**Fastener Concepts** 

What's the Difference?

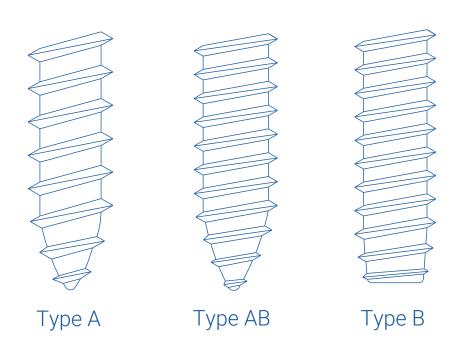
# Self-Tapping Screws Vs. Self-Drilling Screws



# **Disassembling the Confusion**

Self-Tapping Screws and Self-Drilling Screws are some of the most common fasteners used within our industry today. Although their names are often confused and used interchangeably, they're two completely unique products with specific features used for different applications.

So what exactly is a Self-Tapping Screw? Self-Tapping Screws, also known as Sheet Metal Screws, are fasteners that are known to cut or roll their own threads as they're driven into pre-drilled pilot holes, a process known as tapping. These fasteners are typically available in three different tip shapes: pointed, blunt, or flat. Each style can have a specific thread variation, such as type A, type AB, or type B threads, as illustrated in the image below.





# Disassembling the Confusion (cont.)

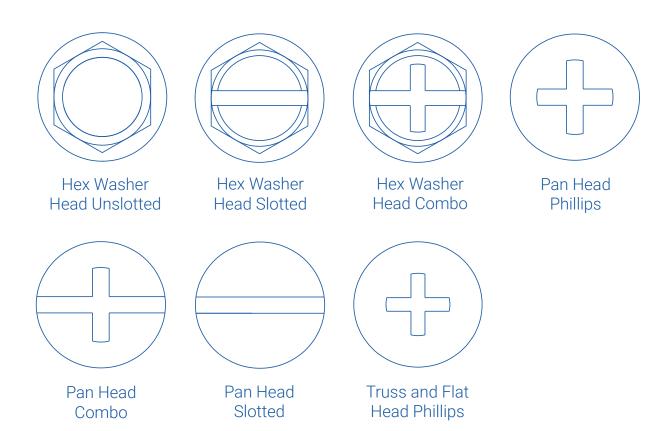
When selecting the right tip shape and thread variation for your application, it's important to consider the material with which the fastener will be paired. Typically, if the Self-Tapping Screw has a pointed end, the fastener will be designed to be thread-cutting, meaning it will tap and create its own threads as it's driven into its pre-drilled hole. The type A and AB thread is an excellent choice for use with thin metal, resinous plywood, and other composite boards. Though, the Type AB thread is more versatile as it can be used in a wider range of materials as it combines both the A and B thread into one style of screw.

Alternatively, if the tip is flat, it will produce a rolling thread, meaning the threads, by design, will roll the thread form into the material which they are being driven into. Unlike the type A and AB thread, type B threads do not cut the thread form into their installation material. The type B thread is a great choice for use with thin metal, resinous plywood, composite boards, plastics, and non-ferrous castings, which are metals that do not contain iron or steel, such as aluminum, copper, brass, and bronze.

Lastly, Self-Tapping Screws are available in a variety of head styles as illustrated on Page 3.



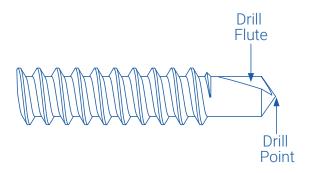
# **Self-Tapping Screw Head Styles**



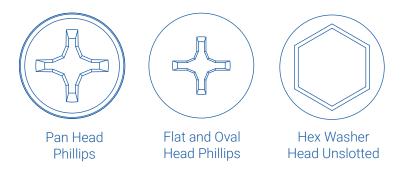


## No Pilot Holes Needed

**Self-Drilling Screws, commonly known as Teks® Screws**, are easily identified by the distinctive drill point located at the base of their threads, as shown in the illustration below. This sharp tip functions like a drill bit, allowing the fastener to be driven directly into its installation material without the need for a pre-drilled pilot hole. Self-Drilling Screws also feature a drill flute which prevents material buildup by allowing the drilled material to be ejected from the hole more easily.



This style of fastener is typically used to secure sheets of metal to other materials. They are versatile fasteners that can create metal-to-metal, metal-to-wood connections, and can even be used with softer materials like plastic. Much like Self-Tapping Screws, Self-Drilling Screws are available in several head styles as illustrated below.







# **Drilling into the Differences**

Now that we've reviewed the features of each screw, it's easy to see just how different each fastener is from each other. While Self-Tapping Screws require predrilled pilot holes to be installed correctly, Self-Drilling Screws do not. Typically, Self-Tapping Screws are designed with sharp, self-cutting threads, whereas Self-Drilling Screws feature a drill bit tip that creates the hole and threads simultaneously as it's driven into place.

Overall, Self-Drilling Screws can save time on installation and cut down on the need to swap between drill bits when the end user is creating their fastened assembly. Alternatively, Self-Tapping Screws are available in a variety of head styles, tip shapes, and thread styles. It's important to note that these screws are not interchangeable, and choosing an incorrect fastener for an application could result in possible failures within your fastened assemblies.

Earnest Machine stocks a wide variety of both Self-Tapping Screws and Self-Drilling Screws in various thread types and head styles. If you have questions about which fastener suits your customer's needs or a specific application, please don't hesitate to contact us to speak with one of our fastener experts. We're here to help!

### **Contact Us Today:**

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