



2012-13 Catalog

NDT MATERIALS, EQUIPMENT & ACCESSORIES



Global Leadership in NDT



Global Leadership in NDT

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PENETRANT TESTING MATERIALS



LPI Fluorescent
Materials



LPI Non-Fluorescent
(Visible) Materials



"We trust in MAGNAFLUX Zyglo® fluorescent and Spotcheck® visible brand penetrant testing materials to deliver the level of quality performance that inspires customers to do business with us."

inspire



Magnaflux® certified fluorescent and visible dye penetrant inspection materials deliver unmatched performance in the detection of small defects and discontinuities in almost any non-porous material.

Delivering Quality

ZYGLO® FLUORESCENT PENETRANTS

POST EMULSIFIABLE FLUORESCENT PENETRANTS

Zyglo® ZL-2C Post Emulsifiable Fluorescent Penetrant

Zyglo® ZL-2C is designed to be impervious to water to protect it from over-washing and to allow more penetrant to remain in discontinuities for improved detection of small defects. It and other post emulsifiable penetrants require the application of a lipophilic or hydrophilic emulsifier to render them washable with water.

Zyglo® ZL-2C fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS-2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271.

Applications: Zyglo® ZL-2C is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, laminations and porosity.

Classification: Type 1, Method B Penetrant when using ZE-4B emulsifier.
Type 1, Method D Penetrant when using ZR-10B (20%) remover.

Penetrant Sensitivity Level: Level 2 - Normal Sensitivity.

Part Number & Container Size:

01-3123-40 5 Gal. Pail
01-3123-30 20 Gal. Drum
01-3123-45 55 Gal. Drum



PENETRANT TESTING MATERIALS

Magnaflux Zyglo® fluorescent and Spotcheck® visible liquid penetrant testing materials are the industry's most preferred and widely used NDT products employed in the detection of cracks and fine surface discontinuities in ferrous and non-ferrous test materials. Formulated from superior quality dyes and solvents they produce vivid indications in virtually all non-porous materials, and are supported by an expansive line-up of certified penetrants, cleaners, developers, emulsifiers, accessories and equipment.

Zyglo® ZL-27A Post Emulsifiable Fluorescent Penetrant

Zyglo® ZL-27A is designed to be impervious to water to protect it from over-washing and to allow more penetrant to remain in discontinuities for improved detection of small defects. It and other post emulsifiable penetrants require the application of a lipophilic or hydrophilic emulsifier to render them washable with water.

Zyglo® ZL-27A fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-27A is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, laminations and porosity.

Classification: Type 1, Method B Penetrant when using ZE-4B emulsifier. Type 1, Method D Penetrant when using ZR-10B (20%) remover.

Penetrant Sensitivity Level: Level 3 - High Sensitivity.

Part Number & Container Size:

01-3187-40 5 Gal. Pail

01-3187-30 20 Gal. Drum

01-3187-45 55 Gal. Drum

Also available in 16 oz. aerosol cans.



Zyglo® ZL-37 Post Emulsifiable Fluorescent Penetrant

Zyglo® ZL-37 is designed to be impervious to water to protect it from over-washing and to allow more penetrant to remain in discontinuities for improved detection of small defects. It and other post emulsifiable penetrants require the application of a lipophilic or hydrophilic emulsifier to render them washable with water.

Zyglo® ZL-37 fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-37 is ideal for titanium turbine components, investment castings, and other high stress critical components where detection of fine, tight discontinuities is required.

Classification: Type 1, Method B Penetrant when using ZE-4B emulsifier. Type 1, Method D Penetrant when using ZR-10B (20%) remover.

Penetrant Sensitivity Level: Level 4 - Ultra High Sensitivity.

Part Number & Container Size:

01-3188-40 5 Gal. Pail

01-3188-30 20 Gal. Drum

01-3188-45 55 Gal. Drum

01-3188-75 Penetrant Pens (Case of 12)





WATER WASHABLE FLUORESCENT PENETRANTS

Zygro® ZL-15B Water Washable Fluorescent Penetrant

Zygro® ZL-15B is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zygro® ZL-15B fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zygro® ZL-15B exhibits excellent rough surface washability and is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, cold shuts, laminations and porosity.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 1/2 - Very Low Sensitivity.

Part Number & Container Size:

- 01-3159-40 5 Gal. Pail
- 01-3159-30 20 Gal. Drum
- 01-3159-45 55 Gal. Drum



Zygro® ZL-19 Water Washable Fluorescent Penetrant

Zygro® ZL-19 is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zygro® ZL-19 fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zygro® ZL-19 exhibits excellent rough surface washability and is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, cold shuts, laminations and porosity.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 1 - Low Sensitivity.

Part Number & Container Size:

- 01-3263-40 5 Gal. Pail
- 01-3263-30 20 Gal. Drum
- 01-3263-45 55 Gal. Drum



Zyglo® ZL-60D Water Washable Fluorescent Penetrant

Zyglo® ZL-60D is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zyglo® ZL-60D fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-60D exhibits excellent rough surface washability and is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, cold shuts, laminations and porosity.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 2 - Medium Sensitivity.

Part Number & Container Size:

01-3272-40 5 Gal. Pail

01-3272-30 20 Gal. Drum

01-3272-45 55 Gal. Drum

Also available in 16 oz. aerosol cans.



