

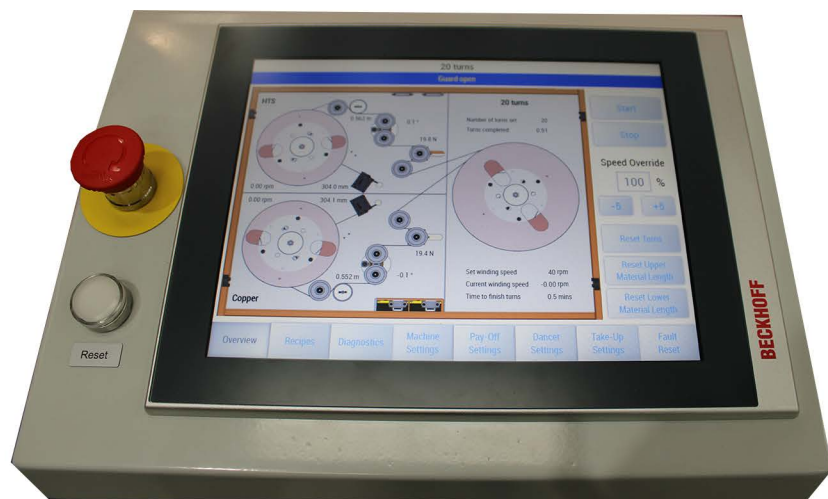
Superconductor Coil Winding Machine

The Superconductor Coil Winding Machine enables the production of precision coils or windings to meet critical requirements. Ergonomic design and intuitive operation make this machine the ideal solution for winding of low and high temperature superconductors as well as other materials.

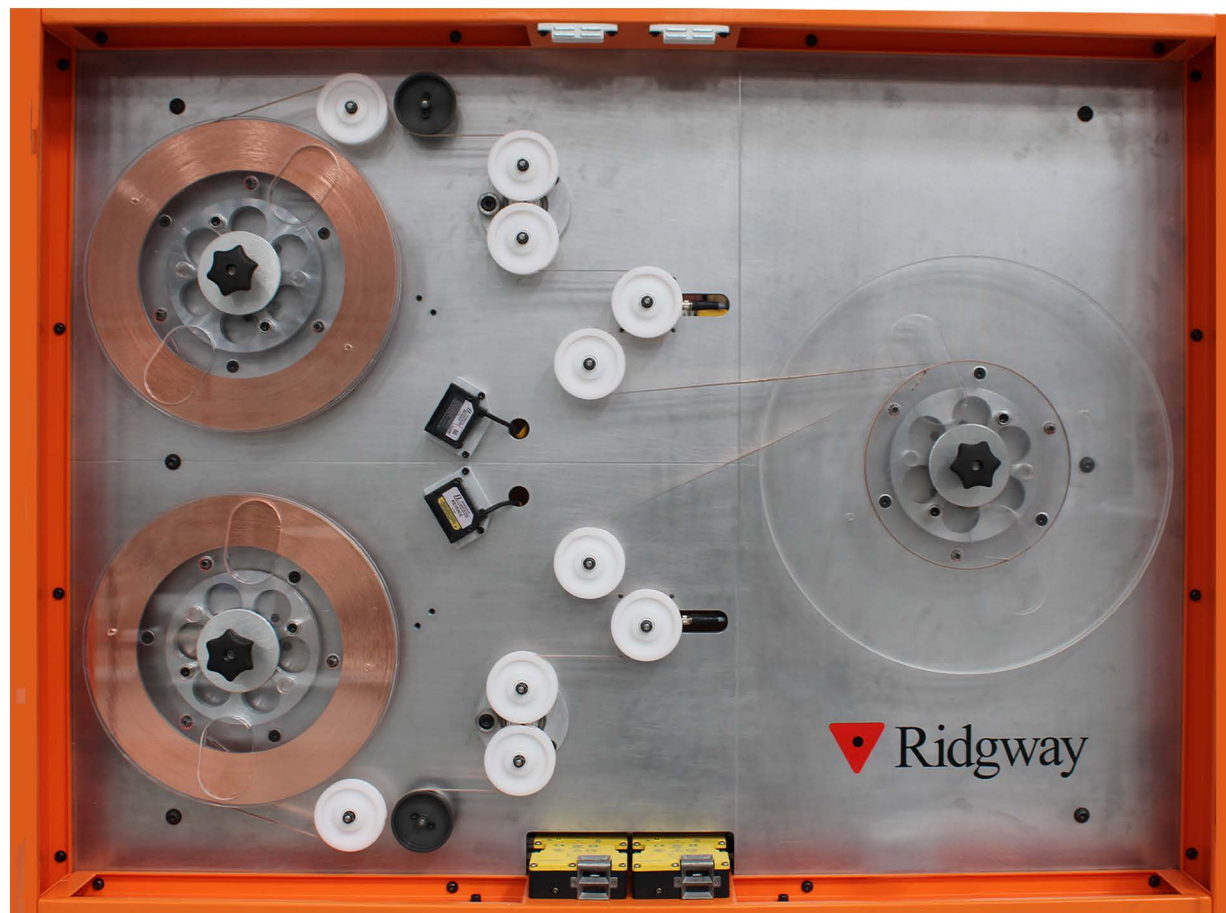
The coil winding fixture is attached to the right-hand spindle via an adaptor disk. Cassettes of material are loaded onto the left-hand spindles with adaptors to suit. The machine can be configured with multiple payoff units with each unit being individually controlled allowing for different tape materials and tensions to be used.

Winding parameters are entered into a 'recipe' as per the required specification. Parameters include winding direction, tape tensions, winding speeds and number of turns. Winding fixtures of complex two dimensional geometry can also be configured in the 'recipe'.

Tensions are accurately controlled via the precision drive and control systems with closed loop feedback. Tensions are maintained throughout the winding process and controlled as the cassette depletes. Loadcells enable tape tensions to be precisely controlled and the data can be captured for quality assurance purposes.



An operator interface (HMI) enables the operator to view the winding operation. The winding data is displayed in real time. Alarm signals can be set and the machine will stop automatically should these be triggered.



Maximum coil diameter	400mm
Maximum winding speed	40m/minute (other speeds available)
Maximum cassette outside diameter	300mm
Minimum cassette core diameter	100mm
Tension range	5 to 50N (other ranges available)
Tension accuracy	Typically better than +/-2%