

IMR TEST LABS

A Curtiss-Wright Business Unit
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February 20, 2008

Joe Smith
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TEST REPORT

IMR Report Number 200800000

PO Number
5555

Date Received
February 13, 2008

Material
6061-T6 Aluminum

Part #
777

Heat #
EE55EE

Specification(s)
ASTM B 221-06

SUMMARY

One sample was received for chemistry, tensile and hardness testing.

The sample **meets** the chemical and tensile requirements of ASTM B 221-06 for a type 6061-T6 aluminum alloy.

Hardness is also reported.

The results are on the following page(s).



Reviewed by

Reviewed by



Andrew J. Waldron
Lead Chemist

Jim Andrews, CWI
Manager, Mechanical & Machine Shop

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CHEMISTRY

Element	Sample	Specification
Si	0.67	0.40 - 0.8
Fe	0.39	0.7 Maximum
Cu	0.32	0.15 - 0.40
Mn	0.10	0.15 Maximum
Mg	0.88	0.8 - 1.2
Cr	0.07	0.04 - 0.35
Zn	0.06	0.25 Maximum
Ti	0.03	0.15 Maximum
OE	<0.05	0.05 Maximum
OT	<0.15	0.15 Maximum
Al	Remainder	Remainder

OE = Other elements, each.

OT = Other elements, total.

Results in weight percent unless otherwise indicated.

Method(s): ASTM E 1251-04

TENSILE PROPERTIES

	Tensile Strength (ksi)	Yield Strength (ksi)	Elongation (%)
Sample	47.3	42.9	17
Specification	38.0 Minimum	35.0 Minimum	10 Minimum

The sample was machined to a diameter of 0.50 inches; gauge length was 2.00 inches. Yield strength was determined by the 0.2% offset method. Crosshead speed was 0.1 in./min. to yield and 0.5 in./min. to fracture. Method(s): ASTM B 557-06

HARDNESS

	HRBW (median of four readings)
Sample	57

Method(s): ASTM E 18-07