Zyglo® ZL-67 Water Washable Fluorescent Penetrant

Zyglo® ZL-67 is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zyglo® ZL-67 fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-67 is typically used on critical applications including investment castings, jet engine components, and highly machined surfaces to find cracks, seams and porosity.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 3 - High Sensitivity.

Part Number & Container Size:

01-3274-40 5 Gal. Pail

01-3274-30 20 Gal. Drum

01-3274-45 55 Gal. Drum





Zyglo® ZL-56 Water Washable Fluorescent Penetrant

Zyglo® ZL-56 is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zyglo® ZL-56 fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-56 is typically used on smooth, nonporous, highly machined surfaces to find cracks, seams and scratches on critical parts.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 4 - Ultra High Sensitivity.

Part Number & Container Size:

- 01-3267-40 5 Gal. Pail
- 01-3267-30 20 Gal. Drum
- 01-3267-45 55 Gal. Drum



WATER BASED FLUORESCENT PENETRANTS

Zyglo® ZL-4C Water Based Penetrant

Zyglo® ZL-4C is a water based penetrant that contains no petroleum based solvents. It fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm.

The use of aqueous developers is not recommended with Zyglo® ZL-4C as they tend to wash the penetrant out of discontinuities. Dry powder developer (ZP-4B Dry Powder Developer) is applied after the test surface has been dried.

Specification Compliance: ASME B & PV Code Sec. V, ASTM E165.

Applications: Zyglo® ZL-4C is typically used on plastics and ceramics to find cracks. Zyglo® ZL-4C is also used as a leaker penetrant to detect through leaks. (Use with plastic parts should be tested to confirm Zyglo® ZL-4C compatibility.)

Part Number & Container Size:

- 01-3137-40 5 Gal. Pail
- 01-3137-45 55 Gal. Drum



EMULSIFIERS

Zyglo® ZE-4B Lipophilic Emulsifier

Zyglo® ZE-4B is a lipophilic emulsifier. It is non-corrosive and can be used in open tank operations due to its low volatility and high flash point.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, Boeing BAC 5423 PSD 6-46 or 8-4, MIL-STD-2132, ASTM E1417, Boeing PS 21202, AECL.

Applications: Zyglo® ZE-4B is used as a Method B lipophilic emulsifier for Magnaflux post emulsifiable penetrants.

Classification: Method B - Lipophilic Emulsifier.

Part Number & Container Size:

- 01-3546-40 5 Gal. Pail
- 01-3546-30 20 Gal. Drum
- 01-3546-45 55 Gal. Drum



Zyglo® ZR-10B Hydrophilic Emulsifier

Zyglo® ZR-10B is a hydrophilic emulsifier. It offers the advantages of minimization of fluorescent background on rough surfaces, minimization of bleed-out from hollow parts, and reduced consumption of expendable materials.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, Boeing BAC 5423 PSD 6-46 or 8-4, MIL-STD-2132, ASTM E1417, Boeing PS 21202, AECL, Honeywell EMS 52309, AMS 2647, General Electric P3TF2, Pratt & Whitney.

Applications: Zyglo® ZR-10B is used as a Method D hydrophilic emulsifier for Magnaflux® post emulsifiable penetrants.

Classification: Method D - Hydrophilic Emulsifier.

Part Number & Container Size:

- 01-3620-40 5 Gal. Pail
- 01-3620-30 20 Gal. Drum
- 01-3620-45 55 Gal. Drum



DEVELOPERS

Zyglo® ZP-4B Dry Powder Developer

Zyglo® ZP-4B is a free flowing, white fluffy powder used as a highly sensitive dry powder developer for Zyglo® Penetrants. When applied, ZP-4B forms a thin film on parts, enhancing indications of ultrafine discontinuities. Its high purity allows it to be used in applications where purity is essential to the testing process.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, Boeing BAC 5423 PSD 6-46 or 8-4, MIL-STD-2132, ASTM E1417, Boeing PS 21202, AECL, Honeywell EMS 52309, AMS 2647, General Electric P3TF2, Pratt & Whitney.





Zygro® ZP-4B Dry Powdered Developer Continued.

Applications: Zygro® ZP-4B is typically used on automobile parts, off-road equipment, farm equipment, welds, castings, forgings, leak testing, pressure vessels, aircraft, marine, construction, maintenance, petroleum pipelines, power plant inspections and general metalwork.

Classification: Form a - Dry Powder Developer.

Part Number & Container Size:

- 01-3328-69 10 lb. Pail
- 01-3328-75 20 lb. Container

Zygro® ZP-5B Water Suspending Developer

Zygro® ZP-5B Water Suspending Developer disperses quickly in water to form an opaque white suspension. At higher concentrations, Zygro® ZP-5B forms an opaque white coating which provides contrasting background for Spotcheck® penetrant indications.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, Boeing BAC 5423 PSD 6-46 or 8-4, MIL-STD-2132, ASTM E1417, Boeing PS 21202, AECL, AMS 2647, General Electric P3TF2.

Applications: Zygro® ZP-5B is typically used on automobile parts, off-road equipment, farm equipment, welds, castings, forgings, leak testing, pressure vessels, aircraft, marine, construction, maintenance, petroleum pipelines, power plant inspections and general metalwork.

