

MAGNETIC PARTICLE EQUIPMENT

Yokes

Benefits

- ▶ Portable lightweight yokes for one-person inspection in tight places
- ▶ Adjustable legs enable you to inspect many different surface configurations
- ▶ **NEW!!**
One Year Warranty

MAGNAFLUX Yoke and Coil Kits

MAGNAFLUX Yoke Kits are designed for reliable, one person magnetic particle inspection of ferrous parts when portability is essential. Because the kits are portable and the yokes fit into tight places, they are ideal for in-plant structures and field work. MAGNAFLUX offers a variety of options, so you can select exactly what you need – a yoke only, or a kit that also includes testing materials and accessories.

Whether you choose a Y-6 AC yoke to locate surface cracks or a Y-7 AC/DC yoke to find surface and near-surface defects or a Y-8 battery powered yoke for portability, you always get unsurpassed MAGNAFLUX quality and reliability.

- ▶ Articulating, double-jointed legs contour easily to any part shape to assure good contact.
- ▶ Pull force (60 lbs DC, 10 lbs AC) complies with specifications.
- ▶ Solid state controls located in housing for maximum safety and reliability.
- ▶ 2-minute ON/OFF duty cycles for fast, efficient inspections (Y-6 and Y-7).
- ▶ 30-second ON/OFF duty cycle - Y-8.

Operating Instructions

When yoke is connected to a proper power source and energized, an intense longitudinal magnetic field is created in the area between the yoke legs. Any surface cracks will create flux leakages which will attract magnetic particles that form indications that allow for detection.

There are two testing methods:

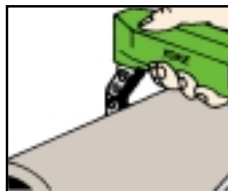
MAGNAFLUX Dry Non-Fluorescent Method, used with a yoke, does not require a black light and is more sensitive for finding near-surface defects on components with rough surfaces, such as castings and forgings.

MAGNAGLO Wet Fluorescent Method, used with a yoke and an ultraviolet black light, can find very fine surface flaws or slightly near-surface discontinuities (with Y-7 or Y-8 yokes only).

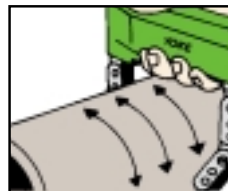
How to use



Preclean inspection area. Spray on Cleaner. Wipe off with cloth.



Place Yoke on test piece perpendicular to direction of suspected cracks.



Energize Yoke. Magnetic field will form in test piece.



Apply magnetic powder or prepared bath while Yoke is energized.



Indications will form immediately.



Y-8 Battery Powered Yoke

Yoke:	Y-8 Battery Powered Yoke <i>ONLY*</i> (Part #620145) *Must choose the appropriate voltage for the battery charger.
Battery Charger:	115v Charger (Part #620142) 230v Charger (Part #620709)
Current Draw:	4 amps @ 6 volts DC (Yoke Only)
Current Draw:	0.2 amps @ 115v or 230v (Charger Only)
Demag:	No
Yoke Weight:	7 ¾ lb.
Leg Capacity:	0" – 12" (0-30 cm) across poles
Cord:	12 ft., coiled

BATTERY SPECIFICATIONS

Rechargeable Battery:	6 volt, 12-amp hour
Battery Weight:	5 ¼ lb.



Y-6 AC Yoke

Yoke:	115v, 50/60 Hz (Part #43530) or 230v, 50/60 Hz (Part #43540)
Current Draw:	Less than 9 amps @115v Less than 4 amps @230v
Demag:	Yes
Yoke Weight:	7.3 lbs (3.1 kg)
Leg Capacity:	0" – 12" (0-30 cm) across poles
Cord:	9 ft (365.8 cm) with grounded plug
Other:	Carrying case and instructions



Y-7 AC/DC Yoke

Yoke:	115v, 50/60 Hz (Part #43550) or 230v, 50/60 Hz (Part #43560)
Current Draw:	9 amps @ 115v AC 4 amps @ 115v DC 4 amps @ 230v
Demag:	Yes
Yoke Weight:	7.4 lb 115v (3.6 kg) 7.2 lb 220v (3.27 kg)
Leg Capacity:	0" – 12" (0-30 cm) across poles
Cord:	9 ft (365.8 cm) with grounded plug
Other:	Carrying case and instructions

Magnetizing Yoke Kits

Designed for one-person portable magnetic particle inspections of ferrous parts. Ideal for inspection of welds and other remote testing. Articulating, double-jointed legs of yokes contour to any part shape to assure good contact.



a) Y-6 AC Yoke Kit

Part #	Includes
45291 – 115V 45292 – 230V	Y-6 Yoke, 1 lb. of #1 Gray Dry Powder, 1 lb. of #8A Red Dry Powder, 4 – Packets of Scrubs™, Powder Spray Bulb, Paint Marker, Wiping Cloth and Instructions. NEW – One Year Warranty

Y-7 AC/DC Yoke Kit

Part #	Includes
43509 – 115V 620741 – 230V	Y-7 Yoke, 1 lb. of #1 Gray Dry Powder, 1 lb. of #8A Red Dry Powder, 4 – Packets of Scrubs™, Powder Spray Bulb, Paint Marker, Wiping Cloth and Instructions. NEW – One Year Warranty



b) Y-8 Battery Powered Yoke Kit

Part #	Includes
611710	Battery Powered Yoke, Case, Charger and 1 lb. of #1 Gray Powder, Powder Spray Bulb, Paint Marker, Scrubs™, Wiping Cloth and Instructions. NEW – One Year Warranty

For Yoke Operating Instructions
see page 36.



MAGNAGLO® Fluorescent Kit

Part #	Includes
600088	ZB100F Blacklight 115v, 4 aerosol cans of 14AM (Wet Method, Fluorescent Premix of 14A Magnetic Powder and Carrier II Oil Petroleum Vehicle), Paint Marker, SCRUBS™ Hand Cleaner, Wiping Cloth and Instructions.
600089	ZB100 Blacklight 230v

MAGNAGLO® /MAGNAFLUX® Specification Conformance Chart

Wet Method Magnetic Particles

Specification	14A	14AM	14 Aqua Glo™	14A Redi-Bath™	20B	MG-410	7C Black	7HF Black	9C Red	9CM Red	Carrier II
NAVSEA T9074-AS-GIB-010/271	X		X	X	X	X	X		X		X
MIL-STD-2132	X	X	X	X	X	X	X	X	X	X	X
AMS 2641											X
AMS 3041								X		X	
AMS 3042							X		X		
AMS 3043								X		X	
AMS 3044	X		X	X	X						
AMS 3045		X									
AMS 3046		X									
ASME B & PV Code, Sec. V	X	X	X	X	X	X	X	X	X	X	X
ASTM E 709	X	X	X	X	X	X	X	X	X	X	X
ASTM E 1444	X	X	X	X	X		X	X	X	X	X
A-A-59230		X									X
Boeing PS-21201	X	X	X	X	X		X	X	X	X	X
NAVSEA 250-1500-1	X		X	X	X	X	X		X		
Pratt & Whitney PMC 1887											X

Dry Method Magnetic Particles

Specification	1 Gray	2 Yellow	8A Red	3A Black
NAVSEA T9074-AS-GIB-010/271	X	X	X	X
MIL-STD-2132	X	X	X	X
AMS 3040	X	X	X	X
ASME B & PV Code, Sec. V	X	X	X	X
ASTM E 709	X	X	X	X
ASTM E 1444	X	X	X	X
NAVSEA 250-1500-1	X	X	X	X