## SELF- TAPPING SCREWS

### SELF-DRILLING

#### #4 & #5 Point Self Drilling Screws, Unified Thread Pitch

<table>
<thead>
<tr>
<th>Diameter &amp; Thread Pitch</th>
<th>Point Size</th>
<th>T Max</th>
<th>T Min</th>
<th>t Max</th>
<th>t Min</th>
<th>A Max</th>
<th>A Min</th>
<th>B Max</th>
<th>B Min</th>
<th>Drilling Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-24</td>
<td>#5</td>
<td>.189</td>
<td>.181</td>
<td>.162</td>
<td>.158</td>
<td>.413</td>
<td>.373</td>
<td>.173</td>
<td>.165</td>
<td>.250</td>
</tr>
<tr>
<td>1/4-20</td>
<td>#4</td>
<td>.246</td>
<td>.239</td>
<td>.192</td>
<td>.185</td>
<td>.511</td>
<td>.471</td>
<td>.227</td>
<td>.215</td>
<td>.312</td>
</tr>
<tr>
<td>1/4-20</td>
<td>#5</td>
<td>.249</td>
<td>.242</td>
<td>.192</td>
<td>.185</td>
<td>.629</td>
<td>.569</td>
<td>.227</td>
<td>.222</td>
<td>.500</td>
</tr>
</tbody>
</table>

#### Performance Info—STEEL Screws only

<table>
<thead>
<tr>
<th>Steel Gauge</th>
<th>Shear Strength (lapped steel) (lbs.)</th>
<th>Pullout Strength (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-8 or 410 Stainless</td>
<td>410 SS</td>
<td>1200</td>
</tr>
<tr>
<td>18-8 or 316 Stainless</td>
<td>410 SS</td>
<td>2700</td>
</tr>
<tr>
<td>18-8 or 316 Stainless</td>
<td>18-8</td>
<td>2760</td>
</tr>
</tbody>
</table>

## Description

A tapping screw with an integrally formed hex washer head, unified threads, and a drill point significantly longer than that of a #2 or #3 point drill screw.

## Applications/Advantages

Designed to drill through a greater thickness of steel than a standard self drilling screw. Although it can assist in attaching metal deck to structural steel, the #4 & #5 point self drilling screws are not structural bolts and should not be used as such.

Will drill through thicker sheets of stainless than a #2 or #3 drill point. In the absence of industry test results, each user should carefully test to see if parts will work in desired application. The hardness of the material to be drilled should be a minimum of 10-20 Rockwell hardness points less than the hardness of the fastener.

## Material

AISI 1022 or equivalent steel

## Heat Treatment

Screws shall be quenched in liquid and then tempered by reheating to 625°F minimum.

18-8 is only hardenable by cold-working.

## Case Hardness

Rockwell C52 -58.

## Case Depth

No. 10 & 12 diameter: .004 - .009
1/4 and larger: .005 - .011

## Hardness

Core: Rockwell C32 - 40 (after tempering)

18-8 & 316 SS: Rockwell B100 (approx.)

## Shear Strength

The average ultimate values for shear strength are listed in the above table. Safety factors should be used when designing final applications.

## Pull-out Strength

The average ultimate values for pull-out strength are listed in the above table. Safety factors should be used when designing final applications.

## Plating

See Appendix-A for plating information.

Stainless drill screws are usually supplied without additional finish.

---

This page prints with a watermark