



CERTIFICATE OF ANALYSIS

Control No 26198
 Grade 8630
 Description. 1/4" SQ +.001 -0

Spec.: AISI 8630

Heat No	Melt Source	Country of Origin	Weight:
231740	CHARTER	USA	6125# N & 6425# G

Specification	CHEMISTRY															
	0.28 0.33	0.70 0.90	0.035 MAX	0.040 MAX	0.15 0.35	0.40 0.70	0.40 0.60	0.15 0.25								
Heat No	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	O ₂	Al	Ti	Sn	V	Pb	
231740	.30	.79	.012	.013	.240	.58	.48	.18	.08		.024	.003	.009	.001		

MECHANICAL PROPERTIES					
Tensile	Yield	Hardness	R/A	Elong. Over 2"	Grain Size

BY _____

- A Tolerance** Describes the accountable manufacturing tolerance.
- B Specification Authority** Describes the organization that created the specification (AISI is the American Iron and Steel Institute).
- C Grade** Specifically refers to chemical content and physical properties.
- D Melt Source** Denotes actual mill where iron was smelted.
- E Heat Number** The special lot or "melt" from which the product was produced.
- F Chemical Analysis** Lists the content values of various elements expressed as a share of one percent (ex. .30 of carbon=.003).
- G Tensile Strength** Also called ultimate strength, measurement at which steel exhibits strain.
- H Yield Strength** Related to tensile, yield is the stress level at which steel exhibits strain.
- I Mechanical Properties** Represents values determined by physically testing the product.
- J Elongation** Elongation is the increase in gage length or "pull" when steel is tensile tested.

Notice that chemical values do not total 100%. The balance of steel chemistry would consist of iron and trace elements.

