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Ampeers vision is to lead the U.S. in engineering the worlds most advanced high-temperature superconductors and accelerate their adoption across critical industries.



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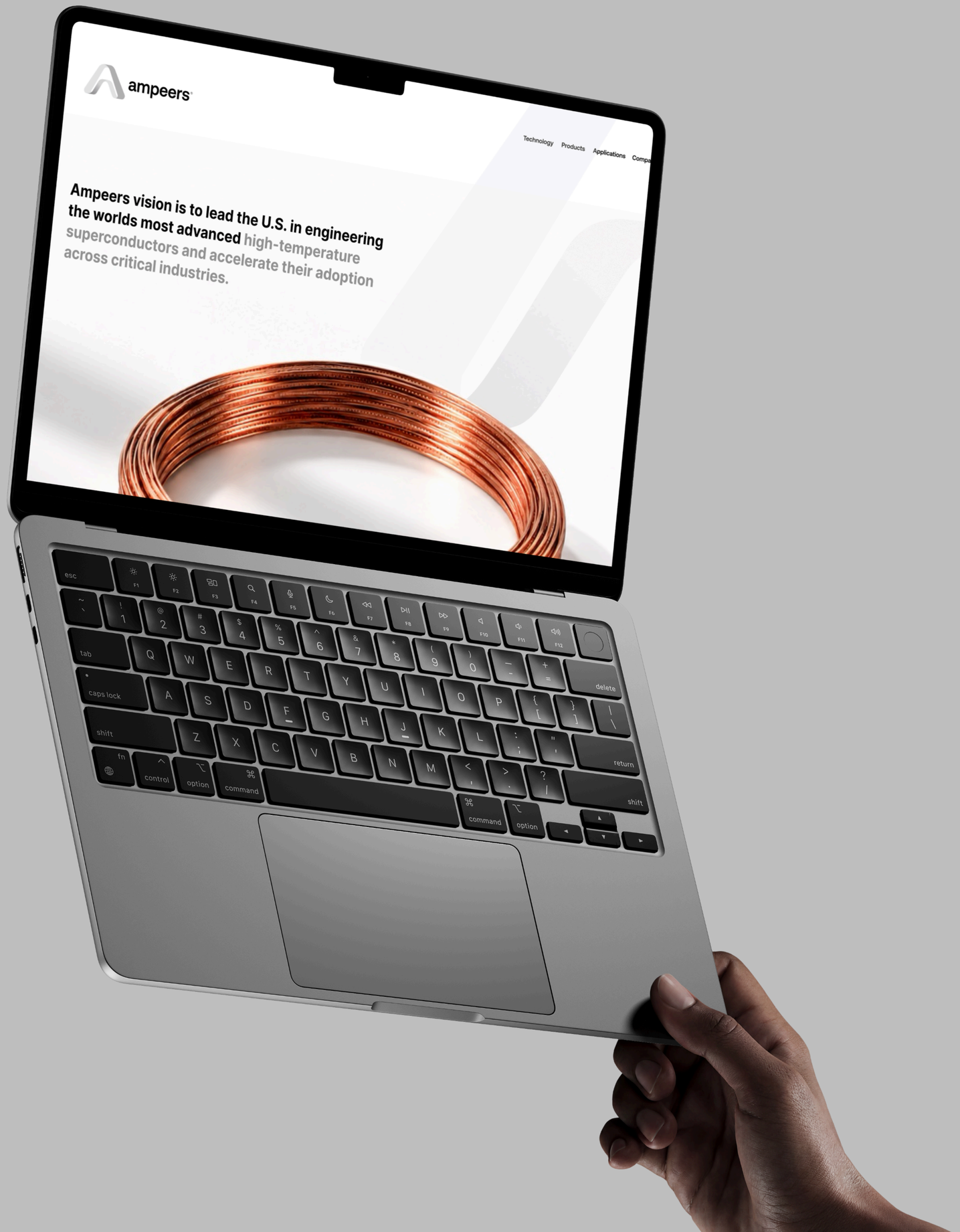
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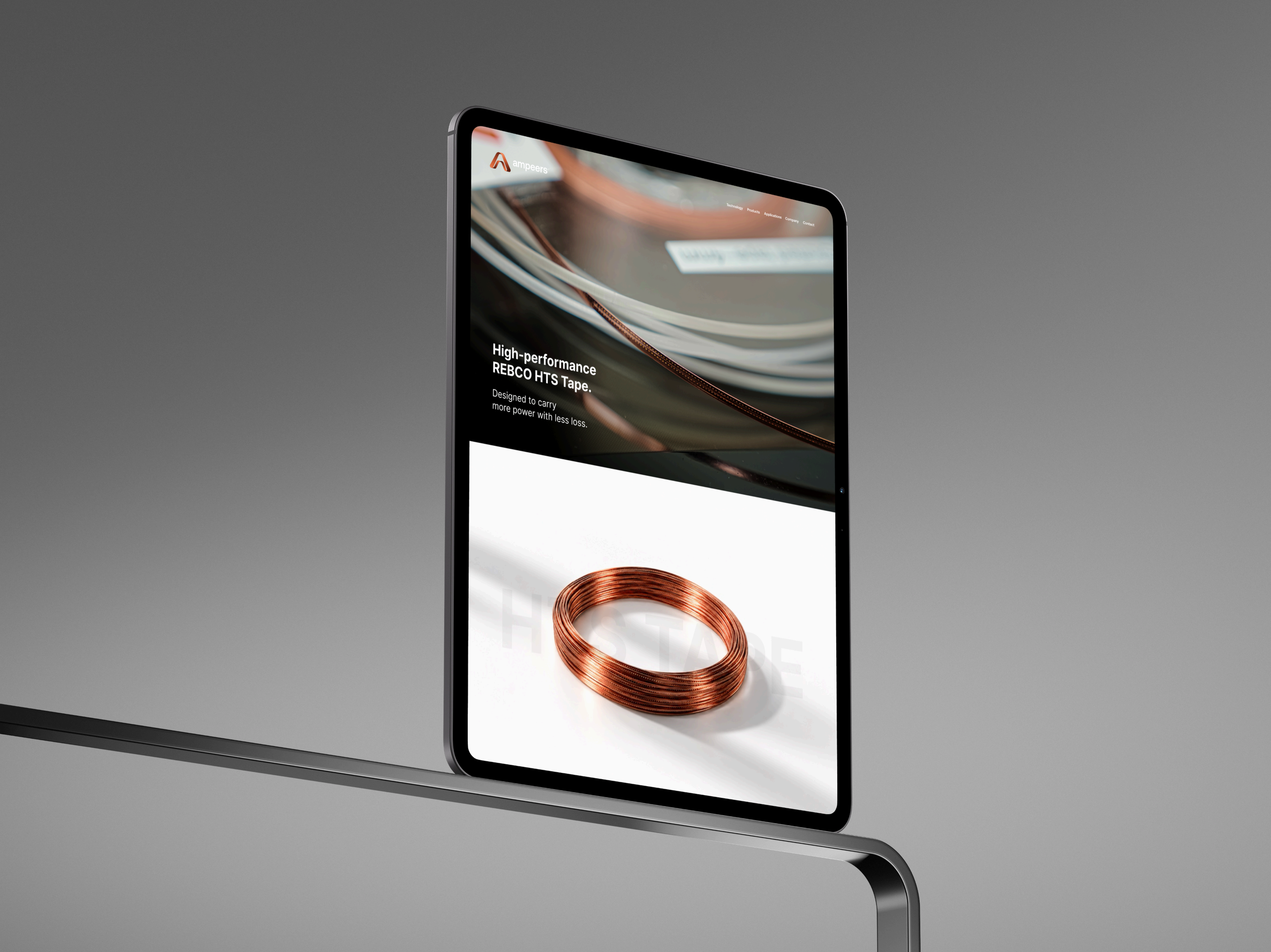
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High-performance
REBCO HTS Tape.
Designed to carry
more power with less loss.



