

344 Superconductors

Type 344C: Copper stabilized YBCO second generation HTS wire

- HTS wire laminated on both sides with hardened copper for stabilization and strength
- Solder fillets at edges provide hermeticity, corrosion protection, and enhanced electrical stability
- Robust product with excellent mechanical strength and bend tolerance
- Optimized for use in power dense coils and magnets

344 superconductors are American Superconductor's new YBCO second generation HTS wires.



Mechanical Properties::

Average thickness:	0.18 - 0.22 mm
Minimum width:	4.27 mm
Maximum width:	4.55 mm
Minimum double bend diameter (RT):	25 mm ⁱ
Maximum rated tensile stress (RT):	200 MPa ⁱ
Maximum rated wire tension (RT):	12 kg
Maximum rated tensile strain (77K):	0.3% ⁱ

Electrical Properties:

Minimum amperage (I _c) ⁱⁱ	Average engineering current density (J _e) ⁱⁱⁱ
70 A	7,900 A/cm ²
80 A	9,100 A/cm ²
90 A	10,200 A/cm ²
≥100 A	Contact factory

Spliced wire available in long lengths

Insulation options: Contact factory

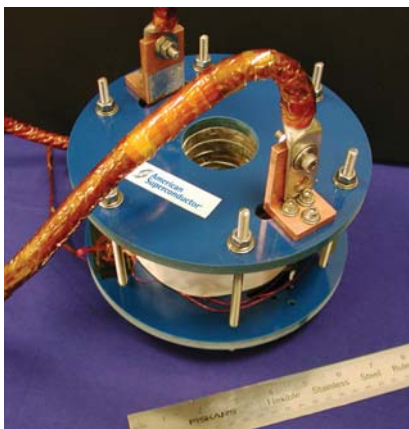
Certificate of Conformance provided.

Certificate of Analysis optionally available. Contact factory.

ⁱ With 95% I_c retention

ⁱⁱ 77K, self-field, 1μV/cm

ⁱⁱⁱ J_e is a calculated value based on average thickness and width



1.2 T HTS coil using Type 344C superconductors.



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