



Wolverine Tube, Inc
 2100 Market Street
 Decatur, AL 35601
 800-633-3972

**CERTIFIED INSPECTION REPORT FOR
 EXTRUDED PRODUCTS**

MANIFEST NUMBER 35799	OUR ORDER NUMBER 18499-2	DIE NUMBER WS10417	DATE OF SHIPMENT 11/22/2022
	CUSTOMER PO 600265	ALLOY 6061	TEMPER T6
	CUSTOMER PART NUMBER 1838601	DESCRIPTION 1/4 x 1-1/2 Flat Bar	

We hereby certify that the material covered by this report has been inspected in accordance with, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown.

Tickets:
185742

Application Specifications: ASTM B221-20

J. Dunzweiler
 Jason Dunzweiler, Quality Assurance
 Wolverine Tube Inc.

Mechanical Properties

Order #	Item #	Lot #	Cast Number	Alloy	Alloy Type	Test No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
18499-2-1/A/11			086317	6061	P	1	11/20/22	41.0	36.3	10%
18499-2-1/A/11			086317	6061	P	2	11/20/22	43.4	38.6	10%

Chemical Limits

	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Each	Total
ALLOY 6061 TYPE P																				
Minimum	0.40	0.14	0.15	0.00	0.8	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.15
Maximum	0.80	0.40	0.29	0.15	1.2	0.35	0.00	0.25	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Density:	0.098 g/cm3																			

Chemical Composition

Cast Number	Alloy Type	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other	
086317	6061 P	0.55	0.17	0.19	0.02	0.8	0.07	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	REM	0.00

Note: The cast #'s for all lot numbers ending in /12, /13, etc are the same for lot #'s ending in /11. The numbers after the slash denote a different heat treat oven load.

Country of Origin: U.S.A