## THREDFLOER HOLE SIZE AND CLASS OF FIT

The following table gives the hole size for three thread percentages when used with the recommended "H" or "D" numbers. The largest " $H$ " or " $D$ " numbers will place the finished thread pitch diameter .0005 to .0010 under the "NO-GO" P.D. limit. They will also provide the longest tap life before the tap wears under size. For a slightly tighter fit, the smaller recommended " H " or " D " numbers may be used.

THREDFLOERS - MACHINE SCREW AND FRACTIONAL SIZE

| SIZE | THREADS PER INCH |  | HOLE SIZES REQUIRED FOR: |  |  | TAP DRILL SIZE (65\% THREAD) | "H" NUMBER PER CLASS OF FIT |  |  | STOCK "H" NUMBER |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { 75\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{aligned} & \text { 65\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{aligned} & \text { 55\% } \\ & \text { THREAD } \end{aligned}$ |  | 2B | 3B | 2 |  |
| 000 |  | 120 | . 0303 | . 0307 | . 0311 | \#68 | - | - | - | 2 |
| 00 | 90 | 96 | . 0417 | . 0422 | . 0426 | \#58 | - | - | - | 2 |
|  |  |  | . 0420 | . 0425 | . 0430 | \#58 | - | - | - |  |
| 0 | 64 | 80 | . 0546 | . 0552 | . 0558 | \#54 OR 1.4 mm* | 3,2 | 2 | 2 | $2,3,4,5,6,7$ |
| 1 |  | 72 | . 066 | . 067 | . 068 | \#51 OR 1.7 mm | 4,3 | 3,2 | 3,2 |  |
|  |  |  | . 067 | . 068 | . 069 | \#51 OR 1.75 mm | 4,3 | 3,2 | 3,2 |  |
| 2 | 56 | 64 | . 078 | . 079 | . 080 | \#47 OR 2.0 mm | 4,3 | 3,2 | 3,2 |  |
|  |  |  | . 079 | . 080 | . 081 | 2.0 mm* | 4,3 | 3,2 | 3,2 |  |
| 3 | 48 | 56 | . 090 | . 091 | . 092 | 2.3 mm* | 5,4 | 3,2 | 3,2 |  |
|  |  |  | . 091 | . 092 | . 093 | 2.3 mm* | 5,4 | 3,2 | 3,2 |  |
| 4 | 40 | 48 | . 100 | . 101 | . 103 | \#39 | 5,4 | 4,3 | 4,3 |  |
|  |  |  | . 103 | . 104 | . 105 | \#37 | 5,4 | 4,3 | 3,2 |  |
| 5 | 40 |  | . 113 | . 114 | . 116 | \#33 OR 2.9 mm | 5,4 | 4,3 | 4,3 |  |
|  |  | 44 | . 114 | . 115 | . 117 | \#33 OR 2.9 mm | 5,4 | 4,3 | 4,3 |  |
| 6 | 32 |  | . 124 | . 125 | . 126 | 3.1 mm | 6,5 | 4,3 | 5,4 |  |
|  |  | 40 | . 126 | . 127 | . 128 | 1/8" OR 3.2 mm* | 5,4 | 4,3 | 4,3 |  |
| 8 | 32 |  | . 149 | . 150 | . 152 | \#25 OR 3.8 mm | 6,5 | 4,3 | 4,3 |  |
