



ELLWOOD
Specialty Steel Group

Aluminum Product Line

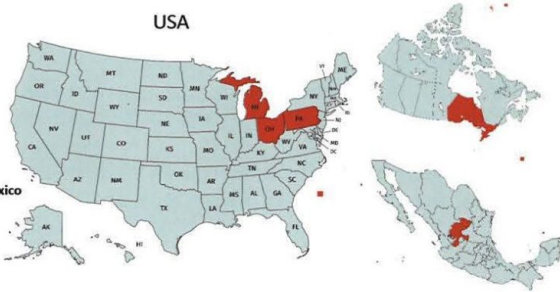


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Canada

USA

Mexico



- 1) Ellwood Specialty Steel
New Castle, PA
- 2) Unisteel
Sterling Heights, MI
- 3) Walter Metals
Stow, OH
- 4) Ellwood Specialty Metals
Windsor, ON
- 5) Ellwood Specialty Metals Mexico
Queretaro, MX

About Us:

- Leading Processor & Distributor Of Tool, Mold, Die Steel and Aluminum
- A Standalone division of Ellwood Group Inc.
- ESSG Founded in 1992
- 5 Facilities Located throughout North America

Why Choose Ellwood?

- Metallurgical and Engineering Expertise
- Customer Focus
- Integrity In All Our Dealings
- Reliable Quality & Delivery

Do The Right Thing!!
Choose Ellwood For your Aluminum Needs



6061 T6- is one of the most common aluminum materials in the world. The T6 refers to the temper or degree of hardness, which is achieved by precipitation hardening. This grade has a good strength-to-weight ratio and is also heat-treatable. With great formability and weldability, it is used for engineering and structural applications, boats, furniture and more.

6061 T651- This alloy is heat treated (and stress relieved in the case of T651) and is generally suited for low pressure applications including large Blow molds, RIM molds, and Structural foam molds. This alloy has excellent thermal conductivity but relatively low strength and surface hardness. Therefore this alloy is not recommended for applications requiring high strength.

6061 T652- High quality aluminum alloy product produced by heat treatment and pre-stretching in process solution heat treated, stress relieved by compressive deformation and artificially aged.

6061 T6511- Is a medium strength material offered in an extruded process. Due to its toughness and great corrosion resistance it is commonly used in floors, ramps and stairs.

2618 ELLcast 2- Is typically used in aerospace and defense applications. This highly ductile alloy features exceptional strength and good corrosion resistance properties. Available in 2021.

QC-10® – High-strength aluminum mold plate especially developed for the injection mold market. It combines the highest strength and hardness by thickness for any aluminum mold product and maintains very high thermal conductivity. The product has low quench sensitivity therefore it has uniform through thickness hardness even up to 24 inches in size. This results in very good stability when machining. It also has superior corrosion resistance for a 7xxx series mold alloy. It is produced to a minimum of .030 inch over nominal thickness.

5083 Mold Plate Ellicast 5- is a premium quality aluminum alloy sold in a ready-to-use condition. Stock is available in either Cast Mold Plate or Precision machined cast plate. This highly engineered aluminum alloy requires no stress relieving after machining.

7075- Alloy that is used in the automotive, aircraft and aerospace industries. Due to its high strength, low density, thermal properties, and its ability to be highly polished, 7075 is widely used in mold tool manufacturing.

7021- High strength aluminum cast product many of its uses are Blow, Compression, RIM, RTM, Thermoforming molding but not limited to only these.

5083 ATP- Precision machined cast and forged aluminum plate that has a milled top and bottom surface. Excellent machinability, weldability and corrosion resistance. 5083 ATP also has very good etching properties and hard anodizing properties.

Technical Data

Ranges are Based on grades: A- Very Good B- Good C- Fair D- Poor		Hardness HB	Yield Strength (KSI)	Tensile Strength (KSI)	Elongation	Rolled Plate	Forged Plate	Extruded Shape	Cast/Block	Thickness	Max Width	Weldability	Machinability	Polishability	Corrosion Resistance
Product Line	Description														
QC10	High Strength	150-170	65-78	74-81	5-15%	x	x			1" - 24"	60.5"	B	A	Very Good	B
5083 Mold Plate Ellicast 5	Medium Strength	70	18	42-46	16%			x		.5" - 60.5"	94"	A	B	Very Good	A
6061 T651	Medium Strength	95	45-48	39-45	11-14%	x	x			1" - 16"	60.5"	B	C	Good	A
6061 T652	Medium Strength	95	26-30	18-42	11%	x	x			8"-16"	60.5"	B	C	Good	A
6061 T6	Medium Strength	95	29-33	17-38	9-11%	x	x			1"-18"	60.5"	A	C	Good	A
6061 T6511	Medium Strength	95	36-40	20-45	17%			x		6061 (T3511) Special Order		A	C	Good	A
7075	High Strength	150	52-81	67-83	11-14%	x				1" -8"	60.5"	C	B	Very Good	C
7021	High Strength	110-120	42-49	46-55	2.5-4.5			x		1" to 23"	79.5"	C	A	Very Good	C
5083 ATP	Medium Strength	70	18	42-46	12-15%			x		1"-5"	85.5"	A	B	Very Good	A
2618 ELLcast 2	High Strength	115	54	64	10%			x		.5" - 28"	78"	B	A	Good	B