

CERTIFICATION REPORT

CUSTOMER: **STONE TUCKER INSTRUMENTS**

DATE: **12/19/18**

SERIAL NO: **51112**

ITEM: **5-STEP BLOCK, INCH**

PO NO: **O18121802**

MATERIAL: **7075-T6 ALUMINUM, ANODIZED**

LOT NO: **20199435**

APPLICABLE SPECIFICATION: **ASTM E797 FIG. X1.2, U.S. CUSTOMARY BLOCK, INCHES**

MEASURING TECHNIQUE USED:

REPLICATION
XX DIRECT MEASUREMENT
OTHER

NIST TRACEABLE EQUIPMENT USED /TEST NO:

VIDEO MEASUREMENT SYS 821/262115-99
DIAL INDICATOR 683/287532-16
MICROMETER 683/287532-16
XX GAGE BLOCKS 683/287532-16

Manufactured in accordance with Quality Assurance Program Revision 3 dated 8/31/17 that complies with MIL-Q-9858A, 10CFR50 App B, ANSI N45.2, ASME Sec III Div 1 and MIL-I-45208A.

MATERIAL TEST REPORT ATTACHED

STEP No.	STEP THICKNESS ± 0.001 "
1	0.100
2	0.200
3	0.300
4	0.400
5	0.500

DIMENSIONS IN INCHES

IT IS CERTIFIED THAT THIS REFERENCE STANDARD HAS BEEN MANUFACTURED IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS AND INSPECTED WITH INSTRUMENTS CALIBRATED IAW MIL-STD-45662 (LATEST REV.), ISO 10012-1 AND ANSI/NCSL Z540-1 USING MASTER GAGE BLOCKS AND MICRORULE MASTER SCALES DIRECTLY TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST).

AUTHORIZED SIGNATURE



PHILIP R. HERMAN, QA MANAGER



PH TOOL
REFERENCE STANDARDS

6021 EASTON ROAD, PIPERSVILLE, PA 18947 USA
T: 267-203-1600 · F: 267-203-1601 · www.phtool.com

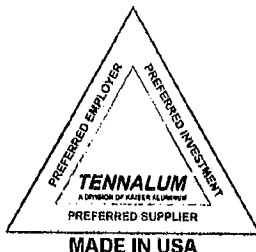
This Certification Report shall not be reproduced except in full, without the written approval of PH TOOL.

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Certification Report filename: CSTI51112

KAISER ALUMINUM FABRICATED PRODUCTS

Tennalum
309 Industrial Drive
Jackson, TN 38301
731-423-2811



CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

1.0" x 1.5"
7075-T6 Al
Lot# 20199435
Kaiser
Alro

PH PO 9077

CUSTOMER PO NUMBER: PV11547295-1		CUSTOMER PART NUMBER: 21984100		PRODUCT DESCRIPTION: Cold Finished Rectangle	
KAISER ORDER NUMBER: 707082	LINE ITEM: 1	SHIP DATE: 10/19/2015	ALLOY: 7075	TEMPER: T651	
WEIGHT SHIPPED: 2440 lbs.	QUANTITY: 112 pcs.	B/L NUMBER: 38848	DIAM/DAF/THKNS: 1.000 in.	WIDTH: 1.500 in.	LENGTH: 144.0 in.
SHIP TO: Alro Steel Corp 5859 Alro Park Drive Pottersville, MI 48876 USA			SOLD TO: Alro Steel Corp P O Box 927 Jackson, MI 49204 USA		

Test Code: 1000 AC

Actual Physical Properties

Lot Number	LONG. UTS ksi	LONG. YTS ksi	LONG. ELONG. %
20199435	82.7 83.0	77.2 77.2	15.5 16.0

Chemical Composition, WT. % (Aluminum Remainder)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OTHERS EACH	OTHERS TOTAL	Lot
Actual	0.17	0.23	1.4	0.02	2.7	0.19	5.9	0.02			20199435
Max	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.15	
Min			1.2		2.1	0.18	5.1				

Specifications

Standard: ISO 9001,ASTMB211-12,AMS4123H,AMS-QQ-A-225/9A AMS4122L

ALRO STEEL/METAL



RT08182342

RECEIVED

OCT 21 2015

ALRO STEEL PV

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ("Kaiser") hereby certifies that the metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

