

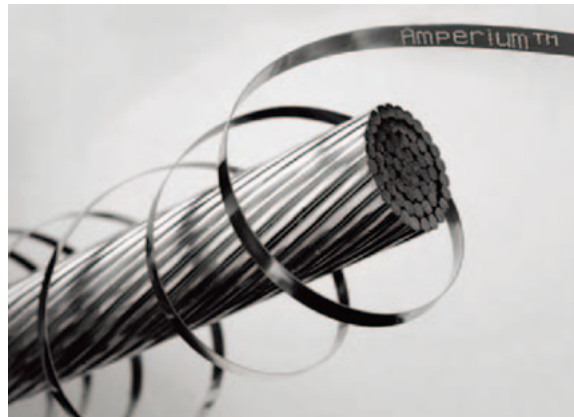
# アメリカンスーパーコンダクター社製 Amperium Wire

## American Superconductor's Second Generation HTS wires

American Superconductor 社製 Amperium Wire は、コストパフォーマンスのみならず、優れた特性を有する第二世代 HTS 線材です。

American Superconductor's Amperium Wire has high cost performance and is the second generation HTS wire with excellent properties.

- HTS線材の安定性と強度向上のため線材両面に硬化銅をラミネート。
- エッジ部の半田フレットは気密性を保ち、腐食を防ぎ、電氣的安定性を向上させます。
- Wire laminated on both sides with hardened copper for stabilization and strength
- Solder fillets at edges provide hermeticity, environmental protection, and enhanced electrical stability



MECHANICAL PROPERTIES	4.8 mm	12 mm
Average thickness:	0.18 mm - 0.22 mm	0.18 mm - 0.22 mm
Minimum width:	4.70 mm	11.9 mm
Maximum width:	4.95 mm	12.3 mm
Minimum double bend diameter (RT):	30 mm <sup>i</sup>	30 mm <sup>i</sup>
Maximum rated tensile stress (RT):	150 MPa <sup>i</sup>	150 MPa <sup>i</sup>
Maximum rated wire tension (RT):	12 kg <sup>i</sup>	30 kg <sup>i</sup>
Maximum rated tensile strain (77K):	0.3% <sup>i</sup>	0.3% <sup>i</sup>

ELECTRICAL PROPERTIES	4.8 mm	12 mm
Minimum amperage (Ic) <sup>i</sup>	Average Engineering current density - Je (A/cm <sup>2</sup> ) <sup>iii</sup>	Average Engineering current density - Je (A/cm <sup>2</sup> ) <sup>iii</sup>
70 A	7,200 A/cm <sup>2</sup>	—
80 A	8,200 A/cm <sup>2</sup>	—
90 A	9,300 A/cm <sup>2</sup>	—
100 A	Contact factory	—
175 A	—	7200 A/cm <sup>2</sup>
200 A	—	8200 A/cm <sup>2</sup>
225 A	—	9300 A/cm <sup>2</sup>
≥250 A	—	Contact factory

Spliced wire available in long lengths

Insulation options: Contact factory

Certificate of Conformance provided.

Certificate of Analysis optionally available. Contact factory.

Leaders and trailers optionally available. Contact factory.

<sup>i</sup> Greater than 95% Ic retention

<sup>ii</sup> 77K, self-field, 1 μV/cm

<sup>iii</sup> Je is based on average thickness and width