

Novelis Anodized Quality Aluminum



Industry-leading anodized aesthetics
from the world's largest recycler and
roller of aluminum

Not just aluminum, Novelis Aluminum.™

Novelis

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Novelis AQue52 is the premium anodized-quality 5052 alloy commercially available for demanding cosmetic applications. Unlike common anodized 5052 alloys with elevated magnesium, Novelis AQue52 delivers the industry-leading finish after anodizing, guaranteed.*

Based on our innovative manufacturing practices and stringent process parameters, Novelis AQue products deliver remarkably low defect rates.*

Anodized Aluminum Supply Chain

Every step in the process adds cost. If you start with inferior metal, that cost is even greater. Begin with superior Novelis AQue. The metal is cleaner, producing higher yields at each stage for reduced cost end to end. Novelis guarantees $\leq 3\%$ * first-pass black-line defects after anodizing.



*3% defect rate is based on documented piece count rejections as agreed in writing between Novelis and their customer at time of order placement. Claims for rejections > 3% must follow the Novelis claims procedure and will be settled for material replacement value only, provided a Novelis-approved etch and anodize process is followed.

Optimized for Anodizing

Any aluminum can be anodized; results are what matters. Novelis aluminum is optimized for anodizing using our proprietary purification and rolling processes. Our industry-leading compositional control produces superior anodize quality (AQ) aluminum that reduces operating costs, increases our customers' production throughput and wins them more business in the marketplace compared to any other anodized quality product on the market today.

Dedicated, Proprietary Processes

Novelis AQ can only be produced by our proprietary processes. Every aspect of the production process has been optimized, from casting ingots to rolling coils to scratch-reducing packaging protocols. Novelis AQ can only be produced in a dedicated production run.

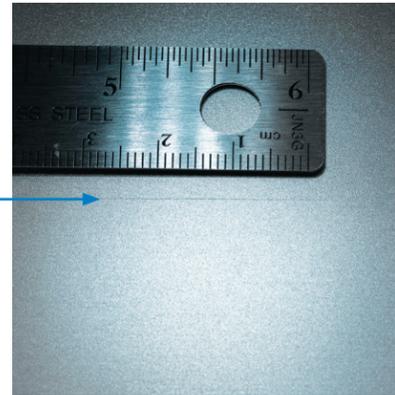
Coil Replacement Schemes Cost Your Business Time and Money

Novelis is committed to shipping consistent, high-quality aluminum coils every time. Because of our commitment to quality, Novelis does not need to offer a coil replacement scheme, thereby saving our customers manufacturing expenses related to product rejects, and increasing our customers' manufacturing throughput. There is no need to carry excess inventory because you can trust Novelis' product.

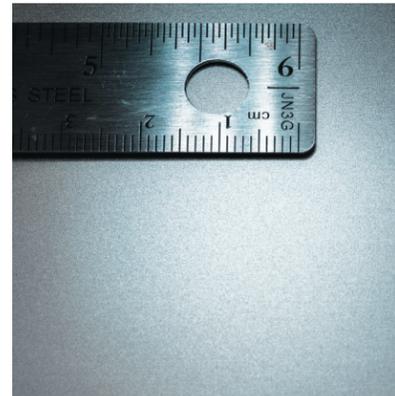
Superior Technical Support

Our dedicated field technical experts help our customers create the optimal setup for stamping, anodizing and more to dramatically decrease time to market. We welcome the opportunity to solve customer challenges and develop new market ideas.

Standard 5052



Novelis AQ



Product Availability for Electronics Applications*	
Alloy	5052 AQ**
Thickness	0.3-3mm
Temper	O, H3x
Width	300-1800mm
Coil ID	305, 406, 508, 610mm

* Check with your Novelis representative for product inquiries outside of specification range and availability

** Product availability depends on end use of application and other considerations

77% Improvement in Through-Metal Cleanliness

Reduced inclusions improve results in deep anodizing processes.



Standard 5052

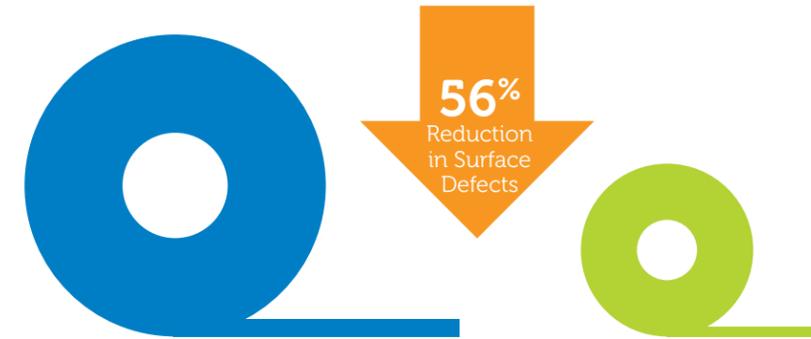


Novelis AQ

56% Improvement in Surface Quality

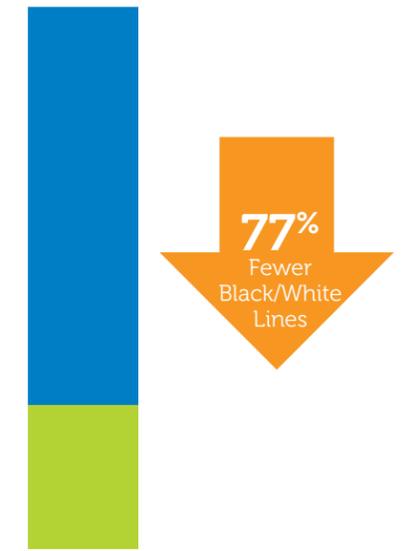
Reduced surface defects improve the quality of the source aluminum, minimizing waste and maximizing yield. This benefits light anodizing processes.