- **1–2mm**
  Wire diameter
- **15mm**
  Bend radius without p
- **3X+**
  Higher current density
- **60m**
  Demonstrated produc

Where HTS Tape performs.







Performanc

High performance.
Remarkable flexibility.

STAR®(Symmetric Tape Round)superconducting wires combine advanced REBCO conductor architecture with exceptional current-carrying capacity and mechanical flexibility. Designed for compact, high-field magnet systems, STAR®delivers performance in demanding operating conditions.



1–2mm

15mm

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High-performance REBCO HTS Tape.

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HTS Tape



Subtitle Here

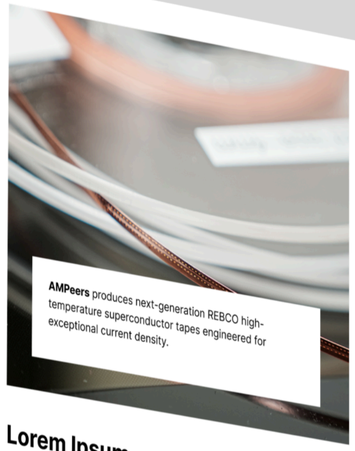
40-meter-long REBCO tapes with critical current over 4,000 A/12 mm at 4.2 K and 13 T by Advanced MOCVD

Subtitle Here

High critical current double-sided, thick-film REBCO tapes by Advanced MOCVD

Subtitle Here

Manufacturing of High-Performance, Low-Cost REBCO Superconductors for Large-Scale Deployment



AMPeers produces next-generation REBCO high-temperature superconductor tapes engineered for exceptional current density.

Lorem Ipsum.
Less Resistance.



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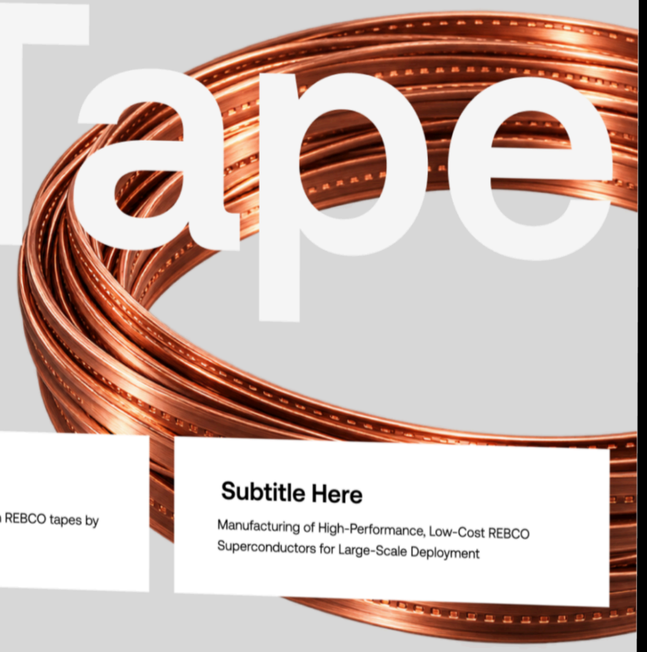
HTS Tape



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StarWire.
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StarWire

Discover how STAR®Wire can support your next-generation high-field applications.

