



**Impact Torque Nm**

| Impact Tapping Torque |           |            |            |
|-----------------------|-----------|------------|------------|
| Thread Diameter       | 6mm Steel | 12mm Steel | 25mm Steel |
| Diameter Ø            | Nm Torque |            |            |
| M3                    | 105       | 160        | N/A        |
| M4                    | 120       | 180        | N/A        |
| M5                    | 135       | 200        | N/A        |
| M6                    | 140       | 240        | 400        |
| 1/4"                  | 145       | 255        | 410        |
| 5/16"                 | 145       | 265        | 420        |
| M8                    | 150       | 280        | 430        |
| 3/8"                  | 165       | 290        | 440        |
| M10                   | 170       | 300        | 480        |
| M12                   | 185       | 320        | 512        |
| 1/2"                  | 190       | 330        | 525        |
| M14                   | 190       | 340        | 544        |
| 5/8"                  | 195       | 355        | 555        |
| M16                   | 200       | 360        | 576        |
| 3/4"                  | 245       | 385        | 615        |
| M20                   | 315       | 400        | 640        |
| 7/8"                  | N/A       | 515        | 775        |
| M24                   | N/A       | 600        | 960        |
| 1"                    | N/A       | 695        | 1050       |
| M27                   | N/A       | 740        | 1184       |
| M30                   | N/A       | 800        | 1200       |

| Impact Tapping Torque |            |          |
|-----------------------|------------|----------|
| 1/4" Steel            | 1/2" Steel | 1" Steel |
| Ft Lbs Torque         |            |          |
| 80                    | 120        | N/A      |
| 90                    | 135        | N/A      |
| 100                   | 150        | N/A      |
| 105                   | 180        | N/A      |
| 105                   | 180        | 295      |
| 110                   | 205        | 320      |
| 115                   | 210        | 330      |
| 125                   | 220        | 355      |
| 125                   | 220        | 360      |
| 135                   | 235        | 400      |
| 135                   | 235        | 375      |
| 140                   | 250        | 400      |
| 145                   | 365        | 425      |
| 150                   | 265        | 425      |
| 230                   | 295        | 470      |
| 235                   | 300        | 470      |
| N/A                   | 370        | 710      |
| N/A                   | 440        | 720      |
| N/A                   | 445        | 735      |
| N/A                   | 545        | 875      |
| N/A                   | 590        | 885      |

**Revolutions per minute (Rotary)**

| Thread Diameter | Structural Steel | Structural Steel | Stainless Steel | Aluminium | Cast Iron (Grey) |
|-----------------|------------------|------------------|-----------------|-----------|------------------|
|                 | <500Nm           | <1000Nm          | INOX            |           |                  |
| Diameter Ø      | RPM Range        |                  |                 |           |                  |
| M3              | 960              | 809              | 650             | 2700      | 1295             |
| M4              | 730              | 610              | 490             | 2060      | 975              |
| M5              | 585              | 485              | 385             | 1750      | 780              |
| M6              | 485              | 405              | 325             | 1455      | 650              |
| 1/4"            | 485              | 405              | 325             | 1455      | 650              |
| 5/16"           | 365              | 310              | 245             | 1095      | 485              |
| M8              | 365              | 310              | 245             | 1095      | 485              |
| 3/8"            | 295              | 245              | 195             | 870       | 390              |
| M10             | 295              | 245              | 195             | 870       | 390              |
| M12             | 240              | 200              | 162             | 730       | 330              |
| 1/2"            | 240              | 200              | 162             | 730       | 330              |
| M14             | 210              | 175              | 140             | 625       | 275              |
| 5/8"            | 185              | 155              | 125             | 550       | 243              |
| M16             | 185              | 155              | 125             | 550       | 243              |
| 3/4"            | 145              | 125              | 100             | 440       | 194              |
| M20             | 145              | 125              | 100             | 440       | 194              |
| 7/8"            | 130              | 115              | 92              | 410       | 180              |
| M24             | 120              | 100              | 85              | 370       | 165              |
| 1"              | 120              | 100              | 85              | 370       | 165              |
| M27             | 105              | 90               | 75              | 330       | 145              |
| M30             | 95               | 80               | 60              | 310       | 130              |

**Best Practice Advice**

\*GUIDELINE PARAMETERS ONLY - Actual parameters may vary depending on operating conditions

|   |   |    |   |
|---|---|----|---|
| 1 | ImpactaTaps are recommended for through hole applications only.   | 7  | Regularly apply quality cooling lubricant, especially when drilling thick or hardened materials.  |
| 2 | Pilot drill the exact tapping size hole for best results  | 8  | Hardened or heat-affected materials may require higher torque, reduced RPM and feed rates and extra coolant   |
| 3 | Select the correct torque power for impact wrench/drivers using the data range above. If exact match is not available select the closest torque setting above the recommendation.                   | 9  | Flame cut/punched holes will require more torque to tap than drilled holes due to heat build up. Caution: Sometimes flame cut holes do not have parallel sides meaning risk of tap breakage.  |
| 4 | Apply firm, steady feed pressure throughout the cut   | 10 | Tap the hole in one pass where possible, applying adequate lubrication before you start.  |
| 5 | Ensure the Tap is inserted squarely to the hole - poorly aligned or off-centre taps will greatly increase the risk of breakage.   | 11 | If the tap is over-run from the hole once it is tapped, to remove the risk of cross-threading/damage to the tap, remove the tap from the adapter and locate it in the thread by hand, before reversing.                                     |
| 6 | When using cordless tools, torque may drop once the battery charge becomes low. Keep batteries well charged. Low battery charge can lead to lower torque which can break or damage taps as point 3. | 12 | When re-threading an existing thread, use caution to avoid cross-threading which can lead to tap breakage or thread damage. It is advisable to insert/start the tap into the thread by hand before driving it through at the correct torque |

**Quick Guide**

|   |   |
|---|---|
| 1 | For fastest performance use on impact wrenches & impact drivers       |
| 2 | Check the minimum torque requirement                                  |
| 3 | Laser cut holes & Stainless Steel require higher torque               |
| 4 | Use appropriate lubrication and correct RPM to achieve long tool life |