

HIGH STRENGTH • HIGH PERFORMANCE • GREATER MACHINABILITY

ALLOY 6033

RoHS6033
RoHS COMPLIANT ALUMINUM

A technology-driven replacement
for Alloys 6061 and 6262
with good machinability,
corrosion resistance,
and anodize
response



Best in Class

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ALLOY 6033



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KAISER ALUMINUM ALLOY 6033: A TECHNOLOGY-DRIVEN REPLACEMENT FOR ALLOYS 6061 AND 6262

Through extensive machine testing and development, Kaiser Aluminum has created **Alloy 6033**, which surpasses the Hardness, Ultimate Strength and Yield Strength of Alloys 6061 and 6262.

Over the past several years, it became apparent that the industry required an aluminum alloy that featured greater hardness, higher ultimate strength, increased yield strength and improved machining characteristics. During the developmental phase, Kaiser Aluminum engineers evaluated variations of alloy chemistry to determine the best possible combination for mechanical and machining properties to create a cutting-edge aluminum alloy that delivers what the industry and market expects. The result is Alloy 6033, ideal for recreational, medical and after-market automotive parts used in fly reels, oxygen regulators and small gas powered engines.

Alloy 6033 Major Customer Benefits

- Increased Ultimate and Yield Strengths Compared to Alloys 6061 and 6262
- Corrosion Resistance and Anodize Qualities are Equivalent to Alloy 6061
- Significantly Increased Hardness
- Improved Machining Performance
- Increased Speeds and Feeds
- Reduced Cycle Times
- Lower Overall Part Costs



Alloy 6033 Major Applications

- Fly Reels
- After-Market Automotive Parts
- Oxygen Regulators
- Small Gas Powered Engines

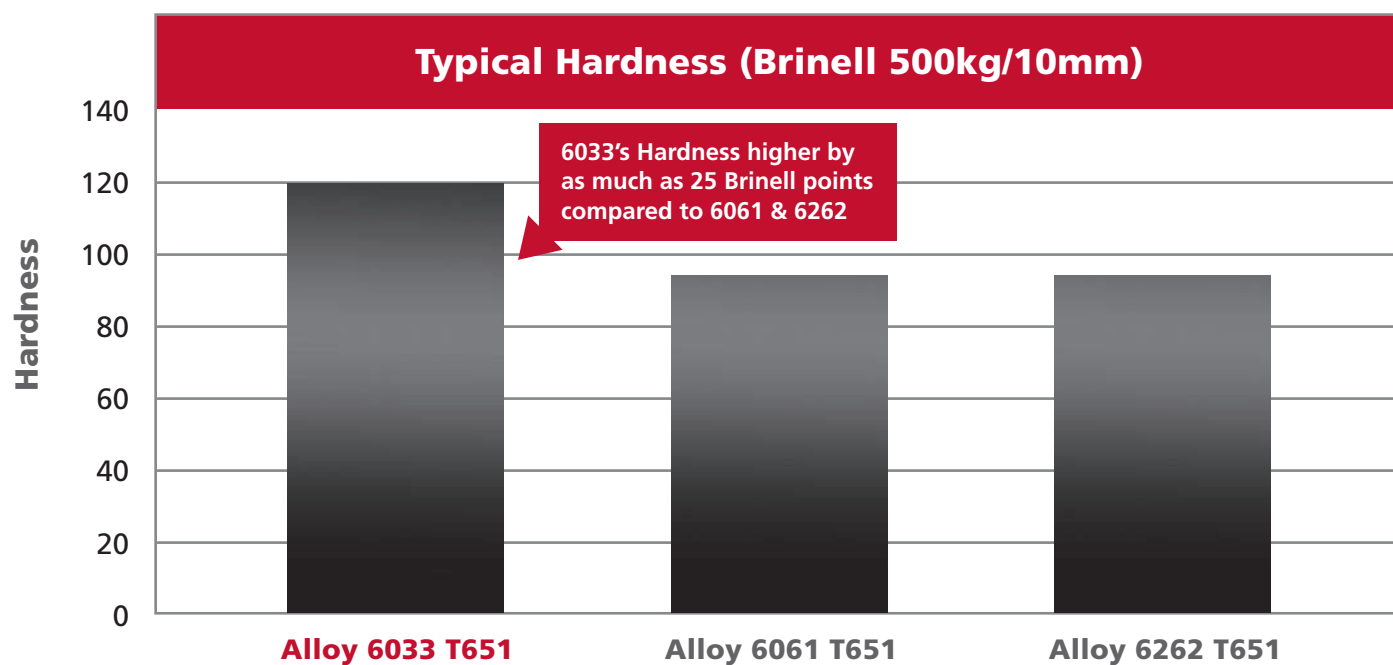
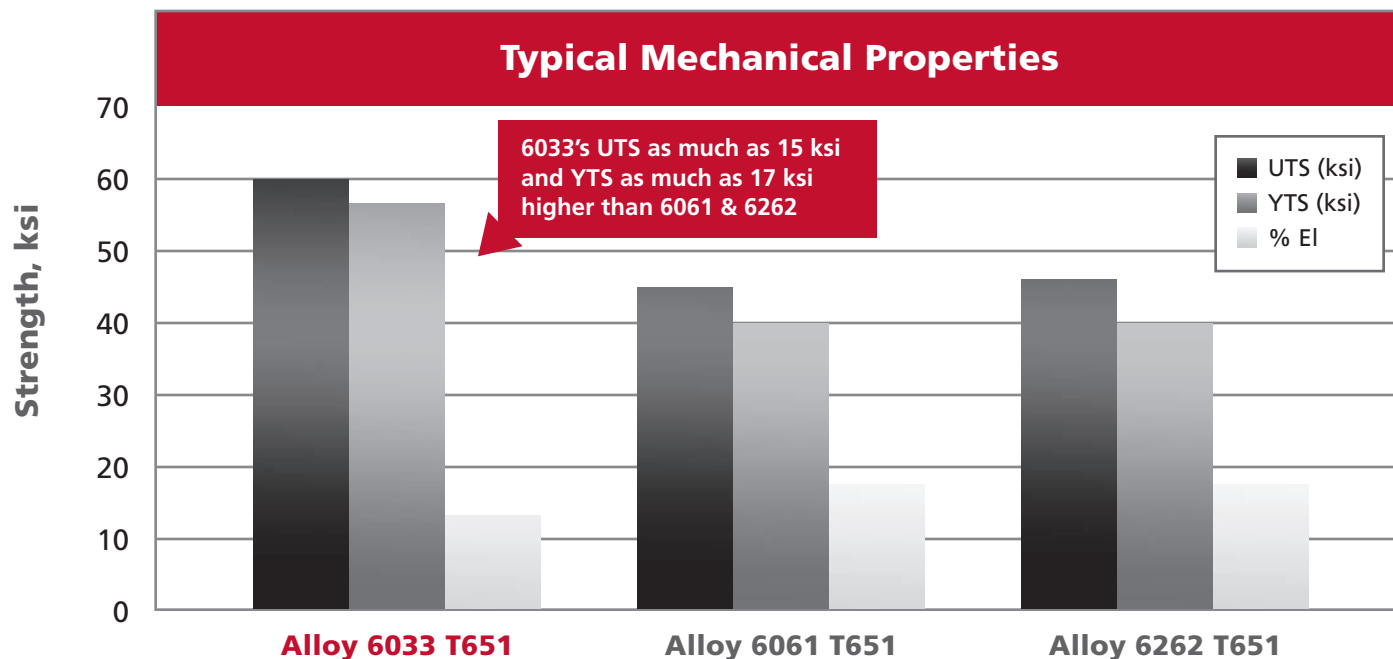
ALLOY 6033