Classification: Form c - Water Suspending Developer.

Part Number & Container Size:

- 01-3341-81 25 lb. Pail



Zygro® ZP-9F Developer

Zygro® ZP-9F is a dispersion of organic particles in isopropyl alcohol and acetone that produces an opaque white coating which provides an excellent contrasting background for Spotcheck® or Zygro® penetrant indications.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, ASTM E1417, Boeing PS 21202, AECL, AMS 2647, NAVSEA 250-1500-1.

Applications: Zygro® ZP-9F is typically used on automobile parts, off-road equipment, farm equipment, welds, castings, forgings, leak testing, pressure vessels, aircraft, marine, construction, maintenance, petroleum pipelines, power plant inspections and general metalwork.

Classification: Form d - Non-Aqueous Type 1 Fluorescent (solvent based).
Form e - Non-Aqueous Type 2 Visible Dye (solvent based).

Part Number & Container Size:

- 01-3354-40 5 Gal. Pail
- Also available in 16 oz. aerosol cans.



Zygro® ZP-14A Aqueous Soluble Developer

Zygro® ZP-14A is used as a water soluble developer for enhancing indications formed by Zygro® penetrants. It produces a uniform white coating when dry which is easily removed in post inspection cleaning by water spray. Once the developer bath has been prepared, no in use agitation is required to maintain developer uniformity.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, ASTM E1417, Boeing BAC-5423 PSD 6-46 or 8-4, AMS 2647, General Electric P3TF2, AECL.

Applications: Zygro® ZP-14A is recommended for use with Zygro® ZL-2C, ZL-27A, and ZL-37 penetrants.

Classification: Form b - Water Soluble Developer.

Part Number & Container Size:

01-3381-75 20 lb. Pail

01-3381-89 50 lb. Container



Zygro® ZA-70 Portable Fluorescent Penetrant Inspection Kit

The Zygro® ZA-70 Portable (aerosol) Fluorescent Inspection Kit offers improved sensitivity over our Spotcheck® visible red dye inspection kit.

Each kit contains:

- ZB-100F Ultraviolet Black Light
- 1 Can ZL-27A PE Fluorescent Penetrant
- 1 Can ZP-9F Developer
- 2 Cans SKC-S Cleaner
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case
- Instruction Booklet

Applications: The Zygro® ZA-70 Portable Fluorescent Inspection Kit is typically used on machined surfaces to find cracks, seams, laps, laminations and porosity.

Part Number:

600047 Kit with 115V ZB-100F UV Black Light

600045 Kit with 230V-60Hz ZB-100F UV Black Light

621304 Kit with 220V-50Hz ZB-100F UV Black Light



600047

Zygro® ZA-70R (16 oz.) Refill Kit

Each kit contains:

- 2 Cans ZL-27A PE Fluorescent Penetrant
- 2 Cans ZP-9F Developer
- 4 Cans SKC-S Cleaner
- Heavy Duty Wiping Cloth
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case
- Instruction Booklet

Part Number:

01-3930-48 Zygro® ZA-70R Refill Kit



01-3930-48



SPOTCHECK® VISIBLE PENETRANTS

SOLVENT REMOVABLE VISIBLE PENETRANT

Spotcheck® SKL-SP2 Solvent Removable Penetrant

Spotcheck® SKL-SP2 is a solvent removable, post emulsifiable, red color contrast penetrant with outstanding penetrating characteristics. It offers maximum reliability in locating surface-open flaws and discontinuities and has been successfully used on non-porous ceramics and other similar materials.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271.

Applications: Spotcheck® SKL-SP2 is typically used on welds, forgings, pressure vessels, castings, general metal work, leak testing, power plants and construction.

Classification: Type 2, Method B, C or D.

Part Number & Container Size:

- 01-5155-35 1 Gal. (Case of 4)
- 01-5155-40 5 Gal. Pail
- 01-5155-45 55 Gal. Drum
- 01-5155-75 Penetrant Pen (Case of 12)

Also available in 16 oz. aerosol cans.



WATER WASHABLE VISIBLE PENETRANT

Spotcheck® SKL-WP2 Water Washable Penetrant

Spotcheck® SKL-WP2 is a water washable, red color contrast penetrant with outstanding penetrating characteristics and discontinuity identification. Water wash removable, it eliminates the need for solvent removers or emulsifiers in the elimination of excess surface penetrant.

Specification Compliance: AMS 2644, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing PS 21202, AECL, NAVSEA 250-1500-1, AECL, Boeing BAC 5423 PSD 6-46 or 8-4.

Applications: Spotcheck® SKL-WP2 is typically used on welds, forgings, pressure vessels, castings and general metal work.

Classification: Type 2, Method A.

Part Number & Container Size:

- 01-5190-35 1 Gal. (Case of 4)
- 01-5190-40 5 Gal. Pail
- 01-5190-45 55 Gal. Drum

Also available in 16 oz. aerosol cans.



WATER BASED VISIBLE PENETRANT

Spotcheck® SKL-4C Water Based Penetrant

Spotcheck® SKL-4C is a water based, water washable, red dye penetrant used for leak testing and in the inspection of ceramic and chemically sensitive plastic parts. (Use with plastic parts should be tested to confirm Spotcheck® SKL-4C compatibility.)

