314-1000  |
| 1-64        | 314-1002  |
| 1-72        | 314-1004  |
| 2-56        | 314-1006  |
| 2-64        | 314-1008  |
| 3-48        | 314-1010  |
| 3-56        | 314-1012  |
| 4-40        | 314-1014  |
| 4-48        | 314-1016  |
| 5-40        | 314-1018  |
| 5-44        | 314-1020  |
| 6-32        | 314-1022  |
| 6-40        | 314-1024  |
| 8-32        | 314-1026  |
| 8-36        | 314-1028  |
| 10-24       | 314-1030  |
| 10-32       | 314-1032  |
| 12-24       | 314-1034  |
| 12-28       | 314-1036  |
| 14-24       | 314-1038  |
| 1/4-20      | 314-1040  |
| 1/4-28      | 314-1042  |
| 5/16-18     | 314-1044  |
| 5/16-24     | 314-1046  |

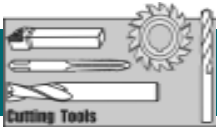
| 1" O.D. |           |
|---------|-----------|
| Size    | Model No. |
| 1-64    | 314-1102  |
| 1-72    | 314-1104  |
| 2-56    | 314-1106  |
| 2-64    | 314-1108  |
| 3-48    | 314-1110  |
| 3-56    | 314-1112  |
| 4-40    | 314-1114  |
| 4-48    | 314-1116  |
| 5-40    | 314-1118  |
| 5-44    | 314-1120  |
| 6-32    | 314-1122  |
| 6-40    | 314-1124  |
| 8-32    | 314-1126  |
| 8-36    | 314-1128  |
| 10-24   | 314-1130  |
| 10-32   | 314-1132  |
| 12-24   | 314-1134  |
| 12-28   | 314-1136  |
| 14-24   | 314-1138  |
| 1/4-20  | 314-1140  |
| 1/4-28  | 314-1142  |
| 5/16-18 | 314-1144  |
| 5/16-24 | 314-1146  |
| 3/8-16  | 314-1148  |
| 3/8-24  | 314-1150  |
| 7/16-14 | 314-1152  |
| 7/16-20 | 314-1154  |
| 1/2-13  | 314-1156  |
| 1/2-20  | 314-1158  |

| 1-1/2" O.D. |           |
|-------------|-----------|
| Size        | Model No. |
| 1/4-20      | 314-1240  |
| 1/4-28      | 314-1242  |
| 5/16-18     | 314-1244  |
| 5/16-24     | 314-1246  |
| 3/8-16      | 314-1248  |
| 3/8-24      | 314-1250  |
| 7/16-14     | 314-1252  |
| 7/16-20     | 314-1256  |
| 1/2-13      | 314-1258  |
| 1/2-20      | 314-1260  |
| 9/16-12     | 314-1262  |
| 9/16-18     | 314-1264  |
| 5/8-11      | 314-1266  |
| 5/8-18      | 314-1268  |
| 3/4-10      | 314-1270  |
| 3/4-16      | 314-1272  |

| 2" O.D. |           |
|---------|-----------|
| Size    | Model No. |
| 1/4-20  | 314-1340  |
| 1/4-28  | 314-1342  |
| 5/16-18 | 314-1344  |
| 5/16-24 | 314-1346  |
| 3/8-16  | 314-1348  |
| 3/8-24  | 314-1350  |
| 7/16-14 | 314-1352  |
| 7/16-20 | 314-1354  |
| 1/2-13  | 314-1356  |
| 1/2-20  | 314-1358  |
| 9/16-12 | 314-1360  |
| 9/16-18 | 314-1362  |
| 5/8-11  | 314-1364  |
| 5/8-18  | 314-1366  |
| 3/4-10  | 314-1368  |
| 3/4-16  | 314-1370  |
| 7/8-9   | 314-1372  |
| 7/8-14  | 314-1374  |
| 1-8     | 314-1378  |
| 1-12    | 314-1380  |