Start a Conversation ›



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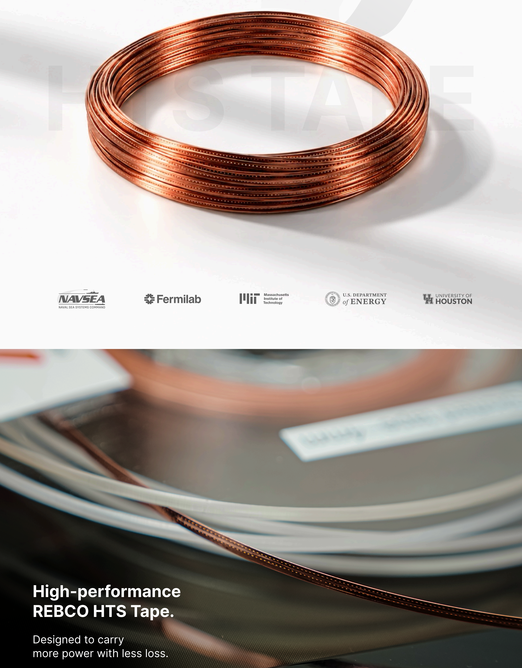

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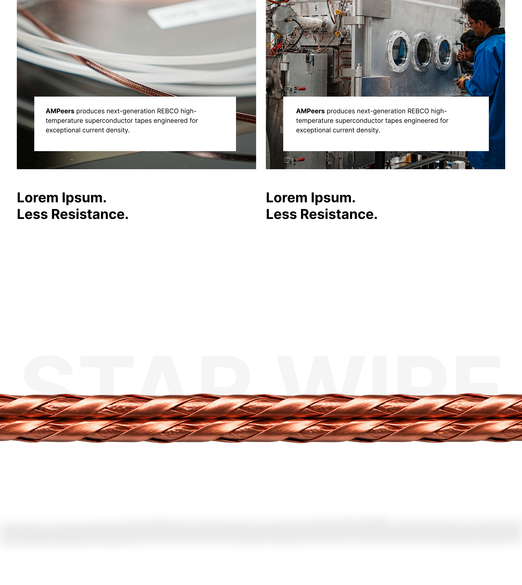
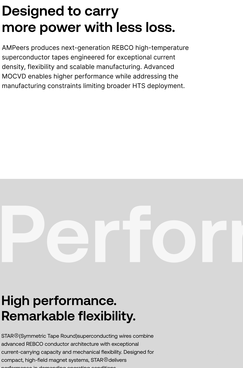


High-performance REBCO HTS Tape.

Designed to carry more power with less loss.



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AMPeers produces next-generation REBCO high-temperature superconductor tapes engineered for exceptional current density, flexibility and scalable manufacturing. Advanced MOCVD enables higher performance while addressing the manufacturing constraints limiting broader HTS deployment.

Performance

High performance. Remarkable flexibility.

STAR® Symmetric Tape Round superconducting wires combine advanced REBCO conductor architecture with exceptional current-carrying capacity and mechanical flexibility. Designed for compact, high-field magnet systems, STAR® delivers performance in demanding operating conditions.

- **1–2mm** Wire diameter
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Where HTS Tape performs.

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Power
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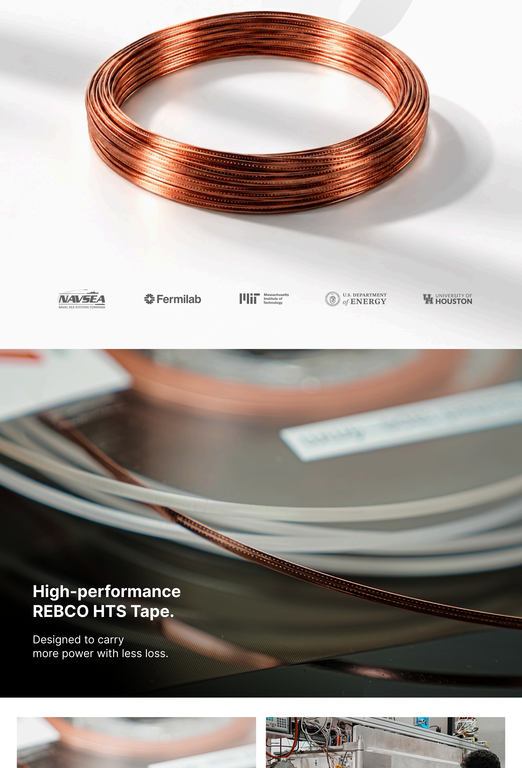

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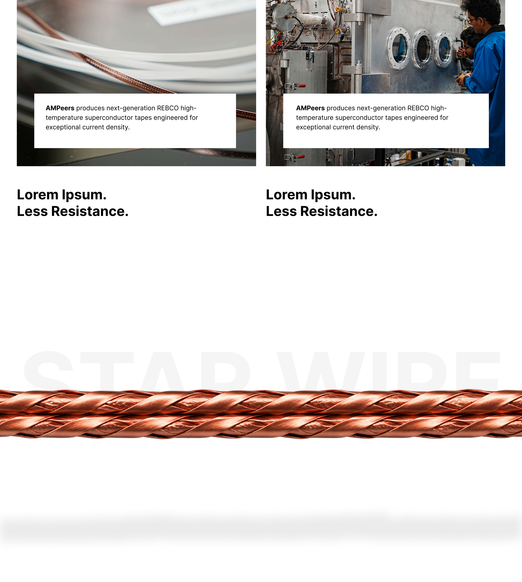

High-performance REBCO HTS Tape.

