

Western Instruments

Established 1965

WA-Series – AC Inspection Coils



Western's new WA-Series of AC Coils are the most powerful Portable AC Coils in the inspection World. All 4 models are rated at over 4000 Amp Turns at 115VAC / 60Hz, and in excess of 5000 Amp Turns at 230VAC / 50Hz ("K" Models). The new WA-Series Coils have ID sizes that correspond to the model number; WA-8, WA-10, WA-12, and WA-14, with diameters of 203mm (8"), 254 (10"), 305mm (12"), and 356mm (14"). These 4 new models replaced our dated WAC-10.

The WA-Series are supplied with a Power Cord that is over 2.5m (8') long, and a 1.5m (5') Foot Switch Cord. Both of these cords are SOOW

(XTREM H07RN-F), one of the highest standards for this type of power cord. With the foot switch being standard, WA-Series Coils are offered with an Energize Button for inspectors requiring extra mobility. The Energize Button is illustrated on the WA-8, in the foreground on the picture above, and in the highlight below

Both the Foot Switch and Energize Button activate Western's unique AC Module, which handles the full electrical load of the WA-Series Coils. The amperage capacity of these modules far exceeds the requirements of the Coil, which give the Foot Switch and Energize Button extended life. This is one of the reasons the AC Output from a WA-Series Coils is so high, we simply have a switching system that can handle the load.

AC Coils are effective for finding surface breaking defects on work pieces with little wear, but where stress results in the highest cause of component failure. The AC field does not penetrate the surface of the workpiece, so its affect is totally surface following. As a result of the surface following characteristic one should not expect full demagnetization from an Alternating Current Field.

For to those who believe that an AC Coil will demagnetize a workpiece, doesn't understand magnetic fields. An AC Coil will only affect the surface of a workpiece,



and the Eddy Currents that form just below the surface act as a shield to any magnetism in the body of the workpiece. Therefore, to truly demagnetize any ferro-magnetic part, a reversing and decaying DC field must be used.

The WA-Series of AC Coils use a common Core to our Medium Duty WP-Series. However, WA-Series are not offered with any options so they truly are an entry level inspection Coil. Unlike the WP-Series which, when fully equipped, offer Variable Reversing DC Fields, so whatever it magnetizes, it can demagnetize as well.

WA-14
w/Energize

WA-12
w/Energize Button

WA-10
w/Energize Button

WA-8
w/Energize

