

CARBON BAR PRODUCTS SELECTION GUIDE



HOT ROLLED

MERCHANT BAR QUALITY

Only a minimum discard is made from each ingot, but bars should be free from visible piping. Seams and other surface irregularities may be present. Chemistry is subject to ladle analysis only. Easily machined, welded, and formed but not particularly recommended for forging, heat treating or complicated machining operations. Conforms to ASTM A575 and QQ-S-630.

Low Carbon

M1010 — Low carbon, general purpose merchant quality steel featuring economy plus formability and weldability.

M1020 — A low carbon, general purpose, merchant quality steel, produced to wider carbon and manganese ranges than standard steels. Suitable for forming and welding.

Medium Carbon

M1044 merchant quality steel is similar to AISI 1045. Because it contains lesser amounts of manganese (.25/.60), strength and responsiveness to heat treatment are slightly lower.

ASTM A36 — Bars designed for use in structural applications. Minimum physical properties of 36,000 psi yield strength and 58,000 psi tensile strength.