Spotcheck® SKL-4C indications appear dark purplish-red under visible light and fluorescent orange under UV Black Light to provide dual range inspection flexibility. It can be diluted infinitely with water, but a dilution of 1:1 is generally recommended.

Specification Compliance: ASME B & PV Code Sec. V, ASTM E165.

Applications: Spotcheck® SKL-4C is typically used for leak testing, and ceramic and plastic part inspection.

Part Number & Container Size:

01-5125-40 5 Gal. Pail
01-5125-45 55 Gal. Drum



CLEANER/REMOVER

Spotcheck® SKC-S Cleaner/Remover

Spotcheck® SKC-S is a non-halogenated material used in the liquid penetrant inspection process. It is used on a moist cloth to remove surface penetrant from the inspection area prior to applying developer.

Specification Compliance: AMS 2644, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing PS 21202, NAVSEA 250-1500-1, AECL, Boeing BAC 5423 PSD 6-46 or 8-4.

Applications: Spotcheck® SKC-S is typically used to remove excess surface penetrant from the inspection area prior to applying developer.

Classifications: Class 2.

Part Number & Container Size:

01-5750-35 1 Gal. (Case of 4)
01-5750-40 5 Gal. Pail
01-5750-45 55 Gal. Drum
Also available in 16 oz. aerosol cans.





DEVELOPER

Spotcheck® SKD-S2 Non-Halogenated Solvent Developer

Spotcheck® SKD-S2 is a non-halogenated solvent developer that meets major requirements for special alloy and nuclear applications. It is a ready to use suspension of white developing particles in a fast drying solvent. It produces an opaque white coating which provides an excellent contrasting background for penetrant indications.

Specification Compliance: AMS 2644, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing PS 21202, NAVSEA 250-1500-1, AECL, Boeing BAC 5423 PSD 6-46 or 8-4.

Applications: Spotcheck® SKD-S2 is used as a developer for the liquid penetrant inspection process.

Classification: Form d - Non-Aqueous Type 1 Fluorescent (solvent based).
Form e - Non-Aqueous Type 2 Visible Dye (solvent based).

Part Number & Container Size:

- 01-5352-35 1 Gal. (Case of 4)
- 01-5352-40 5 Gal. Pail
- 01-5352-45 55 Gal. Drum

Also available in 16 oz. aerosol cans.



VISIBLE PENETRANT INSPECTION KITS

Spotcheck® SK-416 AND SK-816 Penetrant Inspection Kits

Spotcheck® SK-416 and SK-816 penetrant inspection kits contain everything needed to perform visible red dye liquid penetrant inspections. No UV Black Light is required for inspection.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD 2132, ASTM E165, MIL-STD 271.

Applications: Spotcheck® SK-416 and SK-816 penetrant inspection kits are used in the inspection of automobile parts, off-road equipment, farm equipment, welds, castings, forgings, leak testing, pressure vessels, aircraft, marine, construction, maintenance, petroleum pipelines, power plants and general metalwork.

Part Number:

01-5970-48 - Spotcheck® SK-416: Each kit contains:

- 1 Can SKL-SP2 Penetrant
- 1 Can SKD-S2 Developer
- 2 Cans SKC-S Remover
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case

01-5920-48 - Spotcheck® SK-816: Each kit contains:

- 2 Cans SKL-SP2 Penetrant
- 2 Can SKD-S2 Developer
- 4 Cans SKC-S Remover
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case



01-5970-48



01-5920-48

SPECIFICATIONS

ZYGLO® PENETRANTS

SPECIFICATIONS	Water Washable					Post Emulsifiable		
	ZL-15B	ZL-19	ZL-60D	ZL-67	ZL-56	ZL-2C	ZL-27A	ZL-37
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
AECL	X	X	X	X	X	X	X	X
AMS-2644	X	X	X	X	X	X	X	X
AMS-2647			X	X	X	X	X	X
ASME B & PV Code, Sec. V	X	X	X	X	X	X	X	X
ASTM E165	X	X	X	X	X	X	X	X
ASTM E1417	X	X	X	X	X	X	X	X
Boeing BAC 5423 PSD 6-46 or 8-4	X	X	X	X	X	X	X	X
Honeywell EMS 52309	X	X	X	X	X	X	X	X
General Electric P3TF2			X	X	X	X	X	X
Boeing PS 21202	X	X	X	X	X	X	X	X
Pratt & Whitney FPM		X	X	X		X	X	X

ZYGLO® EMULSIFIERS, REMOVERS and DEVELOPERS

SPECIFICATIONS	Emulsifiers & Removers			Developers			
	ZE-4B	ZR-10B	SKC-S	ZP-4B	ZP-14A	ZP-5B	ZP-9F
NAVSEA T9074-AS-GIB-010/271	X	X	X	X	X	X	X
MIL-STD-2132	X	X	X	X	X	X	X
AECL	X	X	X	X	X	X	X
AMS-2644	X	X	X	X	X	X	X
AMS-2647	X	X	X	X	X	X	X
ASME B & PV Code, Sec. V	X	X	X	X	X	X	X
ASTM E165	X	X	X	X	X	X	X
ASTM E1417	X	X	X	X	X	X	X
Boeing BAC 5423 PSD 6-46 or 8-4	X	X	X	X	X	X	X
Honeywell EMS 52309	X	X	X	X	X	X	X
General Electric P3TF2	X	X	X	X	X	X	X
Boeing PS 21202	X	X	X	X	X	X	X
Pratt & Whitney FPM		X		X			X



