Performance Materials for Energy Storage

At a fraction of the industry's standard thickness for battery and ultracapacitor component materials, Arnold Magnetic Technologies' Precision Thin Metals Division (PTM) produces thin and ultra-thin metals that enable energy density through the use of thinner substrates.

Advancing Energy Storage Solutions

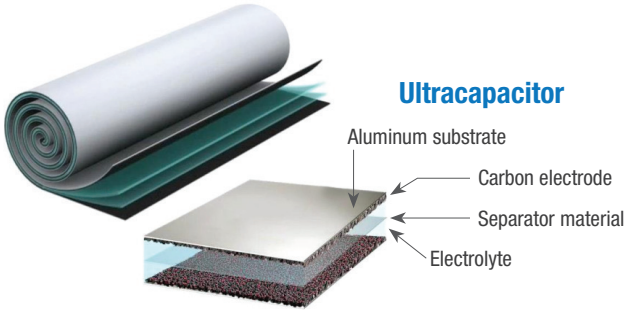
Arnold Magnetic Technologies and PTM work with customers to improve the performance of their existing designs using thinner substrates of Nickel, Aluminum and Copper. In addition to producing thinner substrates, PTM's ability to fine tune grain size, grain structure, and surface roughness can elevate the performance of these materials.

Emerging Materials

Our engineers and metallurgists are also working with customers who are developing emerging energy storage solutions using our thin and ultra-thin Titanium and Stainless Steel.

BESThin® Materials Capabilities for Energy Storage Applications

Material	Industry Std. Thickness	PTM Thickness	Material Widths	
Nickel (Ni)	10+ microns	2+ microns	1.25 – 300 mm	Anode Current Collector, Separator
Aluminum (Al)	5+ microns	2.5+ microns	1.25 – 430 mm	
Copper (Cu)	5+ microns	2+ microns	1.25 – 292 mm	
Titanium (Ti)	10+ microns	2+ microns	1.25 – 393 mm	Emerging
Stainless (SS)	10+ microns	2+ microns	1.25 – 430 mm	



Pushing Your Energy Storage Research

Whether you're working on the next-generation Li-Ion technology or looking to boost the performance of your existing design, Arnold Magnetic Technologies will help you develop your designs into commercially viable battery and ultracapacitor solutions.

Visit arnoldmagnetics.com/PTM for more information on precision thin materials.

To explore working with Arnold's team, contact:

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