

## 1018 COLD FINISHED STEEL BAR

1018 is a general purpose low-carbon mild steel that is relatively soft, easily weldable and formable. It has good case hardening qualities and is especially suited to cold forming and bending operations. Material is suitable for parts which require cold forming (such as crimping, swaging, or bending). Stress-relieving may be necessary to prevent cracking when attempting severe bends.

### 1018 Chemical Analysis

| C       | Mn      | P (max) | S (max) |
|---------|---------|---------|---------|
| .15/.20 | .60/.90 | .04     | .05     |

### 1018 BAR

AED stocks a diverse range of 1018 cold finished bars, mainly in rounds and flats, although squares and hexes are also available.

1018 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.

1018 cold finished bar meet ASTM A108.

### 1018 Bar Typical Mechanical Properties:

|                               | 1” Round, Cold Drawn | 7” Round, Turned & Polished |
|-------------------------------|----------------------|-----------------------------|
| <b>Tensile Strength (psi)</b> | 85,000               | 70,000                      |
| <b>Yield Strength (psi)</b>   | 70,000               | 45,000                      |
| <b>Elongation (% in 2”)</b>   | 28                   | 36                          |
| <b>Reduction of Area (%)</b>  | 58                   | 58                          |
| <b>Brinell Hardness</b>       | 167                  | 143                         |

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.**