John Rennekamp, Quality Manager

John Rennekamp

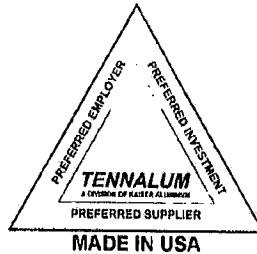
Plant Serial: 222163

Kaiser Order Number: 707082

Line Item: 1

KAISER ALUMINUM FABRICATED PRODUCTS

Tennalum
309 Industrial Drive
Jackson, TN 38301
731-423-2811



CERTIFIED TEST REPORT
<http://Online.KaiserAluminum.com>

Miscellaneous Notes

Made in USA

This material was melted and manufactured in the USA. Mercury is not a normal contaminant in aluminum alloys. Neither mercury nor any of its compounds were utilized by Kaiser Aluminum in the manufacture of this material. AS9100C:2009 The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

This material meets the requirements of (cold finished) T6 temper, AMS 4122L and QQ-A-225/9E (CANCELLED). This material is RoHS 2 - 2011/65/EU compliant.

PH TOOL

This material used for

Standard no. 51112
Date 12-19-18
QA Approval [Signature]

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ("Kaiser") hereby certifies that the metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

John Rennekamp, Quality Manager

John Rennekamp

Plant Serial: 222163

Kaiser Order Number: 707082

Line Item: 1

Certification Report

Positive Material Identification (PMI)



6021 Easton Road, Pipersville, PA 18947
TEL: 267-203-1600 FAX: 267-203-1601
EMAIL: info@phtool.com

Result:

Exact Match: 7075-T6 Aluminum

Heat/Lot #: 20199435

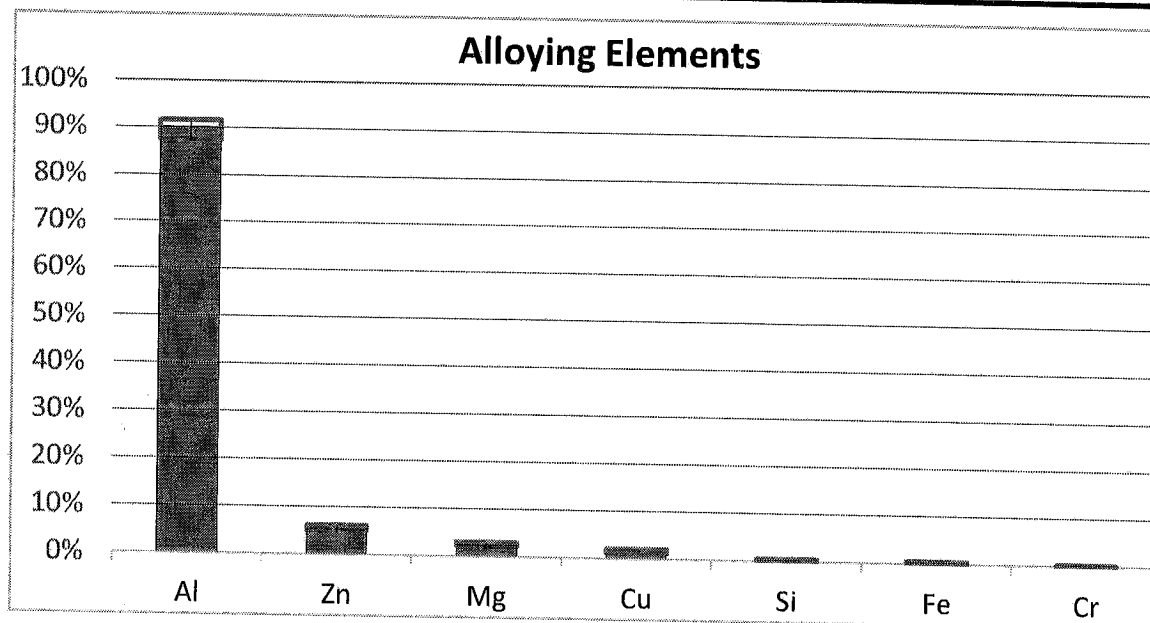
Test Date: 1/11/2016

Equipment: Olympus Delta Professional XRF Analyzer

Operator's Initials: TH

Equipment Serial No: 540865

Element	Composition (%)	+/- Device Error	Min (%)	Max (%)
Al	90.09	0.38	87.32	91.42
Zn	5.53	0.11	5.10	6.10
Mg	2.40	0.39	2.10	2.90
Cu	1.24	0.03	1.20	2.00
Si	0.27	0.03	0.00	0.40
Fe	0.23	0.01	0.00	0.50
Cr	0.22	0.02	0.18	0.28



Authorized Signature:

PHILIP R. HERMAN, QA MANAGER