

C1009 TUBING



AK Tube LLC

A Subsidiary of
AK Steel Corporation



Sometimes all it takes is a simple change in material to help a customer uncover cost savings. In the case of an ATV manufacturer, we recommended an alternative material which provided similar mechanical properties as a high-strength, low-alloy steel without the grade extra. The new material provided the added benefits of improved reliability, repeatability, weld integrity and less variation from heat to heat. Result: improved bending, formability, fabrication, and throughput, as well as a 5% material savings.

Product Overview

- AK Tube's C1009 is a cost savings alternative to high strength low alloy steel tubing. AK Tube's C1009 is supplied to a 50 ksi minimum yield strength and 62 ksi minimum tensile strength.

Benefits of C1009

- High strength
- High elongations compared to either an HSLA, C1020 or C1021
- Formability
- Gauge control (typically less than .004" spread)
- Reliability and repeatability during fabrication
- Consistent formability from heat to heat

Potential applications with C1009

- Cost savings alternative to conventional high strength low alloy steel tubing
- ATV frame tubing
- Handrail for agricultural equipment
- Hospital bed frames
- An alternative to HSLA Gr. 50 for hydroforming
- Where high strength and ductility are required
- Alternative for some DOM applications

TYPICAL MECHANICAL PROPERTIES

Based on a 1" round x 16 ga. tube section.

Yield Strength—70 ksi

Tensile Strength—75 ksi

Elongation - 25 %

CHEMICAL ANALYSIS

- Carbon .05 –.065
- Manganese .60—.90
- Phosphorous .015 max
- Sulfur .015 max
- Sulfur .015 max

PRODUCT AVAILABILITY

Available in 3/4" through 6" OD and 20 gauge (0.035") through 11 gauge (0.120")

SPECIFICATIONS

Product may be manufactured to either ASTM A500 or ASTM A 513 Type 1 specifications. Please inquire.

TECHNICAL ASSISTANCE

For additional information or to obtain samples of this product, contact our Technical Service Department at (800)955-8031 or email sales@aktube.com



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Data referring to mechanical properties and chemical analyses are the result of test performed on specimens obtained for specific locations of the products in accordance with prescribed sampling procedures; any warranty thereof is limited to the values obtained at such locations and by such procedures. There is no warranty with respect to values of the materials at other locations.

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