SPOTCHECK® PENETRANTS, CLEANERS and DEVELOPERS

SPECIFICATIONS	Penetrants			Cleaners	Developers	
	SKL-SP2	SKL-WP2	SKL-4C	SKC-S	SKD-S2	ZP-5B
NAVSEA T9074-AS-GIB-010/271	X	X		X	X	X
NAVSEA 250-1500-1	X			X	X	
MIL-STD-2132	X	X		X	X	X
AECL	X	X		X	X	X
AMS-2644	X	X		X	X	X
ASME B & PV Code, Sec. V	X	X	X	X	X	X
ASTM E165	X	X	X	X	X	X
ASTM E1417	X	X		X	X	X
Boeing BAC 5423 PSD 6-46 or 8-4	X	X		X	X	X
Boeing PS 21202	X			X	X	X



"MAGNAFLUX® penetrant testing accessories helped to increase the speed and effectiveness of our NDT process and literally paid for themselves in time and labor savings within the first year."

expand



Magnaflux® Penetrant Testing Accessories have been designed to simplify and enhance the penetrant testing process and to make sure that the highest process control standards are maintained throughout the entire NDT test sequence.

Expanding Capabilities

TIMERS & MONITORING DEVICES

Hydrometer

A hydrometer is a lab or field device used to measure the specific gravity of a liquid solution and, therefore, its strength. When used for water based developers such as ZP-14A Water Soluble Developer and ZP-5B Water Suspendible Developer, it will give the specific concentration range for optimum performance.

If the hydrometer reading is high (based upon the supplied concentration graph), water is generally added. If the reading is low, developer is added to the bath.

Part Number:

5857 Magnaflux® Hydrometer

Refractometer

A refractometer is an easy to use laboratory or field device used to measure the concentration of the Hydrophilic Remover (ZR-10B) in water and is required to meet Pratt and Whitney and GE concentration specifications for hydrophilic removers.

A chart for converting refractive index to percent concentration of ZR-10B can be found and is available for downloading on the Magnaflux® website.

Part Number:

513829 Refractometer

Specifications Compliance: Pratt & Whitney and GE specifications.

Multi-Station Process Control Digital Timer

Battery operated multi-station digital timer shows MS/HM and station number with corresponding color LEDs. Timer displays up to 4 separate time cycles running at one time.

- Set audible and visual alarms for up to four (4) different dwell times: penetrant, rinse, emulsification and developer
- Features large easy to read LCD screen
- Count-up and count-down functions
- Wall mountable

Part Number:

522099 Multi-Station Process Control Digital Timer



5857



513829



522099

PENETRANT TESTING ACCESSORIES

Manufacturers and quality experts count on Magnaflux® penetrants to maintain their customer's rigid quality standards and to make sure that their parts, components and processes meet major industry certification requirements. The Accessories Group manufactures and maintains a broad inventory of products and support equipment designed to expand and enhance the penetrant inspection process for NDT professionals. From test panels and rinse sprayers to refractometers, Magnaflux® accessories help keep penetrant process control operations performing at peak productivity and quality levels.

HAND SPRAYERS

Dry Developer Spray Gun

Manual spray gun that delivers a light, even dry developer coating.

- Uses shop compressed air (dry)
- Features mix, jet and spread controls
- 1 quart capacity

Part Number:

521339 Dry Developer Spray Gun



521339

Hydro-Wash Spray Gun

For pre and post rinsing of parts using either the water-wash or post-emulsifiable processes.

- Air injection boosts velocity to permit faster rinsing of hollow or rough-surface parts
- Advantageous for areas with low or fluctuating water pressure

Part Number:

518992 Hydro-Wash Spray Gun



518992

Portable Pressure Sprayer

Lightweight pressure sprayer for spot application of penetrants, developers, and cleaners.

- 1 quart capacity
- Chrome-plated, solid brass construction
- Pressurize with compressed air to a maximum of 200 psi

Part Number:

195260 Portable Pressure Sprayer



195260

Water Spray Gun

For pre and post rinsing of parts using either the water-wash or post-emulsifiable processes.

- Provides optimal coarse spray to help prevent part over-washing

Part Number:

520090 Water Spray Gun



520090

CRACK COMPARATORS

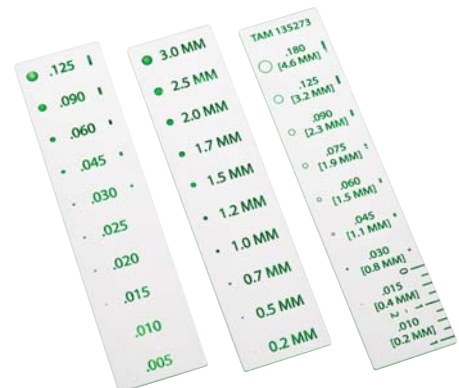
Inch and Metric Crack Comparators

Magnaflux® crack comparators are used to measure the actual size of indications identified during the liquid penetrant inspection process.

