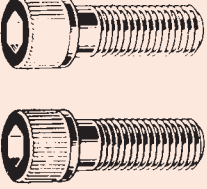
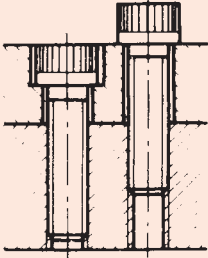
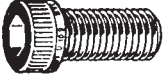
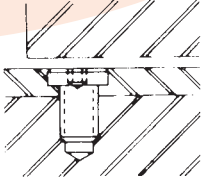
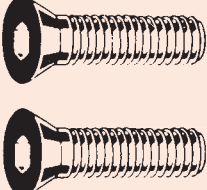
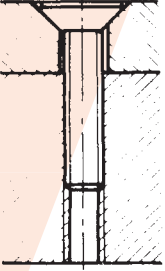
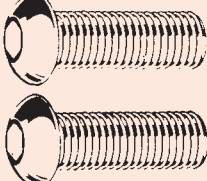
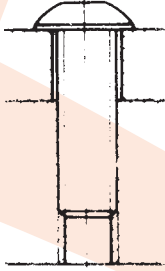
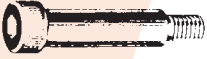
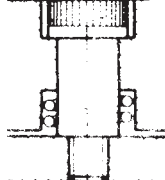
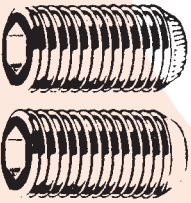
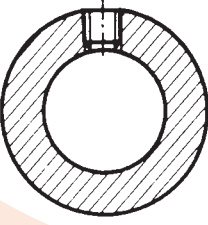


| Type   | Application   | Features   |
|--|---|--|
| <p>Socket Head Cap Screws</p>  <p>Alloy Steel</p> <p>Stainless Steel</p>          |    | <p>Suitable for all high tensile applications. Use Stainless for corrosive-cryogenic or elevated temperatures.</p>   |
| <p>Socket Low Head Cap Screw</p>  <p>Alloy Steel</p>                              |    | <p>Suitable for use in parts too thin for std. SHCS; and for applications with limited clearances.</p>   |
| <p>Countersunk Socket Head Screws</p>  <p>Alloy Steel</p> <p>Stainless Steel</p> |   | <p>Controlled angle under the head ensures maximum flushness and side-wall contact. Non-slip Hex socket prevents marring of material. Note: Inclined angle under the head varies as follows:<br/>                     BSW &amp; BSF Threads - 90°<br/>                     UNC &amp; UNF Threads - 82°<br/>                     Metric Threads - 90° above M20-60°</p> |
| <p>Button Head Screws</p>  <p>Alloy Steel</p> <p>Stainless Steel</p>            |  | <p>Low heads streamline design. Use them in materials too thin to countersink; also for non-critical loading requiring heat treated screws.</p>  |
| <p>Shoulder Screws</p>  <p>Alloy Steel</p>                                      |  | <p>Replaces costly special parts — shafts, pivots, pins, guides, linkages and trunnion mountings. Also standard for tool and die industries.</p>   |
| <p>Socket Set Screws</p>  <p>Alloy Steel</p> <p>Stainless Steel</p>             |  | <p>Fasten collars, sleeves, gears, knobs on shafts. Locate machine parts.</p> <p>Cone, half dog, oval, cup and self locking knurled cup points are standard.</p>   |

Deep, accurate socket for uniform wrenching power and high maximum torques. Precise knurls for easier handling and quick identification.

Precision forged head for continuous grain flow and maximum strength.

U130/12.9

Elliptical head to shank fillet for increased fatigue life.

Radiused-root runout increases fatigue life.

SHANK

ROOT

BODY

**CONVENTIONAL THREAD RUNOUT** Note sharp angle at root where high stress concentration can develop cracks in the screw.

**UNBRAKO RADIUSED-ROOT RUNOUT THREAD**— Controlled radius of runout root provides a smooth form that distributes stress and increases fatigue life of fastener considerably.

Fully formed radiused threads rolled to maintain continuous grain flow for greater tensile and fatigue strength.

Heat treatment in a controlled atmosphere for maximum uniform strength and surface integrity without brittleness or decarburisation.

Accurate control of socket depth gives more wrench engagement than other screws, permitting full tightening without cracking or reaming the socket, yet maintaining ample metal in the crucial fillet area for maximum head strength.

Controlled head forging forms uniform grain flow with unbroken flow lines, makes heads stronger, prevents failure in vital fillet area and adds to fatigue strength of the screw.

Cross-section of radiused fully formed threads. Contour following flow lines provide extra shear strength in threads, resist stripping and provide high fatigue resistance. Note the large root radius, an UNBRAKO socket screw development that increases fatigue life of the threads.