Broomfield offers winding systems dedicated to winding generator rotors, poles and generator exciter coils. Heavy-duty winding machines, special cantilevered winding tooling and wire dereeler/tensioning systems provide for high production performance. Whether rotors are hollow bore or with the shaft inserted, these toolings allow for pole-to-pole rotation between winding, without removing or lifting the rotor until all 4 poles are wound. The tooling locks the rotor precisely in place for proper and simple pole alignment and the best wind situation, increasing quality, production and operator safety. Each tooling is made to accommodate a range of lamination diameters and stack heights to meet your product requirements.

Our winding machine controls will provide the proper wire guide motion to accommodate precision layer winding on Straight or Skewed lamination stacks, Shaded or Non-shaded poles.

“Several photos shown display this type of heavy-duty solid steel fabrication designed to precisely hold and rotate these revolving field rotors with lamination stacks between 150 mm (6”) to over 1300 mm (52”) diameter, stack heights up to 1,524 mm (60”) and weighing up to 18100 kgs. (40000 lbs).”

(Some of the rotors in these photos have been purposely “Blurred” to protect the customer’s product design).
A Completed System

“Below” is a completed system with Model 900 Winder (behind sheet metal guard), large cantilevered 4-pole rotor winding tooling for up to 762mm (30”) diameter rotor, servo wire guide, wire dereeler/tensioner with dancer accumulator, control stand with MP4 winding controller and operator station, 3-sided physical guarding and front light curtain guarding.

Model 900 winder configured to support 9,090 Kg. (20,000 lb.) cantilevered load. Servo wire guide located beneath 4,545 Kg (10,000 lb) rotor mounted in tooling.