|  |  | 36 | . 151 | . 152 | . 153 |  | 5,4 | 4,3 | 3,2 |  |
| 10 | 24 |  | . 170 | . 172 | . 174 | 11/64" | 7,6,5 | 5,4 | 5,4 |  |
|  |  | 32 | . 175 | . 176 | . 178 | \#16 OR.176"* | 6,5 | 4,3 | 4,3 | 2, 3, 4, 5, 6, |
| 12 | 24 |  | . 196 | . 198 | . 200 | \#9 OR 5.0 mm | 7,6,5 | 5,4 | 5,4 | 7, 8, 9, 10 |
|  |  | 28 | . 199 | . 201 | . 203 | \#7 OR 5.1 mm | 7,6,5 | 4,3 | 4,3 |  |
| 1/4" | 20 |  | . 225 | . 227 | . 230 | $5.75 \mathrm{~mm}^{*}$ | 8,7,6 | 5,4 | 5,4 |  |
|  |  | 28 | . 233 |  | . 237 | "A" | $7,6,5$ | 5,4 | $4,3$ |  |
| 5/16" | 18 |  | . 285 | . 287 | . 291 | 7.25 mm* | 9, 8, 7 | 6,5 | 6,5 |  |
|  |  | 24 | . 292 | . 294 | . 297 |  | 8,7,6 | 5,4 | 5,4 |  |
| 3/8" | 16 |  | . 344 | . 347 | . 350 | "S" OR 11/32" | 9, 8, 7 | 7,6 | 7,6 | $\begin{aligned} & 4,5,6,7,8 \\ & 9,10,11,12 \end{aligned}$ |
|  |  | 24 | . 355 | . 357 | . 359 | 9.0 mm* | 8,7,6 | 6,5 | 5,4 |  |
| 7/16" | 14 |  | . 402 | . 405 | . 409 |  | 10, 9, 8 | 7,6 | 8,7,6 |  |
|  |  | 20 | . 414 | . 416 | . 418 | "Z" OR 10.5 mm* | 9,8,7 | 6,5 | 5,4 |  |
| 1/2" | 13 |  | . 462 | . 466 | . 470 | .463"* | 11, 10, 9 | 8,7,6 | 8,7,6 |  |
|  |  | 20 | . 475 | . 477 | . 480 | .476"* | 9, 8, 7 | 6,5 | 5,4 |  |
| 9/16" | 12 |  | . 520 | . 524 | . 528 | . 521 "* | 11,10, 9 | 8, 7, 6 | 9,8,7 |  |
|  |  | 18 | . 535 | . 537 | . 540 | .536** | 9, 8, 7 | 7,6,5 | 7,6,5 |  |
| 5/8" | 11 |  | . 579 | . 583 | . 586 | 37/64" | 12,11, 10 | 9,8,7 | 9,8,7 |  |
|  |  | 18 | . 598 | . 600 | . 603 | .598** | 10, 9, 8 | 7,6,5 | 7,6,5 |  |
| 3/4" | 10 |  | . 700 | . 704 | . 709 | 45/64" | 13, 12, 11 | 9, 8, 7 | 11, 10, 9 |  |
|  |  | 16 | . 720 | . 723 | . 726 | 23/32" | 11, 10, 9 | 8, 7, 6 | 7,6,5 |  |
| 7/8" | 9 |  | . 818 | . 823 | . 829 | .823" | 14, 13, 12 | 10, 9, 8 | 12, 11, 10 | $11,12,13,14$ |
|  |  | 14 | . 839 | . 843 | . 845 | 27/32" | 12, 11, 10 | 9, 8, 7 | 8,7,6 |  |
| $1 "$ | 8 |  | . 935 | . 942 | . 948 | 15/16" | 14, 13, 12 | 11, 10, 9 | 13, 12, 11 |  |
|  |  | 12 | . 959 | . 963 | . 967 | .963" | 13, 12, 11 | 10, 9, 8 | 10, 9, 8 |  |

NOTE: Drill Sizes were selected wherever possible to produce approximately $65 \%$ thread.

