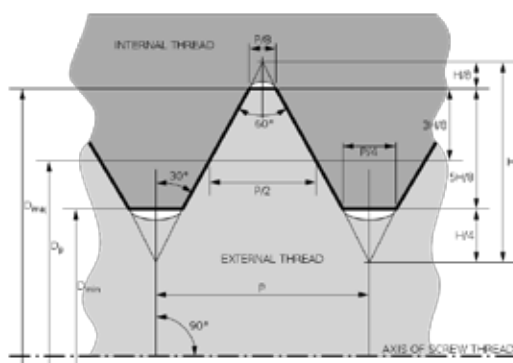


TI / NI CUT TAPS

Titanium and Ti-alloys
Nickel and Ni-alloys

| Material group | Approximate Rc | Approximate HB | Recommended SFM | | | | | |
|------------------------|----------------|----------------|-----------------|-------------|---------------|-------------|---------------|-------------|
| | | | HSS-E | | HSS-E-PM | | Solid carbide | |
| | | | bright finish | hard coated | bright finish | hard coated | bright finish | hard coated |
| Titanium and Ti-alloys | — | 140-275 | — | — | — | 20-30 | — | — |
| | — | 300-380 | — | — | — | 10-18 | — | — |
| Nickel and Ni-alloys | — | 200-300 | — | — | — | 10-18 | — | — |
| | — | >300 | — | — | — | 6-12 | — | — |

If you have customers who are suppliers to the aerospace or military Industries, you will encounter “J” or “Controlled root radius” thread requirements.



The differences between these and UNC or UNF threads are as follows:

The external thread is manufactured with radii in the root of the thread for added strength, and to extend the integrity of the threading tool.

The internal thread is manufactured to 3B class of fit tolerancing for the pitch diameter, and will need to use a larger drill for the minor diameter to accommodate the root radius in the bolt.

ANY UN-3B tap will produce a legitimate “UNJ” internal thread.