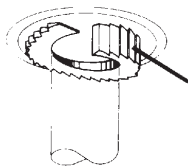


## CYCLONE® TAPPING SCREWS

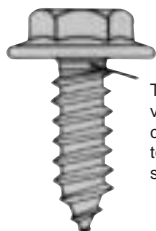
### TAPPING SCREWS FOR THIN GAGE METAL



The Cyclone screw's ribbed "staircase" bites into the tapping plate to increase strip torque and backout resistance.

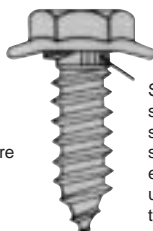
The ITW Shakeproof Cyclone screw's serrated helical shoulder actually bites into sheet metal, enabling the screw to absorb higher tightening torque, which adds to increased backout resistance. A dramatically increased safe operating range (the difference between the maximum drive torque required and the minimum strip torque) makes the cyclone screw "user friendly." Stripping problems, with their resultant scrap loss and rework, are dramatically reduced. This exceptional drive/strip torque ratio makes the cyclone screw ideal for automated assembly and permits the use of thinner sheet metal in many applications.

### COMPARED TO ORDINARY SHEET METAL SCREWS CYCLONE SCREWS BITE INTO THE TAPPING PLATE TO INCREASE STRIP TORQUE AND BACKOUT RESISTANCE



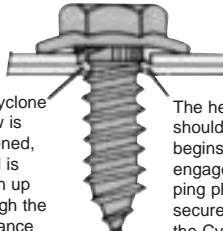
Thread void contributes to premature strip-out

**ORDINARY "AB" SHEET METAL SCREW**



Serrated helical shoulder (a simulated over-size thread) extends upward into the undercut.

**CYCLONE TAPPING SCREW**



As Cyclone screw is tightened, metal is drawn up through the clearance hole.

The helical shoulder begins to engage the tapping plate to securely install the Cyclone Tapping Screw

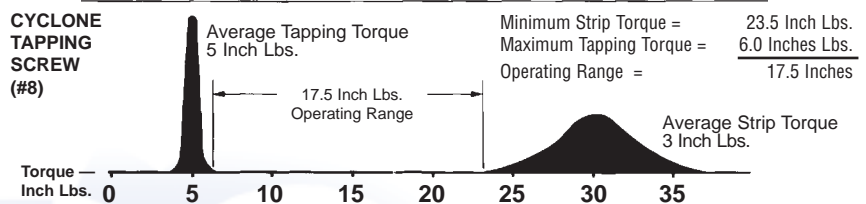
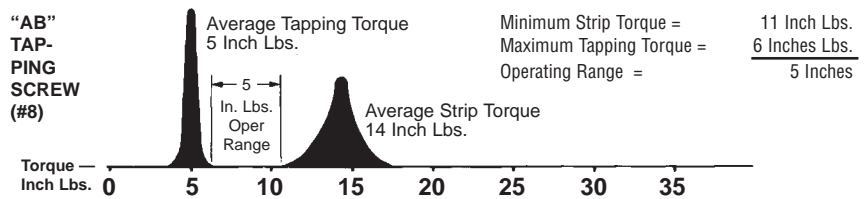
**CYCLONE TAPPING SCREW**

### CYCLONE SCREW BENEFITS:

- Accepts higher tightening torque for increased backout resistance.
- Less stripping on the assembly line less rework and scrap.
- Minimizes need for operator sensitivity.
- Possible use of thinner sheet metal.
- Stall torques can be set higher.
- Uses standard hole sizes... or smaller for even greater stripping torque.
- Smooth bearing surface won't mar work surface and eliminates potential corrosion problems.
- High tightening torque absorption even after removal and reinsertion.

### SAFE OPERATING RANGE

The "safe operating range" is the difference between the maximum torque required to drive the screw and the minimum torque at which the screw may strip. The narrower the range, the greater the probability of stripped screws. The significantly broader operating range of the Cyclone screw accommodates common manufacturing variables such as operating technique or fluctuating rpms in semiautomated or automated equipment. Operator sensitivity is less essential to quality fastening.



### CYCLONE SCREW SPECIFICATIONS

SCREW SIZE	6-20	8-18	10-16	1/4-14
MINIMUM LENGTH	3/8	1/2	1/2	1/2

**Note:** Cyclone® is a registered trademark of Illinois Tool Works Incorporated