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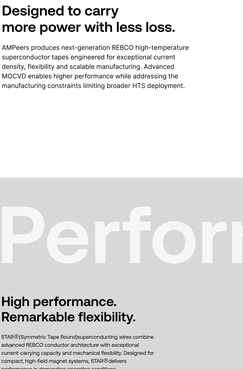

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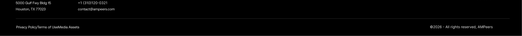

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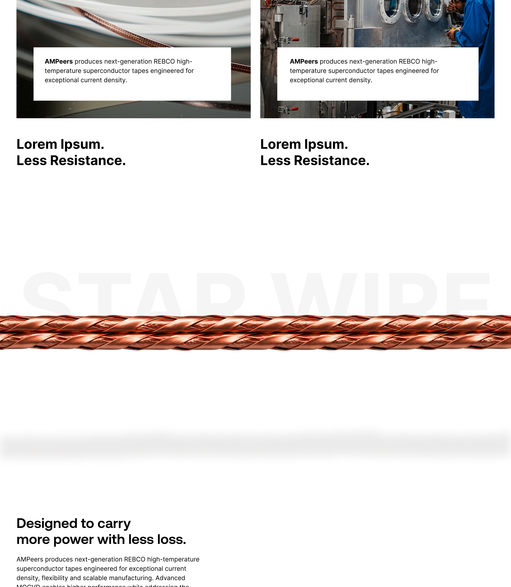

High-performance REBCO HTS Tape.

Designed to carry more power with less loss.



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STAR WIRE



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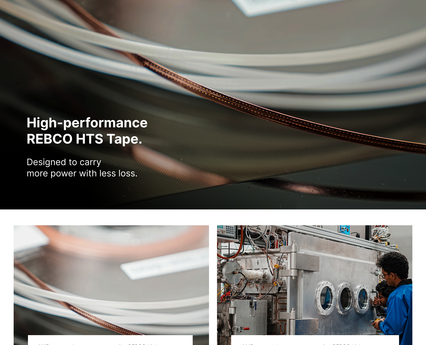
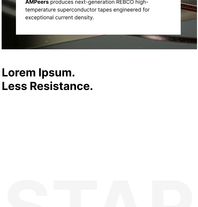


High-performance REBCO HTS Tape.

Designed to carry more power with less loss.



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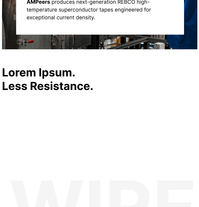

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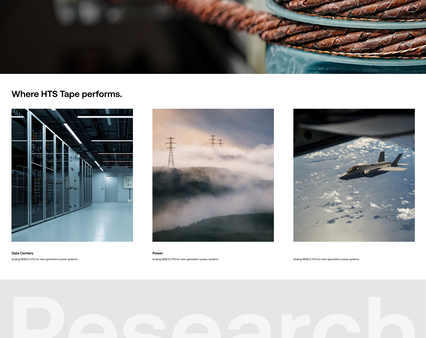


Performance starts with the process.

High-performance superconductors engineered for unprecedented current density, manufacturing scale, and next-generation power systems.

300-600X

Higher current density

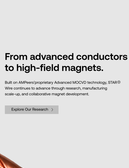
300-600X more current in the same space

3-4X

Ultra-low resistance losses

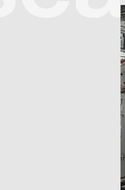
Minimal heat generation

Where HTS Tape performs.



Data Centers

Scaling REBCO HTS for next-generation power systems



Power

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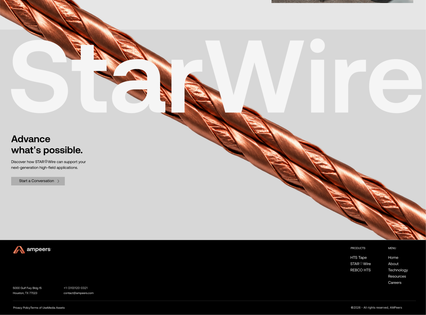
Research

From advanced conductors to high-field magnets.

Built on AMPeers/proprietary Advanced MOCVD technology, STAR® Wire continues to advance through research, manufacturing scale-up, and collaborative magnet development.

Explore Our Research

StarWire

Advance what's possible.

Discover how STAR® Wire can support your next-generation high-field applications.

Start a Conversation

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High-performance REBCO HTS Tape.

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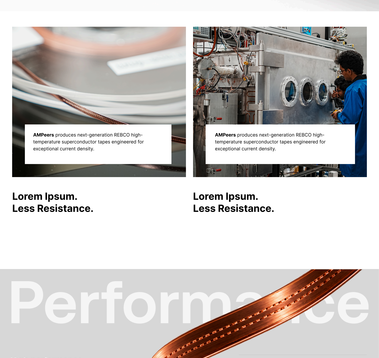



AMPeers produces next-generation REBCO high-temperature superconductor tapes engineered for exceptional current density.

Lorem Ipsum. Less Resistance.



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Performance

High performance beyond the lab.

Long-length AMPeers REBCO tape has demonstrated strong critical current performance under demanding high-field conditions, validating Advanced MOCVD for next-generation superconducting systems.

Explore Our Technology →

40 m → 4,000+ A → 13 T

Higher current density

SuperOx Ltd. (2022) tested a 4 mm wide REBCO tape at 4.2 K and 18 T

- 40-meter REBCO tape
- 4,000+ A /12 mm
- at 4.2 K and 18 T

Additional testing demonstrated more than 1,400 A /10 mm at 20 K and 20 T



Where HTS Tape performs.

Diameter	Scaling REBCO HTS for next-generation power systems	4×4	12×3
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HTS Tape



Subtitle Here
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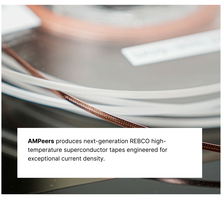
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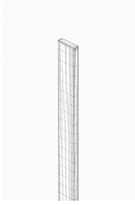

Where HTS Tape performs.

