

CARBON BAR PRODUCTS SELECTION GUIDE



COLD FINISHED

1018 — A low carbon steel with a medium manganese content. Has good hardening properties, fair machinability and is excellent for cold bending and forming operations. Readily brazed and welded. Suitable for shafting and for applications that do not require the greater strength of high carbon and alloy steels. Conforms to ASTM A-108 and AMS 5069. (Not applicable to bars under 2¹⁵/₁₆" and sizes lighter than 29.34 lbs per foot.)

1045 — Is a higher carbon content imparts increased strength to the steel. Response to heat treatment is excellent and the resulting mechanical properties which can be obtained permit a wide usage in the production of machinery parts and shafts. Conforms to ASTM A-108.

1144 — Is a medium carbon, resulfurized, free cutting steel that responds well to heat treatment. The relatively high carbon, high manganese content provides a steel with good strength and wear resistance. It is often used for induction hardened parts, and screw machine applications. Conforms to ASTM A-108.

12L14 — Is the most widely used steel for screw machine parts applications. Improved machinability is obtained by the addition of lead which acts as an internal lubricant allowing increased machining speeds and prolonging cutting tool life. Conforms to ASTM A-108.

GROUND & POLISHED SHAFTING

Extreme size accuracy, straightness and concentricity to minimize wear in high speed applications. **Turned**, ground & polished bars can be machined unsymmetrically, as in key-seating, with minimum distortion because cold drawing strains are not developed. **Drawn**, ground & polished bars combine the strength advantages of cold drawn stock with extra accuracy and lustrous finish. Conforms to ASTM A-108 and QQ-S-637.