

Standard Taps

Class of Fit Recommendations

These tap recommendations will produce the specified class of fit in most applications. Threads produced should be checked with thread plug gages to ensure that the threads meet required specifications. Threads that gage loose or tight may require experimentation with taps of lower or higher pitch diameter limit ("H" or "D" number).

| Unified and American National Screw Threads | | | | | | | |
|---|------------------|-----|-------------------------------------|----------|---|------------------|------------------|
| Nominal Size | Threads Per Inch | | Recommended Tap for Class of Thread | | Pitch Diameter Limits for Class of Thread | | |
| | UNC | UNF | Class 2B | Class 3B | Minimum (Basic) | Maximum Class 2B | Maximum Class 3B |
| 0 | — | 80 | H2 | H1 | .0519 | .0542 | .0536 |
| 1 | 64 | — | H2 | H1 | .0629 | .0655 | .0648 |
| 1 | — | 72 | H2 | H1 | .0640 | .0665 | .0659 |
| 2 | 56 | — | H2 | H1 | .0744 | .0772 | .0765 |
| 2 | — | 64 | H2 | H1 | .0759 | .0786 | .0779 |
| 3 | 48 | — | H2 | H1 | .0855 | .0885 | .0877 |
| 3 | — | 56 | H2 | H1 | .0874 | .0902 | .0895 |
| 4 | 40 | — | H2 | H2 | .0958 | .0991 | .0982 |
| 4 | — | 48 | H2 | H1 | .0985 | .1016 | .1008 |
| 5 | 40 | — | H2 | H2 | .1088 | .1121 | .1113 |
| 5 | — | 44 | H2 | H1 | .1102 | .1134 | .1126 |
| 6 | 32 | — | H3 | H2 | .1177 | .1214 | .1204 |
| 6 | — | 40 | H2 | H2 | .1218 | .1252 | .1243 |
| 8 | 32 | — | H3 | H2 | .1437 | .1475 | .1465 |
| 8 | — | 36 | H2 | H2 | .1460 | .1496 | .1487 |
| 10 | 24 | — | H3 | H3 | .1629 | .1672 | .1661 |
| 10 | — | 32 | H3 | H2 | .1697 | .1736 | .1726 |
| 12 | 24 | — | H3 | H3 | .1889 | .1933 | .1922 |
| 12 | — | 28 | H3 | H3 | .1928 | .1970 | .1959 |
| 1/4 | 20 | — | H5 | H3 | .2175 | .2224 | .2211 |
| 1/4 | — | 28 | H4 | H3 | .2268 | .2311 | .2300 |
| 5/16 | 18 | — | H5 | H3 | .2764 | .2817 | .2803 |
| 5/16 | — | 24 | H4 | H3 | .2854 | .2902 | .2890 |
| 3/8 | 16 | — | H5 | H3 | .3344 | .3401 | .3387 |
| 3/8 | — | 24 | H4 | H3 | .3479 | .3528 | .3516 |
| 7/16 | 14 | — | H5 | H3 | .3911 | .3972 | .3957 |
| 7/16 | — | 20 | H5 | H3 | .4050 | .4104 | .4091 |
| 1/2 | 13 | — | H5 | H3 | .4500 | .4565 | .4548 |
| 1/2 | — | 20 | H5 | H3 | .4675 | .4731 | .4717 |
| 9/16 | 12 | — | H5 | H3 | .5084 | .5152 | .5135 |
| 9/16 | — | 18 | H5 | H3 | .5264 | .5323 | .5308 |
| 5/8 | 11 | — | H5 | H3 | .5660 | .5732 | .5714 |
| 5/8 | — | 18 | H5 | H3 | .5889 | .5949 | .5934 |
| 3/4 | 10 | — | H5 | H3 | .6850 | .6927 | .6907 |
| 3/4 | — | 16 | H5 | H3 | .7094 | .7159 | .7143 |
| 7/8 | 9 | — | H6 | H4 | .8028 | .8110 | .8089 |
| 7/8 | — | 14 | H6 | H4 | .8286 | .8356 | .8339 |
| 1 | 8 | — | H6 | H4 | .9188 | .9276 | .9254 |
| 1 | — | 12 | H6 | H4 | .9459 | .9535 | .9516 |
| 1 | — | 14* | H6 | H4 | .9536 | .9609 | .9590 |
| 1 1/8 | 7 | — | H8 | H4 | 1.0322 | 1.0416 | 1.0393 |
| 1 1/8 | — | 12 | H6 | H4 | 1.0709 | 1.0787 | 1.0768 |
| 1 1/4 | 7 | — | H8 | H4 | 1.1572 | 1.1668 | 1.1644 |
| 1 1/4 | — | 12 | H6 | H4 | 1.1959 | 1.2039 | 1.2019 |
| 1 3/8 | 6 | — | H8 | H4 | 1.2667 | 1.2771 | 1.2745 |
| 1 3/8 | — | 12 | H6 | H4 | 1.3209 | 1.3291 | 1.3270 |
| 1 1/2 | 6 | — | H8 | H4 | 1.3917 | 1.4022 | 1.3996 |
| 1 1/2 | — | 12 | H6 | H4 | 1.4459 | 1.4542 | 1.4522 |

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