Part Number: 514048 - General Purpose Comparator. Measures indications in increments between .005" and 0.125"

Part Number: 514049 - General Purpose Metric Comparator. Measures indications in increments between 0.2mm and 3.0mm

Part Number: 514050 - Pratt & Whitney Crack Comparator. Measures indications in increments between 0.010" and 0.180" and meets Pratt & Whitney requirements (P&W Reference - TAM 135273)



514048

514049

514050



TEST BLOCKS

Aluminum Test Block

The Aluminum Test Block is an aluminum test piece measuring 3" x 2" x 3/8" with a 1/8" wide groove that splits the face in half. The test block is used to check the strength of "in-use" penetrants. This is done by processing one half of the block with "used" penetrant, and the other half with "fresh" penetrant.

Part Number:

14755 Aluminum Test Block

Specifications Compliance: Complies with ASTM E 165 and ASME Boiler and Pressure Vessel Code.



14755

Stainless Steel Test Block

The stainless steel test block offers a simple and convenient comparator for monitoring the washability of water-wash or post-emulsified penetrants.

The "grit blasted" finish provides a rough surface which will retain fluorescent background when the in-use penetrant has decreased when compared to fresh (unused) penetrant. The test block should be thoroughly cleaned with SKC-S Cleaner/Remover, as well as periodically refinished grit blast.

Part Number:

154400 Stainless Steel Test Block

Specifications Compliance: Complies with ASTM E 165.



154400

TEST PANELS

NiCr Penetrant Test Panels

Magnaflux® NiCr test panels are ideal penetrant sensitivity comparators. They come in pairs, with panel set crack depths available in 10, 20, 30 and 50 microns. NiCr test panels allow "in use" Zyglo® penetrants to be compared against "new, unused" product to determine if the penetrant is performing properly.

Dimensions: Length 100mm ± 2mm X Width 35mm ± 2mm X Thickness 2mm ± 0.2mm

Part Number:

- 506251 1 pair of 10 micron panels
- 506252 1 pair of 20 micron panels
- 506253 1 pair of 30 micron panels
- 506254 1 pair of 50 micron panels



506251

TAM Panel / Z5 Test Panel

The Magnaflux® TAM Panel (Pratt and Whitney TAM #146040) monitors both sensitivity and washability of Zyglo® liquid penetrants. The test panel is meant to detect "sudden" penetrant system changes and to ascertain that all parts of the penetrant processing system are functioning in the proper manner.

Part Number:

198055 TAM Panel / Z5 Test Panel

Specifications Compliance: Meets Pratt and Whitney TAM #146040 specifications.



198055

MISCELLANEOUS ACCESSORIES

TAM Panel Ultrasonic Cleaning Unit

Compact, table-top, ultrasonic cleaning unit with integrated heater and timer provides precision cleaning of TAM panels. Unit available in 115 or 230 volt versions.

Kit Includes:

- Table-top (toaster size) ultrasonic cleaning unit
- 1 gallon of Magnavul[®] alkaline cleaner concentrate

Part Number:

01-7500-00 115V Cleaning Unit
01-7501-00 230V Cleaning Unit



01-7500-00

Purified Wiping Cloths

Magnaflux[®] Purified Penetrant Wiping Cloths are ideally suited for penetrant inspection work in the nuclear industry or where ever lint free, low contamination wiping cloths are required or mandated. The unique crimped finish of the “Rymple Cloth” provides more surface area for collecting dirt particles, and better absorbency for collecting fluids. Each bulk dispensing roll is made from 100 square yards of cloth and yields 100 clothes per roll.

- Super absorbent
- Lint-free
- Soft texture will not scratch parts
- Cloths come with manufacturer certifications
- Chemically pure, does not contain binders or silicone

Part Number:

512302 Case of 12 rolls and dispensing rack



512302

Wire Basket

Sturdy 12" diameter 3/4" wire mesh basket designed to enable processing of numerous small parts at one time.

- Epoxy coated mesh protects parts from scratching

Part Number:

