



Bumper Specialties

CYLINDRICAL



BS-1, BS-1-SD
 Dimension :
 - .500" (12.7mm)
 - .140" (3.5mm)
 Pieces :
 200 Per Pad
 5,000 Per Ctn



BS-5
 Dimension :
 - .500" (12.7mm)
 - .060" (1.5mm)
 Pieces :
 200 Per Pad
 5,000 Per Ctn



BS-6
 Dimension :
 - .500" (12.7mm)
 - .250" (6.4mm)
 Pieces :
 200 Per Pad
 5,000 Per Ctn



BS-11
 Dimension :
 - .650" (16.5mm)
 - .400" (10.2mm)
 Pieces :
 128 Per Pad
 2,560 Per Ctn



BS-18
 Dimension :
 - .500" (12.7mm)
 - .140" (3.5mm)
 Pieces :
 200 Per Pad
 5,000 Per Ctn



BS-24
 Dimension :
 - .810" (20.6mm)
 - .120" (3.0mm)
 Pieces :
 72 Per Pad
 2,520 Per Ctn



BS-34
 Dimension :
 - .375" (9.5mm)
 - .125" (3.2mm)
 Pieces :
 300 Per Pad
 6,000 Per Ctn

HEMISPHERICAL



BS-2
 Dimension :
 - .440" (11.1mm)
 - .200" (5.1mm)
 Pieces :
 242 Per Pad
 5,082 Per Ctn



BS-7
 Dimension :
 - .335" (8.5mm)
 - .085" (2.2mm)
 Pieces :
 450 Per Pad
 5,400 Per Ctn



BS-8
 Dimension :
 - .700" (17.8mm)
 - .380" (9.6mm)
 Pieces :
 98 Per Pad
 2,254 Per Ctn



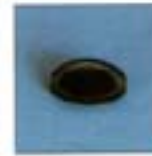
BS-12, BS-12-SD
 Dimension :
 - .375" (9.5mm)
 - .150" (3.8mm)
 Pieces :
 200 Per Pad
 5,000 Per Ctn



BS-15
 Dimension :
 - .620" (15.7mm)
 - .310" (7.9mm)
 Pieces :
 128 Per Pad
 3,200 Per Ctn



BS-22
 Dimension :
 - .375" (9.5mm)
 - .211" (5.4mm)
 Pieces :
 300 Per Pad
 6,000 Per Ctn



BS-27
 Dimension :
 - .312" (7.9mm)
 - .085" (2.2mm)
 Pieces :
 450 Per Pad
 5,400 Per Ctn

SQUARE & RECESSED



BS-3
 Dimension :
 - .500" (12.7mm)
 - .230" (5.8mm)
 Pieces :
 200 Per Pad
 5,000 Per Ctn



BS-4
 Dimension :
 - .780" (19.8mm)
 - .380" (9.7mm)
 Pieces :
 1 Per Pad
 2,000 Per Ctn



BS-47
 Dimension :
 - .750" (19.1mm)
 - .750" (19.1mm)
 Pieces :
 1 Per Pad or 4 Per Pad
 1,000 Per Ctn



BS-57
 Dimension :
 - .787" (20.0mm)
 - .886" (22.5mm)
 Pieces :
 1 Per Pad or 4 Per Pad
 1,000 Per Ctn

NEW PROFILES

Specialty Fasteners

WIDE RANGE OF EXTERNALLY THREADED AND NON-THREADED PARTS



UNIQUE BUSINESS MODEL

- PennEngineering has a unique business model for supplying high quality, high strength fasteners to the global automotive market.
- PennEngineering is the only fastener company in the world currently capable of providing this solution and these benefits to its customer base.

Specialty Fasteners

1. SCREWS are basically classified under 3 major types or categories:

A. MACHINE SCREWS

- needs a pre-tapped hole
- most commonly used

B. TAPPING SCREWS

- needs the hole to be drilled/pierced, but not tapped
- typical types are taptite screws (used on soft metal or casting), plastite screws (used for plastic) or High-Low screws (normally used on sheet metal).
- need to specify the type of point for leading the screw into the hole
e.g. type BT, type C or F

C. DRILLING SCREWS

- do not need a hole (but for positional accuracy, a pilot point is recommended)
- typically used in construction industries
- drilling screws consists of a drill bit tip followed by a tapping screw body.
- eliminates the need to bring work piece to the drill bench to prepare hole.