| 2-1/2" O.D. |           |
|-------------|-----------|
| Size        | Model No. |
| 3/4-10      | 314-1468  |
| 3/4-16      | 314-1470  |
| 7/8-9       | 314-1472  |
| 7/8-14      | 314-1474  |
| 1-8         | 314-1476  |
| 1-14        | 314-1478  |
| 1-1/8-7     | 314-1480  |
| 1-1/8-12    | 314-1482  |
| 1-1/4-7     | 314-1484  |
| 1-1/4-12    | 314-1486  |
| 1-3/8-6     | 314-1488  |
| 1-3/8-12    | 314-1490  |
| 1-1/2-6     | 314-1492  |
| 1-1/2-12    | 314-1494  |

| 3" O.D.  |           |
|----------|-----------|
| Size     | Model No. |
| 1-1/4-12 | 314-1505  |
| 1-1/4-7  | 314-1507  |
| 1-1/2-6  | 314-1509  |



# Cutting Tools

## 13/16" O.D.

| Size   | Model No. |
|--------|-----------|
| 0-80   | 314-4000  |
| 1-64   | 314-4002  |
| 1-72   | 314-4004  |
| 2-56   | 314-4006  |
| 2-64   | 314-4008  |
| 3-48   | 314-4010  |
| 3-56   | 314-4012  |
| 4-40   | 314-4014  |
| 4-48   | 314-4016  |
| 5-40   | 314-4018  |
| 5-44   | 314-4020  |
| 6-32   | 314-4022  |
| 6-40   | 314-4024  |
| 8-32   | 314-4026  |
| 8-36   | 314-4028  |
| 10-24  | 314-4030  |
| 10-32  | 314-4032  |
| 12-24  | 314-4034  |
| 12-28  | 314-4036  |
| 1/4-20 | 314-4040  |
| 1/4-28 | 314-4042  |

## 1" O.D.

| Size    | Model No. |
|---------|-----------|
| 5-44    | 314-4120  |
| 6-32    | 314-4122  |
| 6-40    | 314-4124  |
| 8-32    | 314-4126  |
| 8-36    | 314-4128  |
| 10-24   | 314-4130  |
| 10-32   | 314-4132  |
| 12-24   | 314-4134  |
| 12-28   | 314-4136  |
| 14-24   | 314-4138  |
| 1/4-20  | 314-4140  |
| 1/4-28  | 314-4142  |
| 5/16-18 | 314-4144  |
| 5/16-24 | 314-4146  |
| 3/8-16  | 314-4148  |
| 3/8-24  | 314-4150  |
| 7/16-14 | 314-4152  |
| 7/16-20 | 314-4154  |
| 1/2-13  | 314-4156  |
| 1/2-20  | 314-4158  |

## 1-1/2" O.D.

| Size    | Model No. |
|---------|-----------|
| 1/4-20  | 314-4240  |
| 1/4-28  | 314-4242  |
| 5/16-18 | 314-4244  |
| 5/16-24 | 314-4246  |
| 3/8-16  | 314-4248  |
| 3/8-24  | 314-4252  |
| 3/8-32  | 314-4254  |
| 7/16-14 | 314-4256  |
| 7/16-20 | 314-4258  |
| 1/2-13  | 314-4260  |
| 1/2-20  | 314-4262  |
| 9/16-12 | 314-4264  |
| 9/16-18 | 314-4266  |
| 5/8-11  | 314-4268  |
| 5/8-18  | 314-4270  |
| 3/4-10  | 314-4272  |
| 3/4-16  | 314-4274  |

## 2" O.D.

| Size   | Model No. |
|--------|-----------|
| 3/4-10 | 314-4370  |
| 3/4-16 | 314-4372  |
| 7/8-9  | 314-4374  |
| 7/8-14 | 314-4376  |
| 1-8    | 314-4378  |
| 1-12   | 314-4379  |
| 1-14   | 314-4380  |

## 2-1/2" O.D.

| Size     | Model No. |
|----------|-----------|
| 1-1/8-7  | 314-4480  |
| 1-1/8-12 | 314-4482  |
| 1-1/4-7  | 314-4484  |
| 1-1/4-12 | 314-4486  |
| 1-3/8-16 | 314-4488  |
| 1-3/8-12 | 314-4490  |
| 1-1/2-6  | 314-4492  |
| 1-1/2-12 | 314-4494  |
| 1-3/4-18 | 314-4496  |

