McMASTER-CARR®

Certificate

404-346-7000
404-349-9091 (fax)
atl.sales@mcmaster.com

Purchase Order	Order Date	Placed By	McMaster-Carr Number	Number of Certificates
P1443524	2/3/2022	Jane Beattey	3835098-01	1

Line		Product	Ordered	Status	Certificate
3	9056K34	Multipurpose 6061 Aluminum Round Tube, 1/2" Wall Thickness, 2-3/4" OD, 3 Feet Long	1 each	1 each delivers February 7	152–2554

Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

Certified Inspection Report

Hydro

Hydro Extrusion USA, LLC
53 POTTSVILLE STREET
--
CRESSONA, PA
17929-0187

--

Invoice To Customer
COPPER & BRASS SALES INC
ATTN: ACCOUNTS PAYABLE
P.O. BOX 5116
--
SOUTHFIELD, MI - 48086

Ship To Customer
COPPER & BRASS SALES INC
8001 THYSSENKRUPP PARKWAY
--
--
NORTHWOOD, OH - 43619

Sales Order Number	Line No.	Customer P/O	Cert Number	Page
1101759324	11	5400544509-110	HYDRO3394067	Page 1 of 2
			Cert Creation Date	**Cert Print Date**
			23-MAR-21	23-MAR-21

Quantity Shipped		Date Shipped	Item Description	Specification
1163	LB	23-MAR-21	Extruded Seamless Tube ODxWALL 2.750 OD x 0.500 WALL 240.000 IN LN FIN M-MILL WF 4.156 F 3 CS 2.8 6061T6511	ASTM B241/B241M REV 16 Table 3 Tensile Property Limits for Extruded Tube, Inch-Pound Limits Table 5 Composition Limits AMS QQ-A-200/8 REV A
B/L		**Item No.**		
11679?0		G031038946		
Delivery Id		**Item No. Rev**	Marking CONTINUOUS;	
5274302		--		
CustomerPart No.				
ALTUB00171				

Applicable Specifications, Revisions and Exceptions

For U.S. Government Sales (when applicable to extrusions):
Items supplied are compliant with the Buy
American Act DFARS 252.225-7001
Melted in the USA or a qualifying country, as identified in the Buy
American Act (DFARS 252.225-7001)

COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on this certified inspection report. Remainder is Aluminum.

Hydro Extrusion USA, LLC hereby certifies that the extrusions covered in this report are within the acceptable ranges of the sections or the specification tables, excluding footnotes, identified herein. Chemical composition may be based on results provided by external billet suppliers. Further information on processing, testing including ASTM B557, and inspection is available at www.hydro.com/technicalspecificationsENA. Sales are governed by the Extrusion North America Standard Terms and Conditions of Sale available at www.hydro.com/termsconditionsENA, unless otherwise mutually agreed in writing.

Signature And Title

Darrell Wentich
Quality Manager

23-MAR-21

Quantities per Lot / Packages

Package Number	Lot Number	Quantity	UOM	Weight	
				Gross	Net
G12-PKG3858330	24215585	14	PCS	1169	1163

From: ThyssenKrupp Materials NA

Cust. MCMASTER-CARR SUPPLY CO Del.: 2408111350

CstAr 2473 CstOr RS-50058060

Wgt.: 74.764 LB Date 03/31/2021

Hydro

Hydro Extrusion USA, LLC
53 POTTSVILLE STREET
--
CRESSONA, PA
17929-0187

Certified Inspection Report

Cert Number	HYDRO3394067	Page	Page 2 of 2
Cert Creation Date	23-MAR-21	Cert Print Date	23-MAR-21

Sales Order Number	Line No.	Customer P/O
1101759324	11	5400544509-110

Composition Limits

Alloy	Si PCT (%)		Fe PCT (%)		Cu PCT (%)		Mn PCT (%)		Mg PCT (%)		Cr PCT (%)		Zn PCT (%)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
6061	0.40	0.80	---	0.70	0.15	0.40	---	0.15	0.80	1.20	0.04	0.35	---	0.25

Alloy	Ti PCT (%)		Others Each PCT (%)		Others Total PCT (%)	
	Min	Max	Min	Max	Min	Max
6061	---	0.15	---	0.05	---	0.15

Composition Results

Heat / Cast	Country of Melt	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others Each	Others Total
4050332	US	0.66	0.25	0.19	0.04	0.89	0.06	0.03	0.02	--	--

Mechanical Property - Test Limits

Test Type		UTS - L		TYS - L		EL 4D-Long	
UOM		KSI		KSI		PCT	
# of Test		--		--		--	
Test Temper	Lot Number	# of Tests	MIN Value	MAX Value	MIN Value	MAX Value	MIN Value	MAX Value
T6511	2421585	1	45.5	45.5	40.6	40.6	15.0	15.0

Notes

Mercury is not a normal contaminant in aluminum alloys and we do not knowingly use it in the manufacture of our goods

Extruded in the USA

Extrusions produced to -T6511 temper also meet -T6 temper requirements

--

From: ThyssenKrupp Materials NA

Cust. MCMASTER-CARR SUPPLY CO Del.: 2408111350

CstAr 2473 CstOr RS-50058060

Wgt.: 74.764 LB Date 03/31/2021