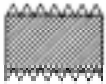


Glossary of Fastener Terms



Tensile Strength - Force or stress required to break a fastener when pulled in straight tension. When expressed as force, lbs..., it applies to a specific size part. Expressed as a stress, psi, means the force is applied over a specific area and it could apply to a range of sizes. For example, socket screws from #0 to 1-1/2 inch can withstand an applied stress of 170,000 psi.



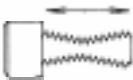
Stress Area - Theoretical area in the thread section of a fastener over which the load is applied.



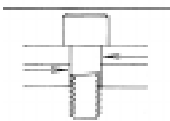
Yield Strength - This is the measure of the resistance of a material to plastic (permanent) deformation. It is usually at a point of 0.2% permanent strain.



Torsion - Twisting force applied to a fastener during tightening.



Elongation - Longitudinal stretching of a fastener caused by a tensile load due either to tightening or to the external load.

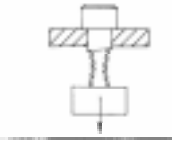


Shear Strength - The resistance of a fastener to transverse loading. This type of load should only be applied to a dowel pin or the unthreaded section of a screw.

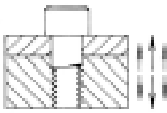


Rockwell Hardness - One method of measuring hardness of a metal, generally related to the material tensile strength. Normally stated as "C" scale readings, but may be taken as "A", 30N or 15N scale readings when limited penetration is desired. Limited penetration is required when checking case hardness or thin parts.

Glossary of Fastener Terms



Creep Strength - At elevated temperature metal under stress elongates. This elongation increases with time and temperature. To prevent failure it is often necessary to change to heat resistant materials.



Fatigue Strength - Under variations in applied stress a fastener feels internal stretching that can cause rupture after a specific number of cycles. The number of cycles to failure for a specific load is the fatigue life of the screw. In rigid assemblies preloading above the external load should eliminate fatigue failure.



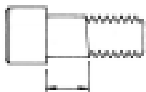
Seams - Inherent discontinuity in raw materials that run longitudinally. They are folds in the material, not fractures at the grain boundary.



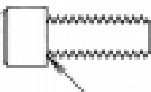
Cracks - Fractures passing through or across grain boundaries without the inclusion of foreign elements.



Shank - Portion of a fastener between the head and point.



Body - The unthreaded section between the head and threads.

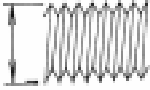


Fillet - Concave junction between the head and shank.

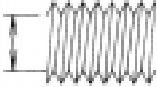


Pressure Flanks - Flank of thread that faces the head of the fastener and which applies the load to the internal threads

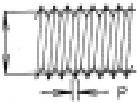
Glossary of Fastener Terms



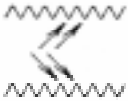
Major Diameter - Largest diameter of the thread.



Minor Diameter - Smallest Diameter of a thread



Pitch Diameter - Theoretical diameter at which the thread and thread space are of equal thickness.



Root - The base of the V thread. Holo-Krome produces parts with radiused root threads.



Runout Threads - The thread section that is between the full thread and the fillet or body. Holo-Krome specifies special dies to produce a large radius in this area thus increasing fatigue life.

Standard Fastener - Product represented by standardized dimensions.

Stock Fasteners- Product commercially available at the distribution level. See Holo-Krome's current catalog for stock sizes.