## LEFT HAND ROUND ADJUSTABLE DIES

High Speed, NC&NF Threads



## LEFT HAND ROUND ADJUSTABLE DIES

Carbon Steel, NC&NF Threads

### 13/16"

#### OUTSIDE DIAMETER

| Size | Model No. | Size  | Model No. |
|------|-----------|-------|-----------|
| 1-72 | 314-5002  | 6-32  | 314-5018  |
| 2-64 | 314-5004  | 6-40  | 314-5020  |
| 3-48 | 314-5006  | 8-32  | 314-5022  |
| 3-56 | 314-5008  | 8-36  | 314-5024  |
| 4-40 | 314-5010  | 10-24 | 314-5026  |
| 4-48 | 314-5012  | 10-32 | 314-5028  |
| 5-40 | 314-5014  | 12-24 | 314-5030  |
| 5-44 | 314-5016  | 12-28 | 314-5032  |

### 1-1/2"

#### OUTSIDE DIAMETER

| Size    | Model No. |
|---------|-----------|
| 1/4-20  | 314-5140  |
| 5/16-18 | 314-5142  |
| 5/16-24 | 314-5144  |
| 7/16-14 | 314-5146  |
| 7/16-20 | 314-5148  |
| 9/16-12 | 314-5150  |
| 9/16-16 | 314-5152  |
| 5/8-11  | 314-5154  |

### 2" OUTSIDE DIAMETER

| Size    | Model No. | Size    | Model No. |
|---------|-----------|---------|-----------|
| 1/4-20  | 314-5240  | 9/16-12 | 314-5258  |
| 1/4-24  | 314-5242  | 9/16-18 | 314-5260  |
| 1/16-18 | 314-5244  | 5/8-11  | 314-5262  |
| 1/16-24 | 314-5246  | 5/8-18  | 314-5264  |
| 3/8-16  | 314-5248  | 3/4-10  | 314-5266  |
| 3/8-24  | 314-5250  | 3/4-16  | 314-5268  |
| 7/16-14 | 314-5252  | 7/8-9   | 314-5270  |
| 1/2-13  | 314-5254  | 7/8-14  | 314-5272  |
| 1/2-20  | 314-5256  | 1-8     | 314-5274  |



## ROUND DIES

DIN 223

HSS



For B.S.W Thread as per DIN 11

| Thread | Per inch | Outside | ModelNo. |
|--------|----------|---------|----------|
| 1/16"  | 60       | 16mm    | 314-1101 |
| 3/32"  | 48       | 16mm    | 314-1103 |
| 1/8"   | 40       | 20mm    | 314-1105 |
| 5/32"  | 32       | 20mm    | 314-1107 |
| 3/16"  | 24       | 20mm    | 314-1109 |
| 7/32"  | 24       | 20mm    | 314-1111 |
| 1/4"   | 20       | 20mm    | 314-1113 |
| 5/16"  | 18       | 25mm    | 314-1115 |
| 3/8"   | 16       | 30mm    | 314-1117 |
| 7/16"  | 14       | 30mm    | 314-1119 |
| 1/2"   | 12       | 38mm    | 314-1121 |
| 9/16"  | 12       | 38mm    | 314-1123 |

| Thread | Per inch | Outside | ModelNo. |
|--------|----------|---------|----------|
| 5/8"   | 11       | 45mm    | 314-1125 |
| 3/4"   | 10       | 45mm    | 314-1127 |
| 7/8"   | 9        | 55mm    | 314-1129 |
| 1"     | 8        | 55mm    | 314-1131 |
| 1-1/8" | 7        | 65mm    | 314-1133 |
| 1-1/4" | 7        | 65mm    | 314-1135 |
| 1-3/8" | 6        | 65mm    | 314-1137 |
| 1-1/2" | 6        | 75mm    | 314-1139 |
| 1-5/8" | 5        | 75mm    | 314-1141 |
| 1-3/4" | 5        | 90mm    | 314-1143 |
| 1-7/8" | 4-1/2    | 90mm    | 314-1145 |
| 2"     | 4-1/2    | 90mm    | 314-1147 |

