SEVEN MAJOR ADVANTAGES OF THREAD FORMING – VS – CUTTING TAPS

Forming taps and cutting taps produce threads that gage identically and are interchangeable, but the similarity stops there. The way they produce threads is completely different: Forming taps displace metal — cutting taps remove it.

1. CHIPLESS TAPPING
Since the thread is formed and not cut, there are no chips to interfere with the tapping process or to cause chip-removal problems in blind holes.

2. STRONGER THREADS
The grain flow of formed threads follows the contour of the thread resulting in greater thread strength. This is especially true for materials that work-harden such as steel and stainless steel.

3. BETTER THREAD GAGING
Forming taps rearrange the metal in the hole to create the thread. Because no metal is cut away, the possibility of producing oversized threads is greatly reduced.

4. STRONGER TAPS
The absence of chips eliminates the need for flutes, resulting in a solid, stronger tap.

5. LONGER TAP LIFE
Forming taps last 3 to 20 times longer than cutting taps because they have no cutting edge to dull.

6. MORE EFFICIENT PRODUCTION
Longer tap life, less tap breakage, and faster tapping speeds combine to reduce cycle time and machine downtime.

7. IDEAL FOR NON-LEAD SCREW TAPPERS
The ability to form their own leads makes Thredfloer Taps especially well suited for CNC machines or other machines without lead screws.

WHY CHOOSE BALAX THREDFLOER’S?

BALAX stands for “BALanced AXially,” which is an important feature for all of our Thredfloer Cold Forming Taps. Balax Thredfloers are ground using our proprietary thread grinders that have a differential lead compensation device that produces cold forming taps with their lead crests exactly on pitch.

Other forming taps have lead thread cold forming teeth that are not ground on pitch. These forming taps actually cold-work the thread twice: (1) to form the in-accurate lead thread and (2) to move it on pitch. This creates an axial thrust on the tap which increases tapping torque and reduces tap life.

Balax Thredfloers form the thread exactly on pitch the first time with no axial thrust, hence the name “BALanced AXially”. All Thredfloers require less tapping torque and provide longer tap life than forming taps ground with conventional methods.