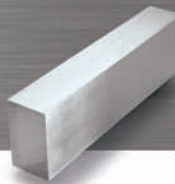
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Test data now reveals, conclusively, that Kaiser Aluminum Alloy 6033 can produce a hardness that is substantially higher than 6061 and 6262 by as much as 25 Brinell points. The ultimate strength of Alloy 6033 is as much as 15 ksi higher, with a yield strength as much as 17 ksi higher than 6061 and 6262.



ALLOY 6033



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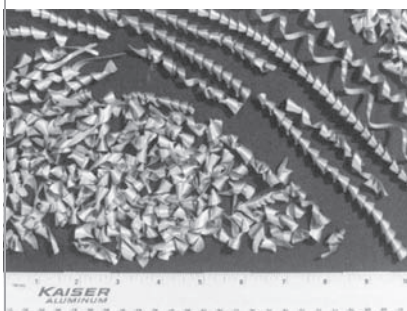
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MACHINING DATA COMPARISON

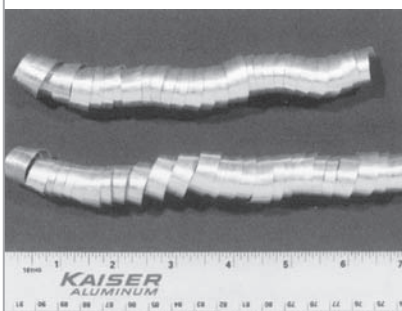
Machining data for Alloy 6033 conclusively demonstrates (compared to Alloy 6061) that resulting machine chip size is noticeably smaller. Therefore, this may allow machine speeds and feeds to be increased, resulting in shorter cycle times and lower costs per machined part.

**Alloy
6061**

Drill Chip



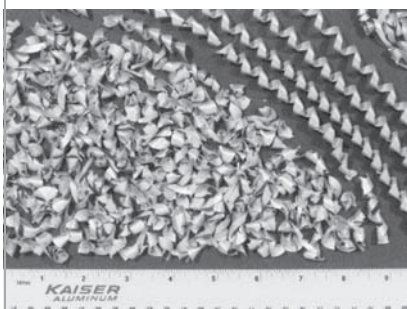
Form Chip



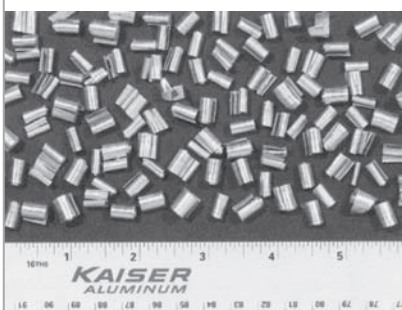
Turning Chip



**Alloy
6262**



**Alloy
6033**



For more information or technical assistance on Alloy 6033, call a Kaiser Aluminum Technical Engineer at 1-800-873-2011 or visit us online