



Precision5®

Aluminum Tooling Plate

Ellwood has created a better, vertically-integrated way to source Aluminum Tooling Plates with our aluminum casthouse in Hubbard, Ohio and our fully automated Aluminum Tooling Plate processing facility in New Castle, Pennsylvania. Delivering unrivaled capacity, our facilities will always get you the Aluminum Tooling Plate you need, when you need it.



➤ Why Precision5®

Precision5® meets or exceeds all industry requirements and can be substituted for other Aluminum Tooling Plate brands specified in RFPs. The plates are produced from a fine-grain custom chemistry 5083 aluminum alloy that is free from internal stresses, making them highly resistant to corrosion and distortion. We also offer custom sizes and have the capacity to hold up to 4 million pounds of inventory, allowing us same day shipping.

➤ Characteristics

Lightweight material that reduces the load on ways and screws
Precision-milled top and bottom providing a smooth surface, ready for use
Consistent mechanical properties
Superior anodizing capabilities
Excellent corrosion resistance
Internally stable; doesn't move during machining
Two-sided protective laminate

Technical Expertise. Made in the USA.

With deep expertise in metallurgy and engineering, we share our knowledge to help customers make informed decisions. We're proud to manufacture in the U.S., so our products qualify for the Buy American Act. In addition to Aluminum Tooling Plate, we supply many other steel and aluminum products to meet a wide range of needs.

Properties	
Tensile Strength	42 ksi
Yield	18 ksi
Elongation	10-20%
Brinell Hardness	72 HB
Density	0.096 lb./in.3
Coefficient of Expansion	13.2 X 10 ⁻⁶ (68" - 212°F)
Electrical Conductivity	29% (I.A.C.S.)
Microstructure	Vacuum Tight
Thermal Conductivity	69 Btu/ft x h x °F
Modulus of Elasticity	10.3 KSI x 10 ³

Information provided does not imply guarantee of properties or capability of manufacturing or use

Standard Sizes

Thickness 0.25-6.00" +/-0.005" - millimeter sizes upon request	Standard Width (+0.50"/-0.00") 48.50" 60.50" 72.50"
Custom Widths up to 85.50"	Length (+0.50/-0.00") 144.50" and 168.50" - Cut to size capabilities upon request
Surface Finish 20 RMS or better	Tolerances - Flatness +/-0.015" on 0.25" to 0.50" thick plate +/- 0.005" on 0.625" to 6.00" thick plate

Applications

- Index Tables
 - Mounting Plates
 - Packing Machinery
 - Templates & Gages
 - Vacuum Chucks
 - Welding Fixtures
 - Semiconductor
- Aircraft Components
 - Automotive Tooling
 - CNC Routing Tables
 - Drill Jigs
 - Food Machinery Components
 - Foundry Patterns

At a glance

Family-owned and operated
Privately held for long-term focus, independence and stability

115+

Years of Experience

Over a century of metallurgical and engineering expertise

\$1B

Reinvested

Into capabilities and capacities in the last decade

2,000+

Team Members

Skilled, engaged experts across disciplines

25+

Facilities Across North America

We are where our customers need us to be

Connect with an expert.
(800) 932-2188
ESM-USA-Sales@elwd.com

