

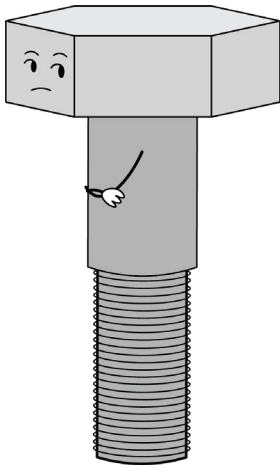


What's the Difference?

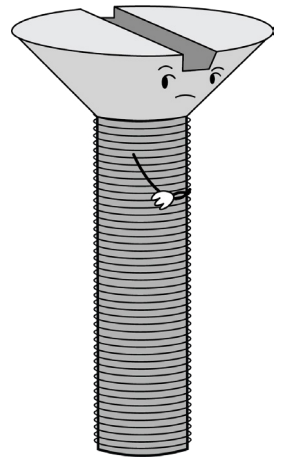
Machine Bolts Vs. Machine Screws



Machine Bolts vs. Machine Screws

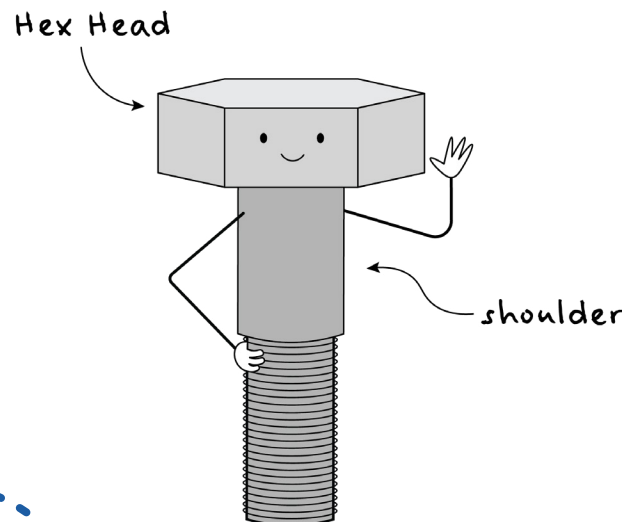


Machine bolts and machine screws have a wide variety of use throughout the fastener industry. Due to their similar names and appearances, it's easy to confuse these two products with each other. Despite their similarities, these fasteners serve distinct purposes. Their unique characteristics make them suitable for different applications.



What is a Machine Bolt?

A machine bolt is a fastener with a hexagonal (sometimes square) head. Machine bolts' threads often do not run the entire length of the bolt. Usually they have a shoulder, which is an unthreaded section of the shank beneath the head. Machine bolts are put into application with a hex socket or box wrench. They're then secured on the other end with a hex nut and washer. This evenly distributes the clamping load, ensuring a secure connection.

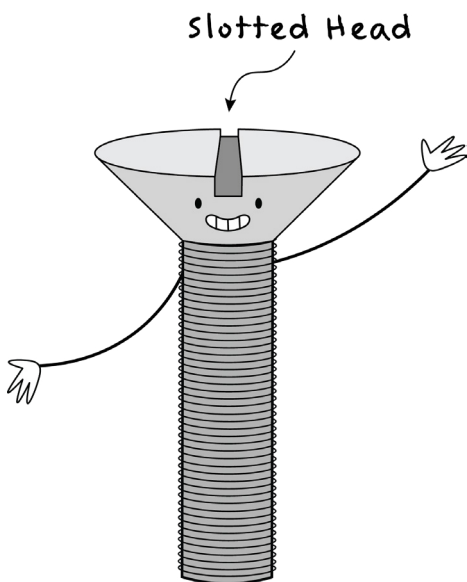


What is a Machine Screw?

A machine screw is a fastener that has a slotted head. They come in a wide variety of styles and combinations, such as:

- ◆ Hex Washer Head Slotted
- ◆ Hex Washer Head Unslotted
- ◆ Hex Head Slotted
- ◆ Hex Head Combo
- ◆ Pan Head Phillips
- ◆ Pan Head Combo
- ◆ Round Head Phillips
- ◆ Round Head Combo
- ◆ Round Head Slotted
- ◆ Flat Head Phillips
- ◆ Truss Head Slotted
- ◆ Truss Head Phillips
- ◆ Truss Head Combo

The slotted head makes the installation of a machine screw easier as these screws can be installed and uninstalled using a screwdriver. Machine screws are made to the Unified National Thread (UNC/UNF) standard thread form found under the ASME B1.1 spec. Machine screws are intended for use with pre-drilled and tapped holes and can be secured in place with a machine screw nut if the assembly requires it.



Let's Compare

The main differences between these two fasteners are in their intended use and their size range. Machine bolts are typically larger than machine screws. They are used in heavy-duty applications because they are primarily made from steel, which can carry heavier loads and withstand more stress from their assemblies. Alternatively, the versatility of machine screws make them ideal for general and light-duty applications. They are used where delicate and accurate fastening is required, such as in electronics, appliances, and smaller machinery. Machine screws can also be made from a wide range of materials, including plastics, softer metals, and carbon steel.

Understanding the specific requirements of an application is essential in determining whether a Machine Bolt or a Machine Screw is needed. If you have questions about which fastener is appropriate for a specific application, please don't hesitate to contact us. Call +1 (800) 327-6378 or email inquiry@earnestmachine.com. We're here to help!