Diameter	Scaling REBCO HTS for next-generation power systems	64X	12X
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Where HTS Tape performs.



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Power
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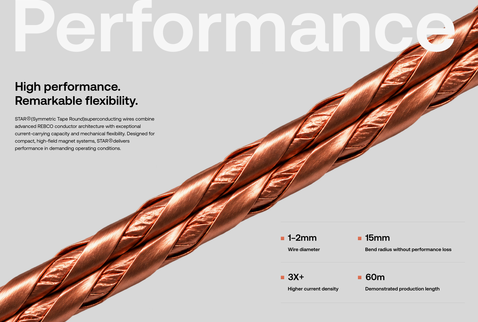

- **1–2mm** Wire diameter
- **15mm** Bend radius without performance loss
- **3X+** Higher current density
- **60m** Demonstrated production length

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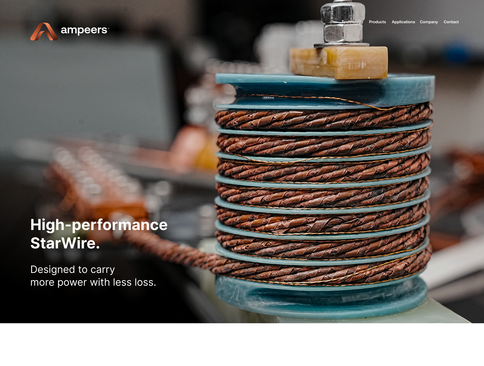
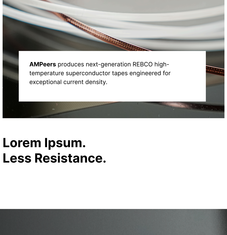


High-performance StarWire.

Designed to carry more power with less loss.



AMPeers produces next-generation REBCO high-temperature superconductor tapes engineered for exceptional current density.

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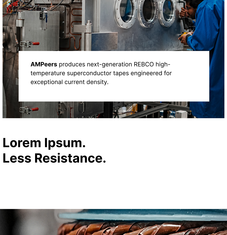

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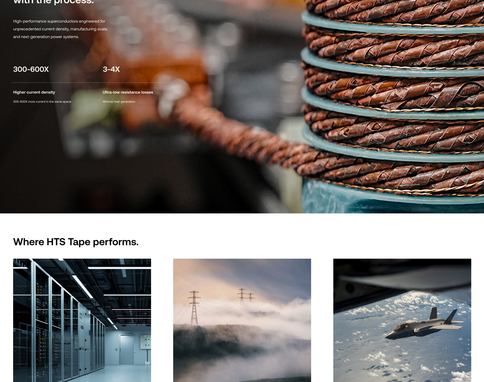

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Higher current density

300-600X more current in the same space

3-4X

Ultra-low resistance losses

Minimal heat generation

Where HTS Tape performs.



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Scaling REBCO HTS for next-generation power systems



Power

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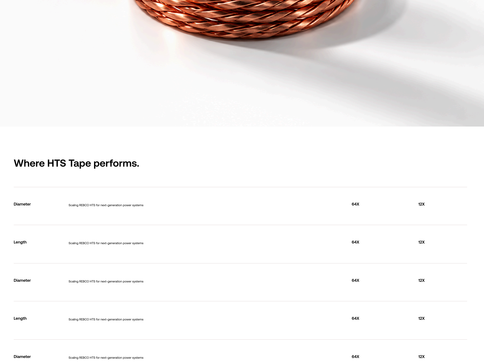

Where HTS Tape performs.

Diameter	Scaling REBCO HTS for next-generation power systems	64X	12X
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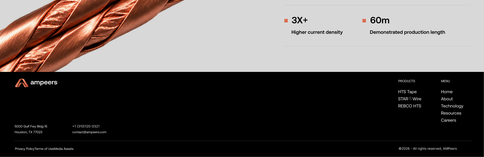

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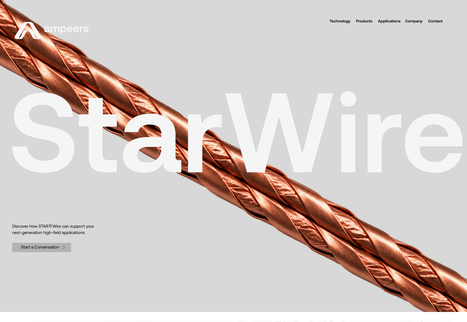
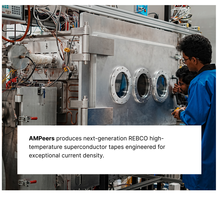
Discover how STAR®Wire can support your next-generation high-field applications.

Start a Conversation >







Lorem Ipsum.
Less Resistance.

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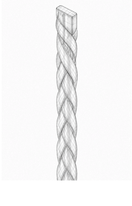

Where HTS Tape performs.

Diameter	Scaling REBCO HTS for next-generation power systems	64X	12X
Length	Scaling REBCO HTS for next-generation power systems	64X	12X
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Where HTS Tape performs.



Data Centers
Scaling REBCO HTS for next-generation power systems



Power
Scaling REBCO HTS for next-generation power systems



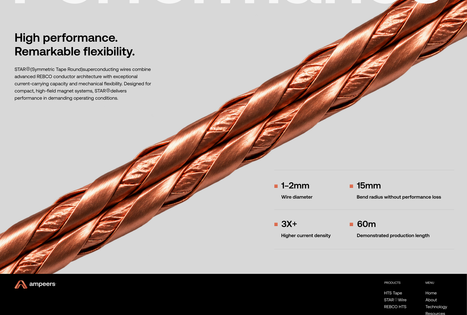
Scaling REBCO HTS for next-generation power systems



Performance

High performance.
Remarkable flexibility.