1962 Wire Basket



1962



E 1417-11 REQUIRED TESTS and FREQUENCY

TESTS	FREQUENCY	PARAGRAPH
Penetrant Contamination ¹	Daily	7.8.2.1
Penetrant Brightness	Quarterly	7.8.2.2
Water Content: Water Based Penetrant (Method A)	Weekly	7.8.2.3
Water Content: Non-Water Based Penetrant (Method A)	Monthly	7.8.2.4
Lipophilic Emulsifier Water Content ²	Monthly	7.8.2.5
Hydrophilic Emulsifier Concentration ²	Weekly	7.8.2.6
Dry Developer Condition ²	Daily	7.8.2.7
Aqueous Developer Contamination: Soluble and Suspendible	Daily	7.8.2.8
Aqueous Developer Concentration: Soluble and Suspendible	Weekly	7.8.2.9
Penetrant System Performance ³	Daily	7.8.3
Water-Washable Penetrant Removability	As Required Per 7.8.3	7.8.3.2
Emulsifier Removability	As Required Per 7.8.3	7.8.3.3
Comparative Penetrant Sensitivity	As Required Per 7.8.3	7.8.3.4
Black Light Intensity ²	Daily	7.8.4.1
Black Light Integrity	Weekly	7.8.4.1
Special UV Lighting	Daily	7.8.4.2
Battery Powered UV-A Lights	Prior to Use	7.8.4.2.1
Visible Light Intensity	Weekly	7.8.4.3
Light Meter Calibration ²	Semi-Annually	7.8.4.4
Inspection Area Cleanliness ¹	Daily	7.8.4.5
Inspection Area Ambient Light Intensity	Quarterly	7.8.4.5
Water Wash Pressure Check ¹	Start of Each Shift	7.8.4.6
Water Pressure Gauge Calibration ²	Semi-Annually	7.8.4.6
Water Wash Temperature Check ¹	Start of Each Shift	7.8.4.6
Water Temperature Gauge Calibration ²	Semi-Annually	7.8.4.6
Drying Oven Calibration ²	Quarterly	7.8.4.7
Air Pressure Gauge Check	Start of Each Shift	7.8.4.9
Air Pressure Gauge Calibration	Semi-Annually	7.8.4.9

¹ Need not be recorded.

² The maximum time between verifications or checks may be extended when substantiated by technical data and approved by the Cognizant Engineering Organization.

³ Not required for Method C Examinations.

PENETRANT INSPECTION EQUIPMENT



LPI Equipment

"MAGNAFLUX® penetrant testing equipment has significantly advanced the productivity of our NDT operations. We couldn't be more satisfied."

improve



Magnaflux® Penetrant Inspection Equipment is designed to enhance the quality inspection of critical parts and is widely used within the automotive, aerospace and energy markets to increase NDT productivity.

Boosting Productivity

LIQUID PENETRANT INSPECTION EQUIPMENT

Magnaflux Liquid Penetrant Inspection (LPI) Systems are designed for testing everything from small, high volume automotive parts and tolerance critical surgical implants, to large turbine blades. Offered in a variety of configurations and supported with materials and accessories to meet the most demanding applications, they are among the most flexible and accurate NDT equipment available today.

Our ZA-1227 Series LPI system offers sequenced processing capabilities and versatility in the inspection of high volume, extremely small parts and low to moderate volume, small to mid-size parts. With all stations welded into a single uni-frame body, its compact design helps to minimize floor space for easy production line integration. The ZA-1633 Series system comes with a larger penetrant tank to accommodate a greater volume and variety of parts, drain racks for increased productivity, and a standalone inspection booth.

Both series offer three models designed to accommodate different inspection methods; Water Wash, Post Emulsified Lipophilic and Post Emulsified Hydrophilic. The Water Wash method is the simplest unit as water can be used directly to wash excess penetrant from parts without additional steps. The Lipophilic method can locate extremely shallow flaws but requires an extra processing step, applying an emulsifier to make the penetrant washable. The Hydrophilic method delivers the highest inspection sensitivity but also requires the application of an emulsifier, and an additional processing station for pre-rinsing parts.

Should you have a special need not met by any of our standard units detailed in the following pages, our engineering group will happily design a custom LPI system to meet your exact requirements and application. Simply contact a Magnaflux Customer Service Representative at (847) 657-5300 to discuss your system needs.

PENETRANT INSPECTION EQUIPMENT

Magnaflux® Liquid Penetrant Inspection (LPI) Systems are engineered for critical part testing in industries with high inspection tolerances that require easy-to-operate equipment built tough enough to stand up to years of use. Offering outstanding design flexibility and proven performance advantages over less technologically advanced systems, Magnaflux® LPI equipment remains the leading choice among global automotive, aerospace and energy parts manufacturers who trust in their outstanding repeatability to uphold their rigid quality standards.

ZA-1227 SERIES LIQUID PENETRANT INSPECTION EQUIPMENT



Zygro® ZA-1227 Method A, Water Wash Fluorescent Penetrant Inspection System

The Zygro® ZA-1227 Water Wash Penetrant Inspection System is a compact, standalone 5-station system designed for batch and low volume fluorescent inspection of small to medium size parts.

Dimensions: 56"L x 28"W x 36"H (142.2cm x 71.1cm x 91.4cm)

Core Features:

- Compact size
- 304 stainless steel tanks (16 gauge)
- Durable welded steel frame
- Adaptable to multiple applications
- 3 year warranty
- Global authorized service centers

General Specifications:

- Elec. Requirements - 115V, 60Hz, single phase
- Tank Size - 12.88"L x 27.63"W x 16"H (32.7cm x 70.2cm x 40.6 cm)
- Tank Capacity - 10 gallons (37.9L)
- Dryer - Thermostatically controlled
- Black Light - Zygro® ZB-100F handheld, 100 Watt fan-cooled
- Stations:
 - 1) Penetrant
 - 2) Rinse
 - 3) Dryer
 - 4) Developer
 - 5) Inspection



Zyglo® ZA-1227 Method B, Post Emulsified Lipophilic Fluorescent Penetrant Inspection System

The Zyglo® ZA-1227 Post Emulsified Lipophilic Penetrant Inspection System is a compact, standalone 6-station system designed for batch and low volume fluorescent inspection of small to medium size parts.