## ROUND DIES

DIN 5158

HSS



For B.S.P. thread as per DIN 228

| Thread | Per Inch | Outside | Model No. |
|--------|----------|---------|-----------|
| G1/16  | 28       | 25mm    | 314-1023  |
| G1/8   | 28       | 30mm    | 314-1001  |
| G1/4   | 19       | 38mm    | 314-1003  |
| G3/8   | 19       | 45mm    | 314-1005  |
| G1/2   | 14       | 45mm    | 314-1007  |
| G5/8   | 14       | 55mm    | 314-1009  |
| G3/4   | 14       | 55mm    | 314-1011  |
| G7/8   | 14       | 65mm    | 314-1013  |
| G1     | 11       | 65mm    | 314-1015  |
| G1-1/8 | 11       | 75mm    | 314-1017  |
| G1-1/4 | 11       | 75mm    | 314-1019  |
| G1-1/2 | 11       | 90mm    | 314-1021  |



## ROUND DIES

DIN 223 B  
HSS



For ISO metric thread as per DIN 13

| Thread mm | Pitch mm | Outside | Model No. |
|-----------|----------|---------|-----------|
| M2        | .4       | 16x5mm  | 314-9001  |
| M2.5      | .45      | 16x5mm  | 314-9003  |
| M3        | .5       | 20x5mm  | 314-9005  |
| M3.5      | .6       | 20x5mm  | 314-9007  |
| M4        | .7       | 20x5mm  | 314-9009  |
| M5        | .8       | 20x7mm  | 314-9011  |
| M6        | 1.0      | 20x7mm  | 314-9013  |
| M7        | 1.0      | 25x9mm  | 314-9015  |
| M8        | 1.25     | 25x9mm  | 314-9017  |
| M10       | 1.5      | 30x11mm | 314-9019  |
| M12       | 1.75     | 38x14mm | 314-9021  |
| M14       | 2.0      | 38x14mm | 314-9023  |
| M16       | 2.0      | 45x14mm | 314-9025  |

| Thread mm | Pitch mm | Outside | Model No. |
|-----------|----------|---------|-----------|
| M18       | 2.5      | 45x18mm | 314-9027  |
| M20       | 2.5      | 45x18mm | 314-9029  |
| M22       | 2.5      | 55x22mm | 314-9031  |
| M24       | 3.0      | 55x22mm | 314-9033  |
| M27       | 3.0      | 65x25mm | 314-9035  |
| M30       | 3.5      | 65x25mm | 314-9037  |
| M33       | 3.5      | 65x25mm | 314-9039  |
| M36       | 4.0      | 65x25mm | 314-9041  |
| M39       | 4.0      | 75x30mm | 314-9043  |
| M42       | 4.5      | 75x30mm | 314-9045  |
| M45       | 4.5      | 90x36mm | 314-9047  |
| M48       | 5.0      | 90x36mm | 314-9049  |
| M52       | 5.0      | 90x36mm | 314-9051  |

## ROUND DIES

DIN 223 B  
HSS



For  
DIY-kits,  
25mm  
outside diameter,  
for all sizes of threads

| Thread (mm) | Pitch (mm) | Outside (mm) | ModelNo. |
|-------------|------------|--------------|----------|
| M3          | 0.5        | 25 x 9       | 314-9103 |
| M4          | 0.7        | 25 x 9       | 314-9104 |
| M5          | 0.8        | 25 x 9       | 314-9105 |
| M6          | 1.0        | 25 x 9       | 314-9106 |
| M8          | 1.25       | 25 x 9       | 314-9108 |
| M10         | 1.5        | 25 x 9       | 314-9110 |
| M12         | 1.75       | 25 x 9       | 314-9112 |

## ROUND DIES

MF DIN223 B  
HSS



For ISO metric fine thread  
as per DIN 13

| Thread mm | Pitch mm | Outside | Model No. |
|-----------|----------|---------|-----------|
| M3        | .35      | 20x5mm  | 314-9201  |
| M4        | .35      | 20x5mm  | 314-9203  |
| M4        | .50      | 20x5mm  | 314-9205  |
| M5        | .50      | 20x5mm  | 314-9207  |
| M6        | .50      | 20x5mm  | 314-9208  |
| M6        | .75      | 25x7mm  | 314-9209  |
| M8        | .50      | 25x9mm  | 314-9210  |
| M8        | .75      | 25x9mm  | 314-9211  |
| M8        | 1.0      | 25x9mm  | 314-9212  |
| M10       | 1.0      | 30x11mm | 314-9213  |
| M10       | .75      | 30x11mm | 314-9214  |