A SEM is an assembly consisting of a screw with one or more washers.

2. How to specify a screw (basic requirement)

- Head type e.g. Pan head
- Type of drive e.g. Cross Recess
- Thread used e.g. M3 or 6-32
- Length needed e.g. 10 mm or 0.5" (note: do not mix metric length and unified thread sizes)
- Type of screw e.g. taptite or machine screws or a SEM
- Material used e.g. Low carbon steel (LCS)
- Plating (if any) e.g. zinc clear

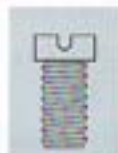
Optional :

- Standards e.g. JIS or IFI

Note: In all preparation, the precedence priority in terms of quality definition, the following order is adopted:

- First article approval documentation (which may include deviations)
- Print or Drawing specifications
- Part description
- Samples

Types of Head Style



CHEESE



BINDING



PAN



TRUSS



FLAT



OVAL



ROUND



HEXAGON



HEXAGON WASHER



FLAT WASHER

Types of Drive Style



SLOTTED



PHILLIPS
RECESS



SLOTTED & PHILLIP
COMBINATION



TX/6 LOBES



PZ DRIVE



SQUARE
SOCKET



HEXAGON
SOCKET

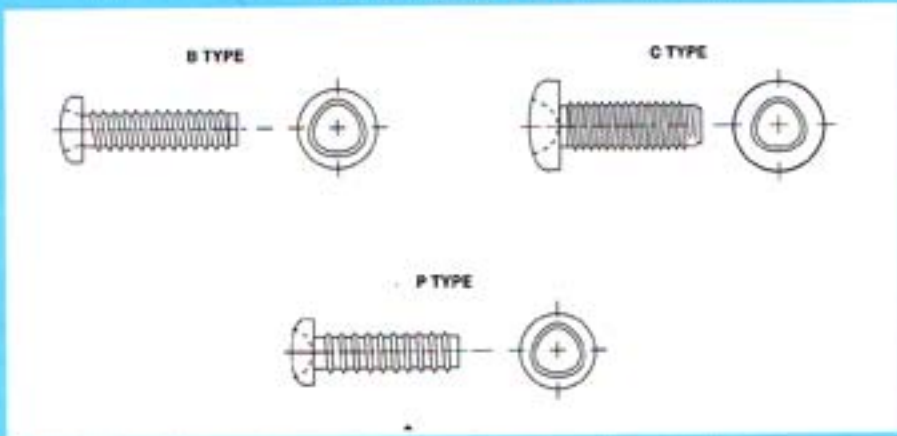


INDENTED
HEXAGON

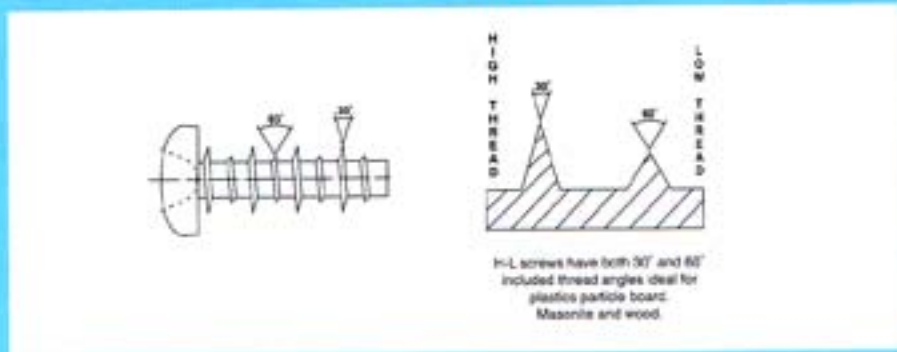


PLANE
HEXAGON

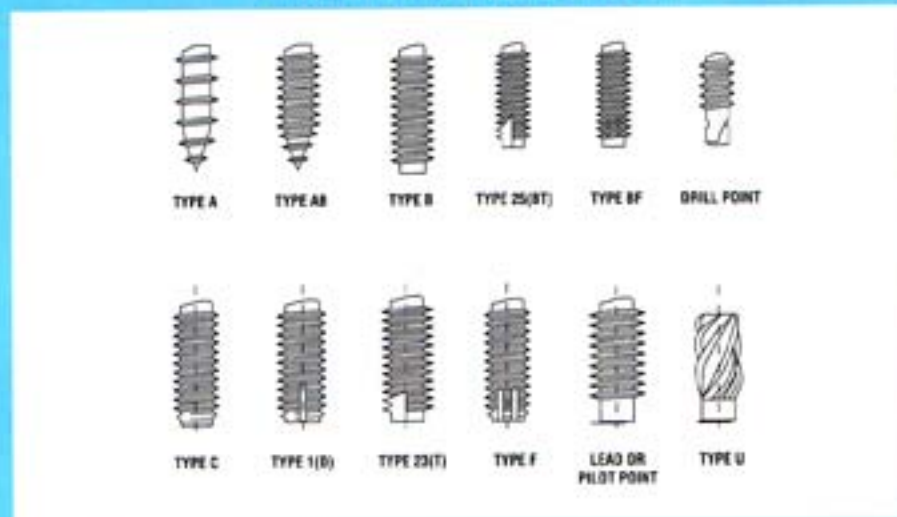
Self-Tapping Screws



Hi-Lo Screws



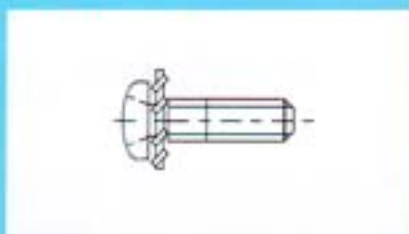
T Points of Self Tapping Screws



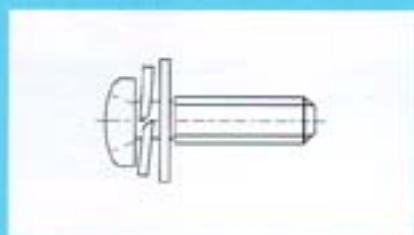
SEMs Screw with Split Washer



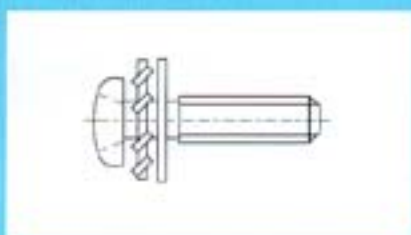
SEMs Screw with Tooth Lock Washer



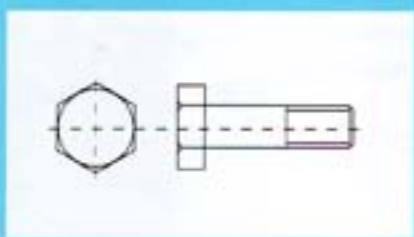
SEMs Screw with Spring Lock and Plain Washer



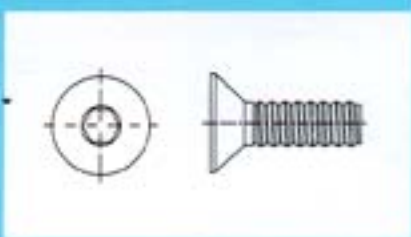
SEMs Screw with Tooth Lock and plain Washer

