

## 4340 CHROME MOLY BAR

4340 is a chromium-nickel-molybdenum alloy steel. It is known for its strength, and it is an excellent choice for highly stressed parts. 4340 can attain much deeper hardenability than 4100 series steel, and it also has excellent non-distorting properties for an alloy steel, with high fatigue/tensile ratio and the capability to maintain strength, ductility, and toughness at relatively high temperatures.

### 4340 Chemical Analysis

C	Mn	P (max)	S (max)	Si	Cr	Ni	Mo	Cu (max)
.38/.43	.65/.85	.025	.025	.15/.30	.70/.90	1.65/2.00	.20/.30	.35

### 4340 BAR

AED stocks several sizes of 4340 round bar, generally in the cold finished and normalized & tempered condition. Other sizes and conditions, as well as hex, flat and square bar, and plate may also be available upon request.

4340 bars are produced in “random lengths” that can range between 11 to 13 feet long. The best pricing is always when you order full lengths, which can be cut for economical shipping methods. AED also offers “cut-to-size” pieces.

4340 bars meet AMS-S-5000, AMS-6415, AMS-2301, and other specifications.

### 4340 Bar Typical Mechanical Properties:

Annealed Condition \*

<b>Tensile Strength (psi)</b>	110,000
<b>Yield Strength (psi)</b>	66,000
<b>Elongation (% in 2")</b>	23
<b>Reduction of Area (%)</b>	49
<b>Brinell Hardness</b>	197

\* Most of our 4340 bars are supplied as “Condition E” (Normalized & Tempered), but most available technical data tends to be provided in “Annealed Condition.”

Note: "Typical Mechanical Properties" have been compiled from a variety of sources. Information is deemed reliable, but it is not guaranteed. This data is provided for information only, **NOT FOR DESIGN PURPOSES.**