## THREDFLOER HOLE SIZE AND CLASS OF FIT - continued

## THREDFLOERS - METRIC

| SIZE | HOLE SIZES REQUIRED FOR 6H TOLERANCE |  |  | $\begin{gathered} \text { TAP } \\ \text { DRILL SIZE } \end{gathered}$ | HOLE SIZES REQUIRED FOR 4H TOLERANCE |  |  | $\begin{gathered} \text { TAP } \\ \text { DRILL SIZE } \end{gathered}$ | STOCK "D" NUMBER PER CLASS OF FIT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { 75\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{aligned} & \text { 65\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{aligned} & \text { 55\% } \\ & \text { THREAD } \end{aligned}$ |  | $\begin{gathered} 75 \% \\ \text { THREAD } \end{gathered}$ | $\begin{aligned} & \text { 65\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{gathered} 55 \% \\ \text { THREAD } \end{gathered}$ |  | $\begin{gathered} \text { 6H } \\ \text { TOLERANCE } \end{gathered}$ | $\begin{gathered} 4 \mathrm{H} \\ \text { TOLERANCE } \end{gathered}$ |
| M1.6 X . 35 | . 057 | . 058 | . 059 | 1.45 mm | . 056 | . 057 | . 058 | \#54 | D5 | D3 |
| M1.7 X . 35 | . 061 | . 062 | . 063 | 1.55 mm | . 060 | . 061 | . 062 | \#53 | D5 | D3 |
| M2 X . 4 | . 072 | . 073 | . 074 | 1.85 mm | . 071 | . 072 | . 073 | 1.80 mm | D5 | D3 |
| M2.5 X . 45 | . 091 | . 092 | . 093 | 2.30 mm | . 089 | . 090 | . 091 | \#43 | D6 | D3 |
| M2.6 X . 45 | . 095 | . 096 | . 097 | 2.40 mm | . 093 | . 094 | . 095 | 2.35 mm | D6 | D3 |
| M3 X . 5 | . 110 | . 111 | . 112 | \#35 | . 108 | . 109 | . 110 | 2.75 mm | D6 | D3 |
| M3.5 X . 6 | . 128 | . 129 | . 130 | \#30 | . 126 | . 127 | . 128 | 3.2 mm | D7 | D4 |
| M $4 \times .7$ | . 145 | . 146 | . 148 | 3.7 mm | . 144 | . 145 | . 147 | \#27 | D7 | D4 |
| M5 X . 8 | . 183 | . 184 | . 185 | \#14 | . 181 | . 182 | . 184 | 4.6 mm | D8 | D4 |
| M6 X 1 | . 218 | . 220 | . 222 | 5.5 mm | . 216 | . 218 | . 220 | 5.5 mm | D9 | D5 |
| M8 X 1.25 | . 291 | . 294 | . 296 | 7.4 mm | . 289 | . 291 | . 294 | 7.3 mm | D10 | D5 |
| M10 X 1 | . 375 | . 377 | . 379 | 9.5 mm | . 373 | . 375 | . 377 | 9.5 mm | D9 | D5 |
| M10 X 1.25 | . 370 | . 373 | . 375 | 9.4 mm | . 368 | . 370 | . 373 | 9.3 mm | D10 | D5 |
| M10 $\times 1.5$ | . 365 | . 368 | . 371 | 9.3 mm | . 362 | . 365 | . 368 | 9.2 mm | D11 | D6 |
| M12 X 1.75 | . 439 | . 442 | . 446 | 7/16" | . 436 | . 439 | . 443 | 11.0 mm | D12 | D6 |
| M14 X 1.25 | . 527 | . 530 | . 532 | 13.4 mm | . 525 | . 528 | . 530 | 13.3 mm | D10 | D5 |
| M14 $\times 1.5$ | . 522 | . 525 | . 528 | 13.3 mm | . 519 | . 522 | . 525 | 13.2 mm | D11 | D6 |
| M14 X 2 | . 512 | . 516 | . 520 | 13.0 mm | . 509 | . 513 | . 517 | 12.9 mm | D14 | D7 |
| M16 X 1.5 | . 601 | . 604 | . 607 | 15.3 mm | . 598 | . 601 | . 604 | 15.2 mm | D11 | D6 |
| M16 X 2 | . 591 | . 595 | . 599 | 15.0 mm | . 588 | . 592 | . 596 | 14.9 mm | D14 | D7 |
| M18 X 1.5 | . 680 | . 683 | . 686 | 17.3 mm | . 677 | . 680 | . 683 | 17.2 mm | D11 | D6 |