STAR®Symmetric Tape Roundsuperconducting wires combine advanced REBCO conductor architecture with exceptional current-carrying capacity and mechanical flexibility. Designed for compact, high-field magnet systems, STAR®delivers performance in demanding operating conditions.



- **1–2mm** Wire diameter
- **15mm** Bend radius without performance loss
- **3X+** Higher current density
- **60m** Demonstrated production length

9000 Gulf Pine Bldg 9
Houston, TX 77041

+1 (737)703-2021
contact@ampeers.com

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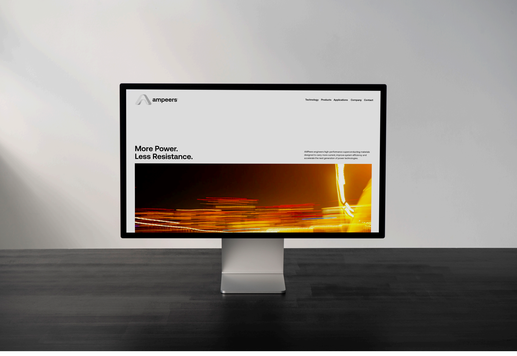
Concept 2

Proprietary & Confidential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More Power.
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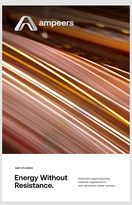
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AMP-HTS SERIES
Energy Without Resistance.
Advanced superconducting materials engineered for next-generation power systems.


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High-Performance REBCO HTS Tape


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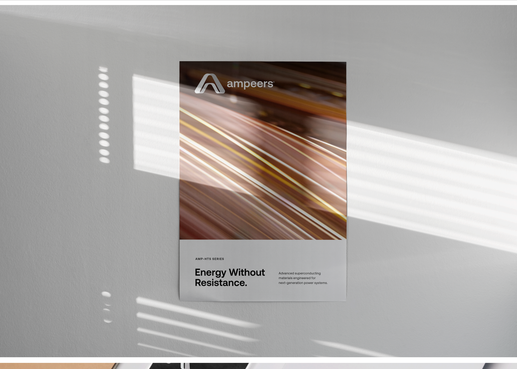
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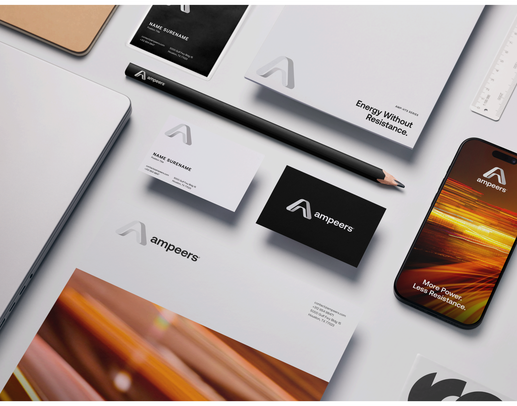
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More Power.
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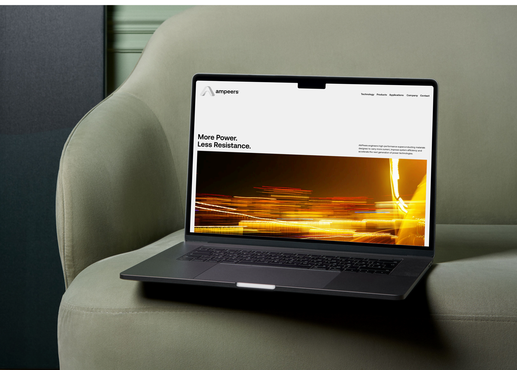
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More Power.
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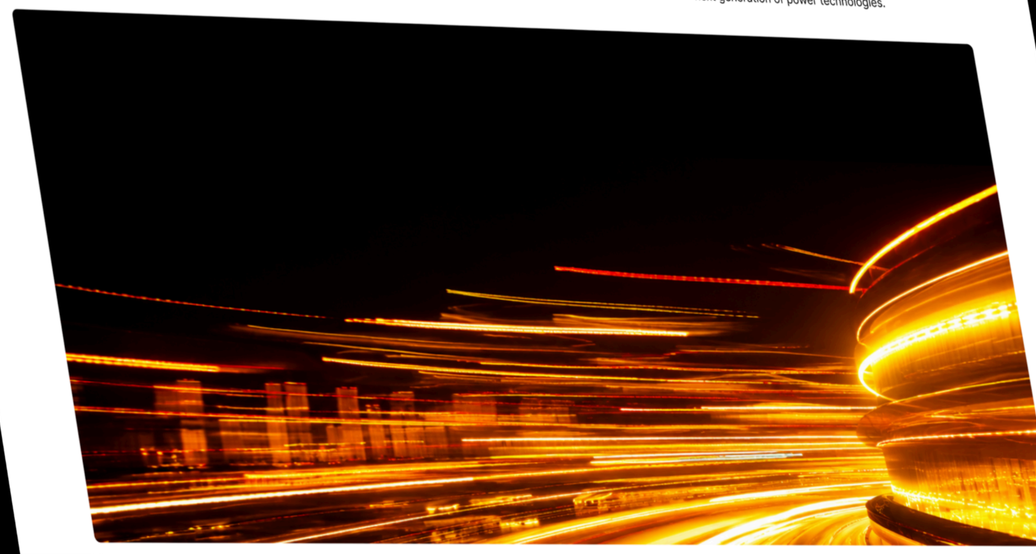
AMPeers engineers high-performance superconducting materials designed to carry more current, improve system efficiency and accelerate the next generation of power technologies.