- Novelis AQ
- Standard 5052



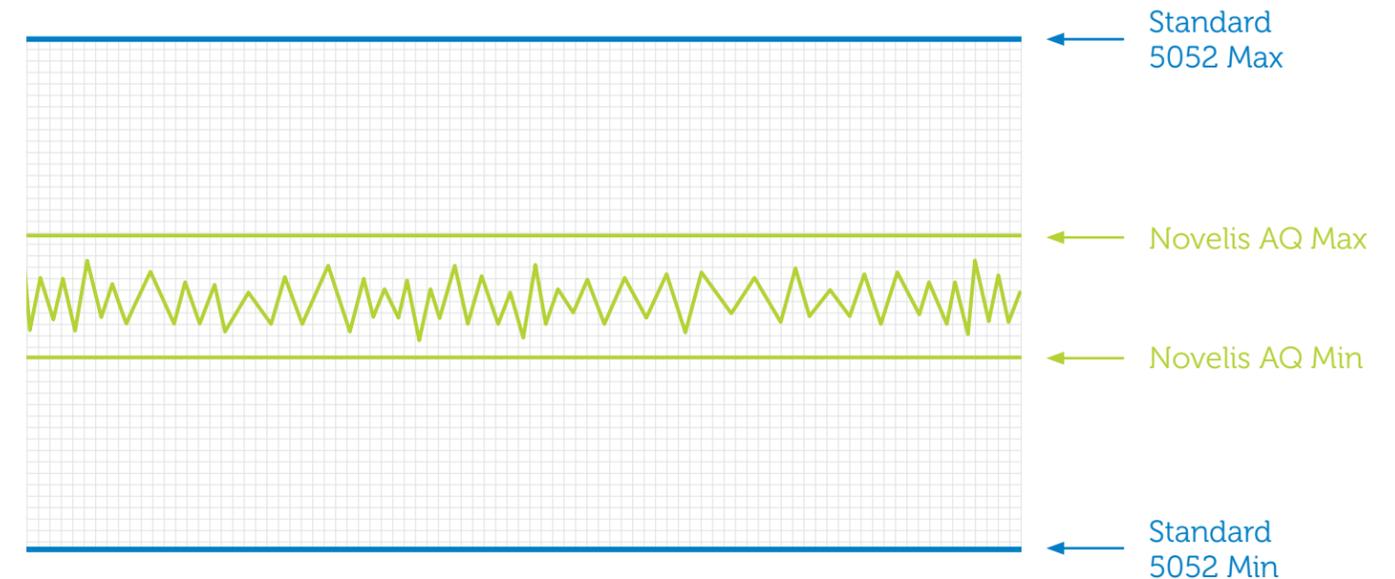
77% Reduction in Anodizing Defects

Fewer lines and dots appear in the metal, reducing the time and money lost during anodizing due to rejected aluminum. Our aluminum has an industry-leading low defect rate. One trial will confirm these results.



Tighter Tolerances for Greater Consistency

Novelis AQ has tighter control on chemical elements than standard 5052, making manufacturing for customers more efficient. Novelis AQ is the material of choice for a variety of anodizing processes.



Closed-loop Business Model

At the most basic level, Novelis' sustainability strategy is designed to significantly reduce the life cycle impacts of aluminum products. To do this, we are working toward a more circular business model that is focused on high-recycled content, closed-loop manufacturing and sustainable product development.



The Global Leader

With 25 manufacturing facilities in nine countries on four continents, Novelis is the world's largest manufacturer of rolled aluminum for the electronics, major appliance, automotive, beverage can and architecture industries.

Novelis is also the largest recycler of aluminum worldwide, recycling approximately 50 billion beverage cans annually as well as aluminum recovered from many other products. This recycling reduces energy use in manufacturing by 95 percent compared to production using primary aluminum.

Novelis Manufacturing Recycling Process

As much as 80 percent of high-quality aluminum for appliances is discarded as scrap during manufacturing, with as little as 20 percent incorporated into products such as washers and refrigerators. Only Novelis can process, recycle and capture this scrap on a global scale, eliminating the need for an expensive brokerage process.

Scrap is presorted by alloy, collected, decontaminated, pressed, dried and returned to the manufacturing cycle in a turnkey process.

Novelis Post-consumer Recycling Process

With the growing demand for consumer electronics worldwide, e-waste continues to increase. As the leading aluminum recycler, Novelis is increasing global demand for post-consumer scrap with new recycling capacity around the world. Novelis is working to increase the yield on scrap generated from end-of-life devices to improve the sustainability of all electronics by recycling the aluminum.

Novelis has made significant investments in equipment that separates scrap by alloy. Once segregated, these alloys can be returned seamlessly to the manufacturing process.

Contact Novelis



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