## STI THREDFLOERS - MACHINE SCREW AND FRACTIONAL SIZE

|  | HOLE SIZES REQUIRED FOR |  |  |  |  | H" NUMBER PER CLASS OF FIT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { STI } \\ \text { THREAD SIZE } \end{gathered}$ | $\begin{aligned} & \text { 85\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{aligned} & \text { 75\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{aligned} & \text { 65\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{aligned} & \text { 55\% } \\ & \text { THREAD } \end{aligned}$ | TAP <br> DRILL SIZE |  |  | BLANK SIZE |
| 2-56 | . 099 | . 100 | . 101 | . 102 | \#39 | 2 | 2 | \#5 |
| 4-40 | . 130 | . 131 | . 132 | . 134 | 3.3 mm | 3,2 | 2 | \#8 |
| 6-32 | . 161 | . 162 | . 163 | . 165 | 4.1 mm | 3,2 | 2 | \#10 |
| 8-32 | . 187 | . 188 | . 189 | . 191 | 3/16 | 3,2 | 2 | \#12 |
| 10-24 | . 221 | . 222 | . 224 | . 226 | \#2 | 4,3 | 3,2 | 1/4 |
| 10-32 | . 213 | . 214 | . 215 | . 217 | \#3 | 4,3 | 3,2 | 1/4 |
| 1/4-20 | . 287 | . 288 | . 290 | . 293 | 7.3 mm | 4,3 | 3,2 | 5/16 |
| 1/4-28 | . 276 | . 278 | . 279 | . 281 | J | 4,3 | 3, 2 | 5/16 |
| 5/16-18 | . 353 | . 355 | . 357 | . 360 | 9.0 mm | 5,4 | 4,3 | 7/16 |
| 3/8-16 | . 420 | . 422 | . 425 | . 428 | 27/64" | 5,4 | 4,3 | 1/2 |

STI THREDFLOERS - METRIC

| $\begin{gathered} \text { STI } \\ \text { THREAD SIZE } \end{gathered}$ | HOLE SIZES REQUIRED FOR |  |  |  | TAP DRILL SIZE | D" NUMBER PER CLASS OF FIT |  | BLANK SIZE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 85 \% \\ \text { THREAD } \end{gathered}$ | $\begin{gathered} 75 \% \\ \text { THREAD } \end{gathered}$ | $\begin{aligned} & \text { 65\% } \\ & \text { THREAD } \end{aligned}$ | $\begin{aligned} & \text { 55\% } \\ & \text { THREAD } \end{aligned}$ |  |  |  |  |
|  |  |  |  |  |  | 5H | 4H |  |
| M2 X . 4 | . 091 | . 091 | . 092 | . 093 | 2.3 mm | D3 | D2 | \#4 |
| M2.5 $\times .45$ | . 112 | . 112 | . 113 | . 114 | \#34 | D3 | D2 | \#5 |
| M3 X . 5 | . 133 | . 133 | . 134 | . 135 | 3.4 mm | D3 | D2 | \#8 |
| M3.5 X . 6 | . 156 | . 157 | . 158 | . 159 | \#22 | D4 | D3 | \#10 |
| M4 X . 7 | . 178 | . 179 | . 180 | . 182 | \#15 | D4 | D3 | \#10 |
| M5 X . 8 | . 220 | . 221 | . 223 | . 225 | \#2 | D4 | D3 | 1/4 |
| M6 X 1.0 | . 266 | . 267 | . 269 | . 271 | 6.8 mm | D5 | D4 | 5/16 |
| M8 X 1.25 | . 352 | . 353 | . 355 | . 358 | 9 mm | D6 | D5 | 3/8 |

