

Battery Cooling Plate Materials

Gränges material solutions for brazed aluminium battery cooling plates offer low carbon footprint and performance benefits in terms of strength, corrosion resistance, hardening and composition to cover all your needs for the thermal management of Li-ion batteries.

SELECTION OF ALLOYS

Alloy		Sustainability		Area of use		Typical mechanical and corrosion properties in post braze condition		
EN std	Gränges	Average carbon footprint [tCO2e/t]	Ability to absorb recycled material **	Mg-content	Age hardenable	Rp0,2 [MPa]	Rm [MPa]	Free corr. pot. [mV vs SCE]
EN AW-3003	FA5577	4-5	Medium	None	NO	40	110	-720
mod 3003 –	FA7915	4-5	High	None	NO	55	160	-705
	FA7021	4-5	High	None	NO	60	165	-680
	FA7975	4-5	High	Intermediate	NO	65	170	-680
	FA7994	4-5	Low	None	NO	50	160	-680
mod 6063	FA7850	<4	High	High	YES	75-90***	190	-700

Values given for standard O-temper. Other tempers available upon request. * Product carbon footprint data from 2023, third-party verified, assuming standard braze clad ** From internal and external sources. Pre- and post consumer scrap can be specified. *** With controlled cooling rate

TYPICAL CAPABILITY RANGE

	Thickness [mm]	Temper	Clad content	Coil width [mm]	Coil size, OD [mm]	Coil weight ^[kg]
Clad	0.0.0	0 (1104	5-10% (1 side)	May 1500	Un to 1000	
Unclad	0.8-2.0	-07 H24	None	Max 1500	Up to 1800	Up to 7500

Exceptions to the above capabilities could be made available upon request

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Rolling into an electrified future

Our battery materials enable our customers to secure supply of high-quality, locally produced rolled aluminium products while reducing their environmental impact. Our product offering towards the battery industry include battery cathode foil, battery casing and battery cooling plate.

Your experienced partner

Built on the foundation of more than 125 years of innovative engineering and materials development, we are a world leader in high-performance aluminium alloys. With a long heritage of supplying the automotive industry, we are an experienced partner delivering consistent, high quality materials to industries with high demands on safety, performance and sustainability. → granges.com/battery



Contributing to a circular and sustainable economy Join us on the path to net-zero 2040

Gränges is a global leader in aluminium rolling and recycling in selected niches. We're committed to creating circular and sustainable aluminium solutions in partnership with our customers and suppliers – for a better future. Our solutions help customers grow and transition to climate neutrality. They are used for efficient climate control in transportation and buildings, electrification and battery components, recyclable packaging, and more.



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