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OUR VISION

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NAVSEA Naval Sea Systems Command · Fermilab · Massachusetts Institute of Technology · U.S. Department of Energy · University of Houston

TECHNOLOGY

Built differently.
Built to scale.

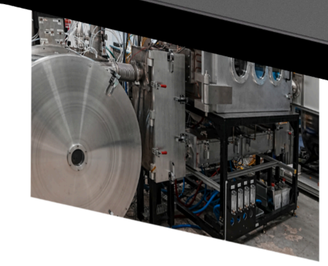
High-performance superconductors engineered for unprecedented current density, manufacturing scale, and next-generation power systems.

Advanced MOCVD
Proprietary manufacturing process.

High-performance REBCO
Higher critical current density.

Commercial scale
Higher throughput and scalable production.





High-performance superconductors engineered for unprecedented current density, manufacturing scale, and next-generation power systems.

300-600X

Higher current density

300-600X more current in the same space

3-4X

Ultra-low resistance losses

Minimal heat generation

MATERIALS PLATFORM

Engineered for what comes next.

AMPeers develops high-performance superconducting materials designed to unlock more compact, efficient and capable systems across energy, science and defense.

PRODUCTS

Two formats. One superconducting platform.

HTS TAPE

300–600×current capacity
Advanced MOCVD
Flexible /scalable

EXPLORE HTS TAPE →



STAR WIRE

1–2 mm diameter
high critical current
flexibility & high-field
applications

EXPLORE HTS TAPE →



RESOURCES /SCIENCE

Research that moves the industry forward.

EXPLORE HTS TAPE ↗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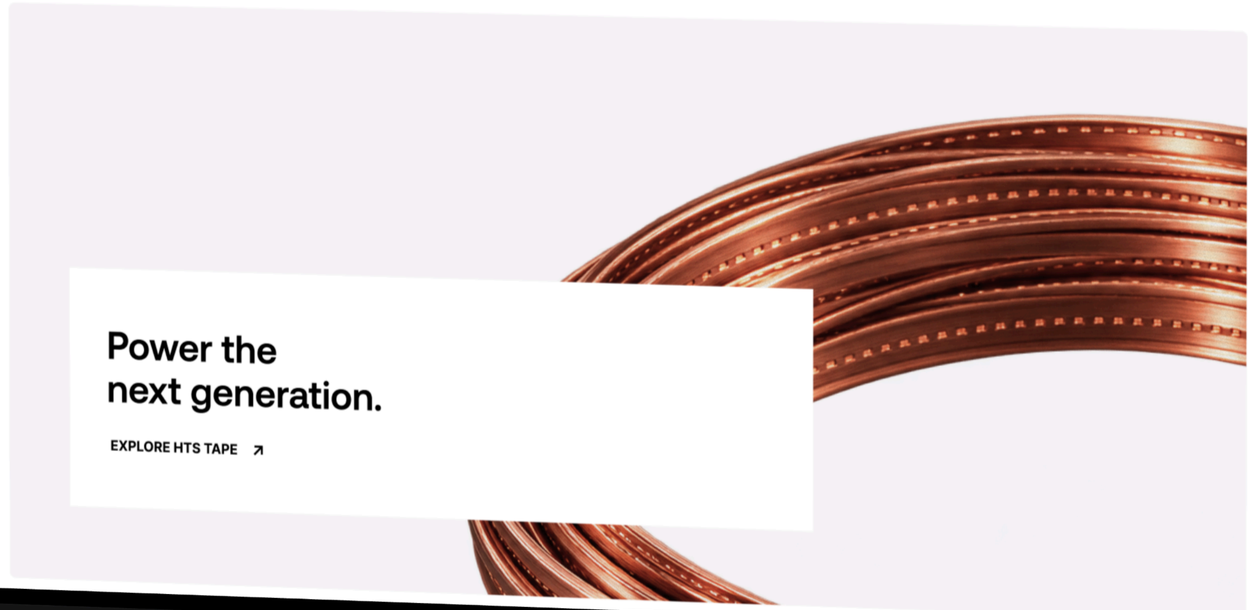
Scaling REBCO HTS for next-generation power systems

EXPLORE PERFORMANCE



Power the next generation.

EXPLORE HTS TAPE

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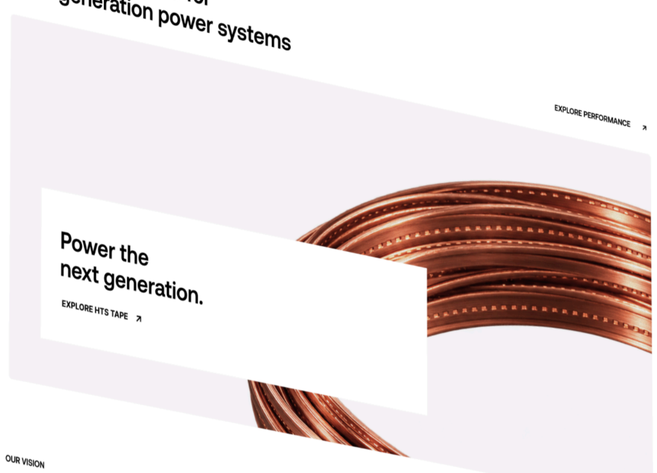

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Technology Products Applications Company Contact

Engineered for the world's most demanding magnets.

EXPLORE PERFORMANCE ↗



AMPeers STAR® Wire combines high current density, exceptional flexibility, and mechanical strength for next-generation high-field applications.

