

TOOL STEEL RING



159999

GENERAL DESCRIPTION

The Magnaflux® Tool Steel Ring is intended to be a total system check for your DC output equipment. This test gauge with subsurface discontinuities is an excellent tool that provides a quick way to confirm your DC output machine is working properly.

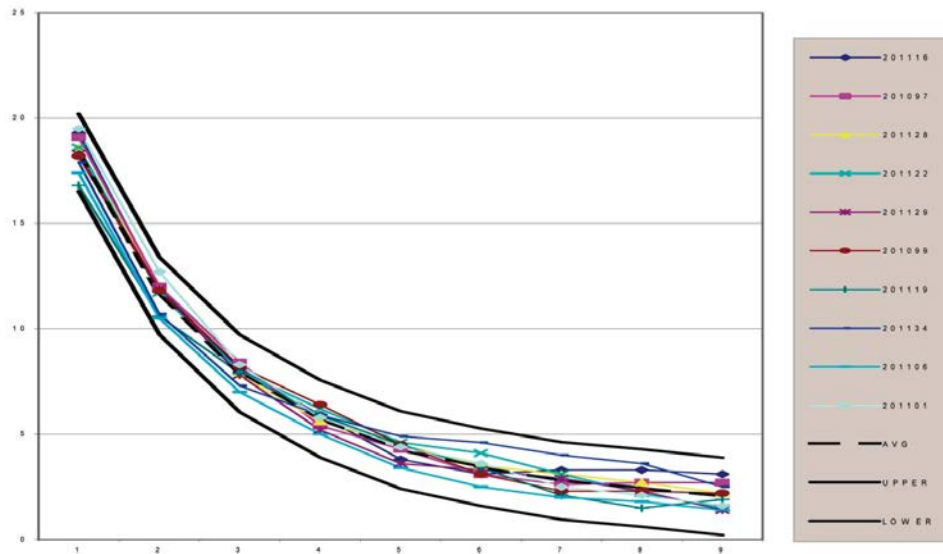
The Tool Steel Ring is meant to be a quick overall system performance indicator. This ring is to be processed by the continuous method using a 1-inch diameter central conductor. When properly processed, indications of artificial subsurface discontinuities will be produced on the circumferential surface of the ring. The number of indications produced is the function of magnetizing current amperage and the characteristics of the indicating medium. The results should conform to the minimum standards in the chart on page 2.

INSTRUCTIONS

Place the ring on a non-ferromagnetic central conductor (1"-1 1/4" or 2.54cm - 3.175cm). Clamp the central conductor between the head and tailstocks. With the amperage set to predetermined levels used for every test, magnetize the ring circularly with a contact shot using the continuous method of particle application. A consistent number of indications per level reveals the system is working properly. Refer to tables for number of indications to be visible. It is recommended to benchmark the performance of each specific combination of ring and magnetizing equipment used in order to detect any decrease in performance.

TYPE OF SUSPENSION	AMPERAGE FWDC or HWDC	MINIMUM NO. OF HOLES INDICATED
Fluorescent Oxide (wet)	500	3
	1000	5
	1500	6
	2500	7
	3500	9
Visible Oxide (wet)	500	3
	1000	4
	1500	5
	2500	6
	3500	8
Dry Powder	500	4
	1000	6
	1500	7
	2500	8
	3500	9

Also provided with your Magnaflux® Tool Steel Ring is an individual field leakage plot similar to the one shown below. The ring has been serialized to give you traceability in order to meet compliance standards.



SPECIFICATIONS COMPLIANCE

ASTM E709-08 (Sections 14.2.2, 20.6.7 & 20.8.4)

ASTM E1444/E1444M-12 (Section 7.1.2, Annex A4)

BPVC (Section V, Article 7: T-766.1)