| Thread mm | Pitch mm | Outside | Model No. |
|-----------|----------|---------|-----------|
| M10       | 1.25     | 30x11mm | 314-9215  |
| M12       | 1.0      | 30x11mm | 314-9217  |
| M12       | 1.25     | 38x11mm | 314-9219  |
| M12       | 1.5      | 38x10mm | 314-9221  |
| M14       | 1.0      | 38x10mm | 314-9223  |
| M14       | 1.25     | 38x10mm | 314-9225  |
| M14       | 1.5      | 38x10mm | 314-9227  |
| M16       | 1.0      | 45x14mm | 314-9229  |
| M16       | 1.5      | 45x14mm | 314-9231  |
| M18       | 1.0      | 45x14mm | 314-9232  |
| M18       | 1.5      | 45x14mm | 314-9233  |

| Thread mm | Pitch mm | Outside | Model No. |
|-----------|----------|---------|-----------|
| M20       | 1.0      | 45x14mm | 314-9234  |
| M20       | 1.5      | 45x14mm | 314-9235  |
| M22       | 1.0      | 55x16mm | 314-9236  |
| M22       | 1.5      | 55x16mm | 314-9237  |
| M22       | 2.0      | 55x16mm | 314-9238  |
| M24       | 1.5      | 55x16mm | 314-9239  |
| M24       | 2.0      | 55x16mm | 314-9241  |
| M27       | 1.5      | 65x18mm | 314-9243  |
| M27       | 2.0      | 65x18mm | 314-9245  |
| M30       | 1.5      | 65x18mm | 314-9247  |
| M30       | 2.0      | 65x18mm | 314-9249  |



Model No. 318-0007



Model No. 318-0003

## HAND TAPPERS

### E-Z TAPPER MINITAPPER

Perpendicular tapped holes.

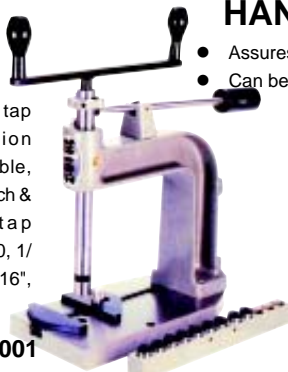
Both units are furnished complete with tap guide, machined work table, tap spindle wrench, and steel tap adapters for use with spiral point taps.

|                  | Model No. 318-0007 | Model No. 318-0003 |
|------------------|--------------------|--------------------|
| Large Tapper     |                    |                    |
| Table length     | 13"                | 8-1/2"             |
| Table width      | 8"                 | 6"                 |
| Height           | 14"                | 9"                 |
| Clearance height | 7"                 | 3-3/4"             |
| Depth of throat  | 7-1/2"             | 4-1/2"             |
| Approx. Weight   | 35 lbs             | 12 lbs             |
| Tap Adapters     | 9 (#8-3/4")        | 7 (#0-5/16")       |

## HAND TAPPERS

- Equipped with tap guide, precision ground work table, tap spindle, wrench & nine steel tap adapters: 6, 8, 10, 1/4", 5/16", 3/8", 7/16", 1/2" & 5/8".

Model No. 318-0001



- Assures straight perpendicular tapped holes.
- Can be used vertical, horizontal or inverted.

| Descriptions     | Model No. 318-0001 |
|------------------|--------------------|
| Table length     | 12-1/2"            |
| Table width      | 6-1/2"             |
| Table area       | 6-1/2" x 10"       |
| Height           | 13"                |
| Clearance height | 7"                 |
| Depth of throat  | 7-1/2"             |
| Weight (Approx.) | 37 lbs.            |



## DIE HOLDERS

- Ideal for short or medium run threading at shafts
- Used safely on lathes, milling machines and tapping heads

**Die Holders Set**  
Model No. 318-2333  
Set include all three sizes

| Body           | Shank       | Die dia. | Model No. |
|----------------|-------------|----------|-----------|
| 1- 1/2" D X 1" | 1/2" D X 2" | 13/16"   | 318-2031  |
| 1- 1/2" D X 1" | 1/2" D X 2" | 1"       | 318-2032  |
| 2"D X 1-1/4"   | 3/4" D X 2" | 1-1/2"   | 318-2033  |