EXPLORE HTS TAPE ↗

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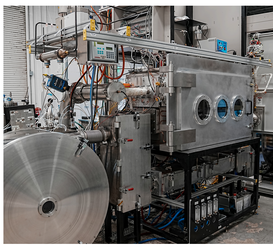

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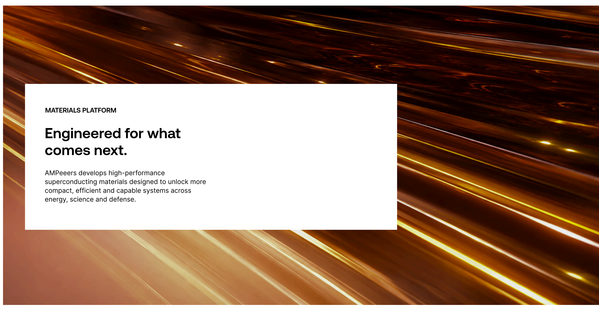

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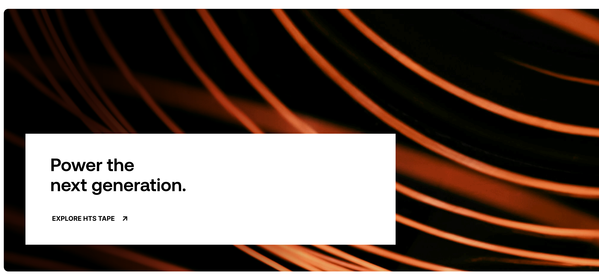

Power the next generation.

EXPLORE HTS TAPE ↗

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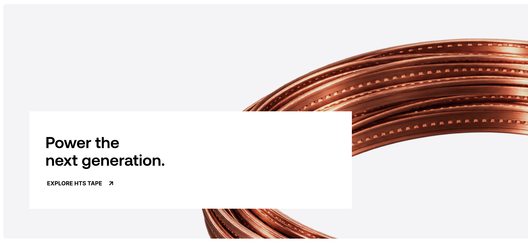
Scaling REBCO HTS for next-generation power systems

EXPLORE PERFORMANCE



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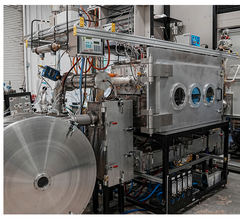

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Minimal heat generation



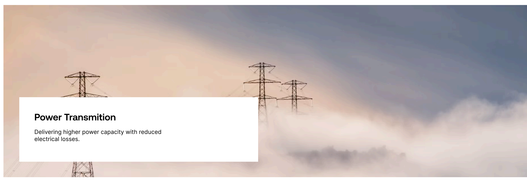
Fusion

Enabling more compact, efficient fusion systems through high-performance superconductors.



Data Centers

Supporting next-generation AI and computing with compact, high-density power solutions.



Power Transmition

Delivering higher power capacity with reduced electrical losses.



Defence

Advancing mission-critical systems with high-performance superconducting technology.

RESOURCES /SCIENCE

From advanced conductors to high-field magnets.

Built on AMPeers' proprietary Advanced MOCVD technology, STAR® Wire continues to advance through research, manufacturing scale-up, and collaborative magnet development.

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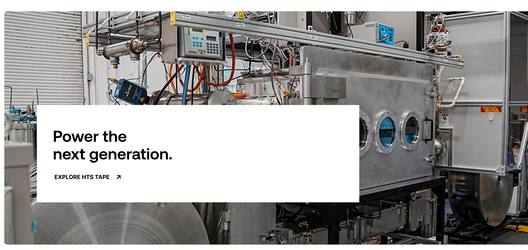

Power the next generation.

EXPLORE HTS TAPE

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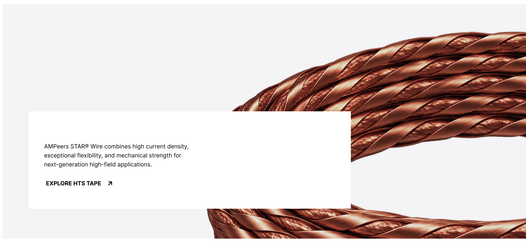
Engineered for the world's most demanding magnets.

EXPLORE PERFORMANCE



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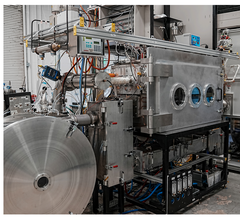

OUR ADVANTAGE

Built to bend. Designed to perform.

STAR® Wire maintains high critical current across demanding temperature and magnetic field conditions, combining flexibility with the performance required for next-generation superconducting magnets.

1,000+ A/mm² at 20 T

High current density for demanding high-field applications.

APPLICATIONS

Engineered for high-field applications.

EXPLORE OUR TECHNOLOGY



Fusion



Power Transmition



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Defence

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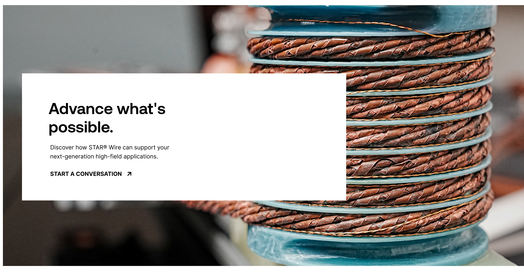
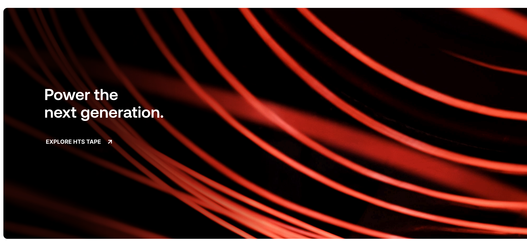


Advance what's possible.

Discover how STAR® Wire can support your next-generation high-field applications.

START A CONVERSATION



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