

# Laboratory Services

Consistent and impeccable product quality is an essential requirement for our wire users. MWS maintains one of the most comprehensive wire testing facilities in the wire industry, capable of testing per NEMA MW 1000 for insulated copper and aluminum magnet wire, as well as to unique customer specifications. MWS is a qualified UL producer to OBWM2, Magnet wire component.

## Testing capabilities include:

### Dimensional Analysis

Contact and non-contact laser micrometer analysis, and cross-section optical measurements for concentricity and corner radius measurements.

### Mechanical Properties

Stress/strain analysis; tensile, yield, break strength values.

### Electrical Properties

DC resistance, dielectric strength, capacitance, impedance, continuity of insulation, completeness of insulation cure, and TCR measurements.

### Thermal Properties

Thermoplastic flow, heat shock, insulation adherence, thermal endurance, and solderability of insulations per NEMA MW 1000.

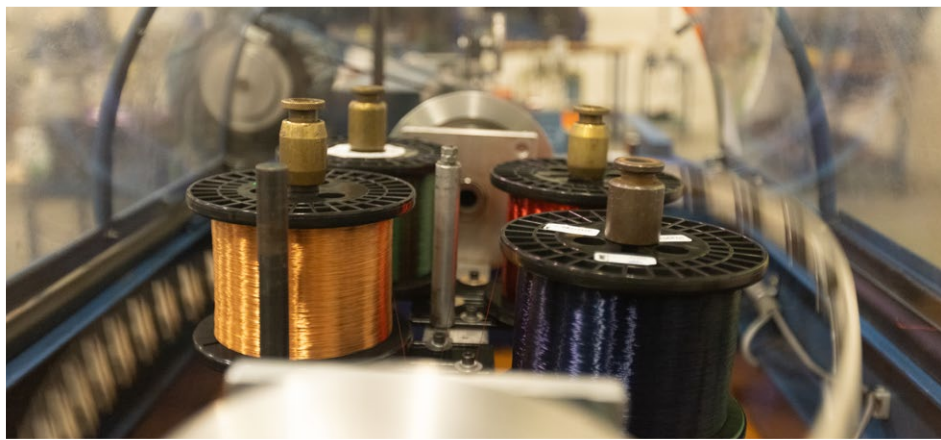
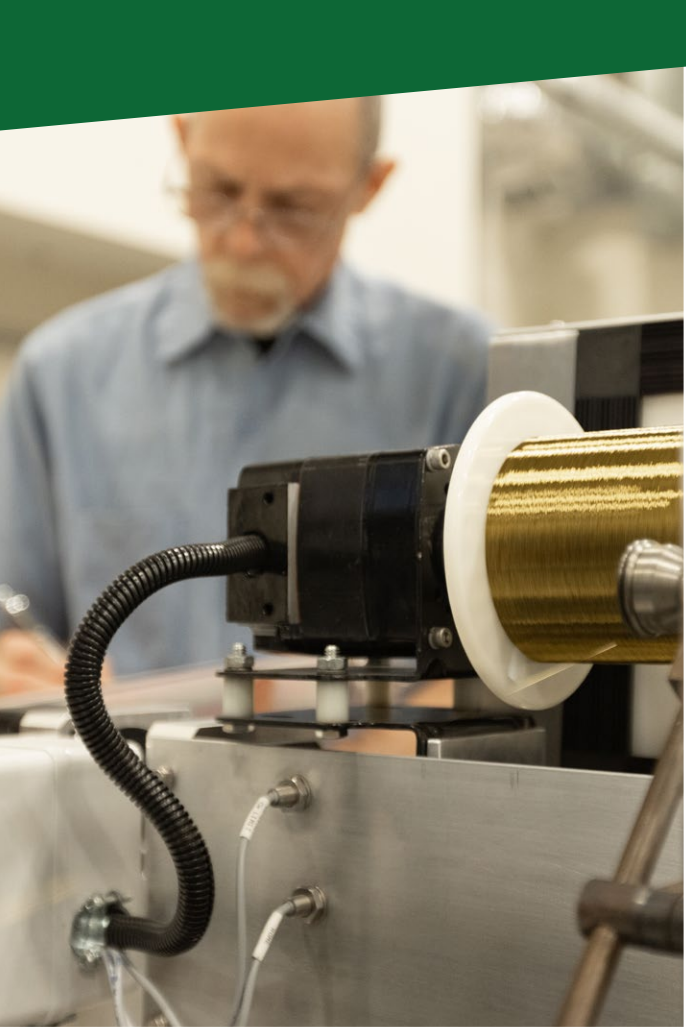
### Material Analysis

Base metal chemical analysis accurate to 1ppm. Insulated material analysis performed using infrared spectroanalysis.

### Special Testing

To customer specification, custom-built test equipment for unique applications.





# Manufacturing

MWS produces custom round, square, rectangular, ribbon, Multifilar<sup>®</sup>, Twistite<sup>™</sup> and Microsquare<sup>™</sup> wires in a state of the art manufacturing facility. Products offered include film insulated wire conforming to NEMA MW 1000 and IEC 60317 in temperature classes 105 to 240°C, from single through quadruple insulation builds. Low minimums, quick deliveries and superior quality are our standards.