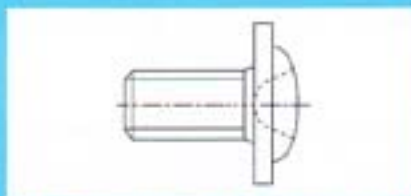


Hex Head Screw/Bolt

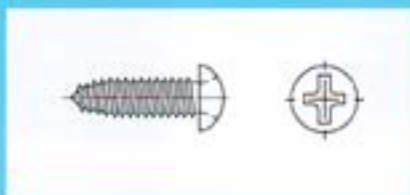


Hex Socket CSK HEAD Cap Screw

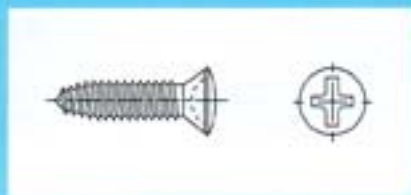




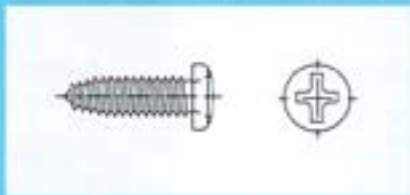
Pan Washer Head Tapping Screw



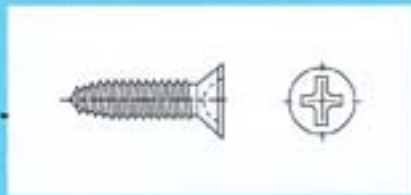
Round Head Tapping Screw



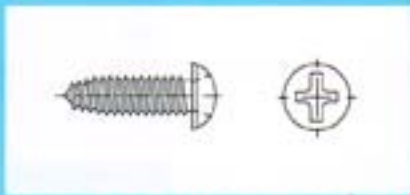
Oval Head Tapping Screw



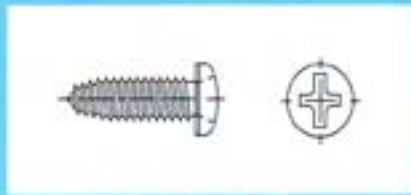
Binding Head Tapping Screw



Flat Head Tapping Screw



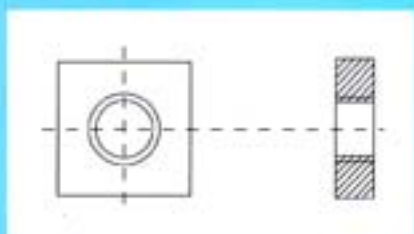
Truss Head Tapping Screw



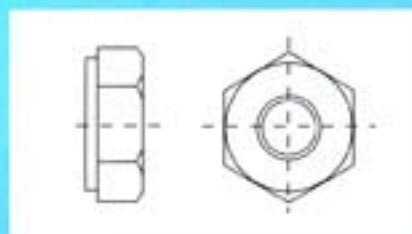
Pan Head Tapping Screw

Specialty Fasteners | NUTS

Square Nuts



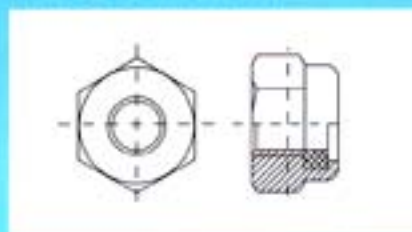
Hexagon Nuts



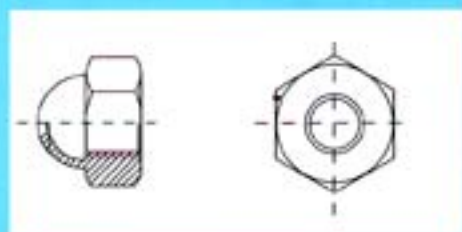
Hex Nut with Flange



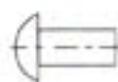
Hex Nylon Insert Nut



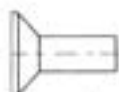
Domed Nut



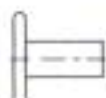
Solid Rivets



THIN ROUND HEAD



COUNTERSUNK HEAD



FLAT HEAD



PAN HEAD

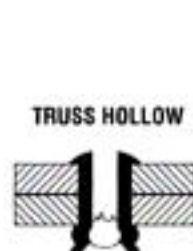
Blind Rivets



CSK HEAD



CSK HEAD



TRUSS HOLLOW



TRUSS HOLLOW



Specialty Fasteners

1. SCREWS are basically classified under 3 major types or categories:

A. MACHINE SCREWS

- needs a pre-tapped hole
- most commonly used

B. TAPPING SCREWS

- needs the hole to be drilled/pierced, but not tapped
- typical types are taptite screws (used on soft metal or casting), plastite screws (used for plastic) or High-Low screws (normally used on sheet metal).
- need to specify the type of point for leading the screw into the hole e.g. type BT, type C or F

C. DRILLING SCREWS

- do not need a hole (but for positional accuracy, a pilot point is recommended)
- typically used in construction industries
- drilling screws consists of a drill bit tip followed by a tapping screw body.
- eliminates the need to bring work piece to the drill bench to prepare hole.

A SEM is an assembly consisting of a screw with one or more washers.

2. How to specify a screw (basic requirement)

- Head type e.g. Pan head
- Type of drive e.g. Cross Recess
- Thread used e.g. M3 or 6-32
- Length needed e.g. 10 mm or 0.5" (note: do not mix metric length and unified thread sizes)
- Type of screw e.g. taptite or machine screws or a SEM
- Material used e.g. Low carbon steel (LCS)
- Plating (if any) e.g. zinc clear

Optional :

- Standards e.g. JIS or IFI

Note: In all preparation, the precedence priority in terms of quality definition, the following order is adopted:

- First article approval documentation (which may include deviations)
- Print or Drawing specifications
- Part description
- Samples