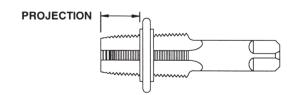
## Engineering Data Table 338 Thread Limits for Taper Pipe Taps

## TAPER PIPE TAP, THREAD LIMITS, GROUND THREAD

(Ref. USCTI Table 338)

- American National Standard Taper Pipe Thread Form (NPT)
  - Aeronautical National Taper Pipe Thread Form (ANPT)
- Dryseal American National Standard Taper Pipe Thread Form (NPTF)



| Tap Thread Limits |         |             |            |                |         | Reference Dimensions |                   |
|-------------------|---------|-------------|------------|----------------|---------|----------------------|-------------------|
| Nominal           | Threads | Projection* | Projection | Taper Per Foot |         | L <sub>1</sub>       | Tap Drill Size ** |
| Size              | per     | Inches      | Tolerance  | Limits         |         | Length               | NPT,ANPT,NPTF     |
| Inches            | Inch    |             | + or -     | Minimum        | Maximum |                      |                   |
| 1/16              | 27      | .312        | .063       | .719           | .781    | .160                 | С                 |
| 1/8               | 27      | .312        | .063       | .719           | .781    | .1615                | Q                 |
| 1/4               | 18      | .459        | .063       | .719           | .781    | .2278                | 7/16              |
|                   |         |             |            |                |         |                      |                   |
| 3/8               | 18      | .454        | .063       | .719           | .781    | .240                 | 9/16              |
| 1/2               | 14      | .579        | .063       | .719           | .781    | .320                 | 45/64             |
| 3/4               | 14      | .565        | .063       | .719           | .781    | .339                 | 29/32             |
|                   |         |             |            |                |         |                      |                   |
| 1"                | 11-1/2  | .678        | .094       | .719           | .781    | .400                 | 1-9/64            |
| 1-1/4             | 11-1/2  | .686        | .094       | .719           | .781    | .420                 | 1-31/64           |
| 1-1/2             | 11-1/2  | .699        | .094       | .719           | .781    | .420                 | 1-23/32           |
|                   |         |             |            |                |         |                      |                   |
| 2"                | 11-1/2  | .667        | .094       | .719           | .781    | .436                 | 2-3/16            |
| 2-1/2             | 8       | .925        | .094       | .734           | .781    | .682                 | 2-39/64           |
| 3"                | 8       | .925        | .094       | .734           | .781    | .766                 | 3-15/64           |
|                   |         |             |            |                |         |                      |                   |
| 3-1/2             | 8       | .938        | .125       | .734           | .781    | .821                 |                   |
| 4                 | 8       | .950        | .125       | .734           | .781    | .844                 |                   |

## **NOTES**

## LEAD TOLERANCE

A maximum lead deviation of plus or minus .0005" within any two threads not farther than 1" is permitted.

<sup>\*</sup> Distance small end of tap projects throught L<sub>1</sub> Taper Thread Ring Gage.

<sup>\*\*</sup> Recommended size given permit direct tapping without reaming the hole, but only give a full thread for approx. the L1 length.