



SPACE TECHNOLOGY CAPABILITIES

In the severe environments encountered in space, electric wire cabling must transmit data under the most extreme conditions. As industry pioneers, Minnesota Wire has over two decades of experience in space wire cables. As a vertically integrated, custom manufacturer for wire, cable, and interconnect assemblies for space technology, Minnesota Wire can be counted on in the most demanding situations.

Life Saving Connections

SPACE TECHNOLOGY – WHY MINNESOTA WIRE

When it comes to space technology and life saving connections, you need an experienced and trusted partner. Minnesota Wire has designed over 6,000 space wire variations!

- Industry pioneers with over 20 years of experience in space wire cables
- Cutting edge and traditional materials
- Weight savings
- Heat resistance solutions
- High vibration mitigation
- Superior shielding
- Custom designs & rapid prototyping
- Test facilities including an EMI chamber plus three additional in-house labs
- AS9100 certified

Carbon-Based/Carbon Nanotube (CNT)

- Up to 60% lighter weight due to copper elimination
- High Performance Shield
- Fatigue/Corrosion Resistant
- Thermally Stable

AS9100 Certification | Short Runs | Custom Designs

Copper Space Wire

Specifications

- Incredibly light weight
- Uses thin wall of Oasis film polyimide jacket
- Single/double flat silver-plated copper clad aluminum braid shielded cables
- Capable of continuous operation over a temperature range of -65 C (-85 F) to +200 C (+392 F)

R&D Strategy

High Technology R&D Projects

Resourced to build new, sustainable value as a leader in the transformation of the wire, cable and interconnect industry.

Minnesota Wire Core Competencies

- 56-year-old family business
- Fully integrated manufacturer
- Extensive research & development department
- Four in-house labs (signal integrity, EMI chamber, mechanical, wet lab)
- Extensive space technology, military, and medical experience
- Development program for customized carbon nano-tube cable technology

"I commend the innovative team at Minnesota Wire for being the trailblazers to enable new, lightweight and tougher cable applications. Minnesota Wire has the expertise, capability, experience, and the innovative culture that was needed to successfully fabricate lighter weight cables having the electrical, mechanical, and the EMI attenuation performance comparable to copper-based cables with substantial weight savings. This team had the comprehensive understanding of our challenge as well as a true understanding of how to advance disruptive and innovative materials to create lighter weight shielded cables using carbon nanotube product forms."

— Ed Silverman,
Northrop Grumman Fellow