Dimensions: 70"L x 28"W x 36"H (177.8cm x 71.1cm x 91.4cm)

Core Features:

- Compact size
- 304 stainless steel tanks (16 gauge)
- Durable welded steel frame
- Adaptable to multiple applications
- 3 year warranty
- Global authorized service centers

General Specifications:

- Elec. Requirements - 115V, 60Hz, single phase
- Tank Size - 12.88"L x 27.63"W x 16"H (32.7cm x 70.2cm x 40.6 cm)
- Tank Capacity - 10 gallons (37.9L)
- Dryer - Thermostatically controlled
- Black Light - Zyglo® ZB-100F handheld, 100 Watt fan-cooled
- Stations:
 - 1) Penetrant
 - 2) Emulsifier
 - 3) Rinse
 - 4) Dryer
 - 5) Developer
 - 6) Inspection

Zyglo® ZA-1227 Method D, Post Emulsified Hydrophilic Fluorescent Penetrant Inspection System

The Zyglo® ZA-1227 Post Emulsified Hydrophilic Penetrant Inspection System is a compact, standalone 7-station system designed for batch and low volume fluorescent inspection of small to medium size parts.

Dimensions: 83"L x 28"W x 36"H (210.8cm x 71.1cm x 91.4cm)

Core Features:

- Compact size
- 304 stainless steel tanks (16 gauge)
- Durable welded steel frame
- Adaptable to multiple applications
- 3 year warranty
- Global authorized service centers

General Specifications:

- Elec. Requirements - 115V, 60Hz, single phase
- Tank Size - 12.88"L x 27.63"W x 16"H (32.7cm x 70.2cm x 40.6 cm)
- Tank Capacity - 10 gallons (37.9L)
- Dryer - Thermostatically controlled
- Black Light - Zyglo® ZB-100F handheld, 100 Watt fan-cooled
- Stations:
 - 1) Penetrant
 - 2) Pre-Rinse
 - 3) Remover
 - 4) Final Rinse
 - 5) Dryer
 - 6) Developer
 - 7) Inspection

ZA-1633 SERIES LIQUID PENETRANT INSPECTION EQUIPMENT



Zygro® ZA-1633 Method A, Water Wash Fluorescent Penetrant Inspection System

The Zygro® ZA-1633 Water Wash Penetrant Inspection System is a standalone 6-station system designed for batch and low volume fluorescent inspection of small to medium size parts. The system comes with a standalone inspection booth with black light, white light, ventilating fan, and digitally calibrated dryer control.

Dimensions: 132"L x 34"W x 36"H (335.3 cm X 86.4 cm X 91.4 cm)

Core Features:

- Stand alone inspection booth
- 304 stainless steel tanks (16 gauge)
- Adaptable to multiple applications
- Durable welded steel frame
- 3 year warranty
- Global authorized service centers

General Specifications:

- Elec. Requirements - 230V or 460V, 60Hz, single phase
- Tank Size - 15.75"L x 33"W x 14.75"H (40 cm x 83.8 cm x 37.5 cm)
- Tank Capacity - 27 gallons (102.2L)
- Dryer - Digitally calibrated temperature control
- Black Light - Zygro® ZB-100F handheld, 100 Watt fan-cooled
- Stations:
 - 1) Penetrant
 - 2) Drain
 - 3) Rinse
 - 4) Dryer
 - 5) Developer
 - 6) Inspection



Zygro® ZA-1633 Method B, Post Emulsified Lipophilic Fluorescent Penetrant Inspection System

The Zygro® ZA-1633 Post Emulsified Lipophilic Penetrant Inspection System is a standalone 8-station system designed for batch and low volume fluorescent inspection of small to medium size parts. The system comes with a standalone inspection booth with black light, white light, ventilating fan, and digitally calibrated dryer control.

Dimensions: 165"L x 34"W x 36"H (419.1 cm X 86.4 cm X 91.4 cm)

Core Features:

- Stand alone inspection booth
- 304 stainless steel tanks (16 gauge)
- Adaptable to multiple applications
- Durable welded steel frame
- 3 year warranty
- Global authorized service centers

General Specifications:

- Elec. Requirements - 230V, 60Hz, single phase
- Tank Size - 15.75"L x 33"W x 14.75"H (40 cm x 83.8 cm x 37.5 cm)
- Tank Capacity - 27 gallons (102.2L)
- Dryer - Digitally calibrated temperature control
- Black Light - Zygro® ZB-100F handheld, 100 Watt fan-cooled
- Stations:
 - 1) Penetrant
 - 2) Drain #1
 - 3) Emulsifier
 - 4) Rinse
 - 5) Drain #2
 - 6) Dryer
 - 7) Developer
 - 8) Inspection

Zygro® ZA-1633 Method D, Post Emulsified Hydrophilic Fluorescent Penetrant Inspection System

The Zygro® ZA-1633 Post Emulsified Hydrophilic Penetrant Inspection System is a standalone 9-station system designed for batch and low volume fluorescent inspection of small to medium size parts. The system comes with a standalone inspection booth with black light, white light, ventilating fan, and digitally calibrated dryer control.

Dimensions: 182"L x 34"W x 36"H (462.3 cm X 86.4 cm X 91.4 cm)

Core Features:

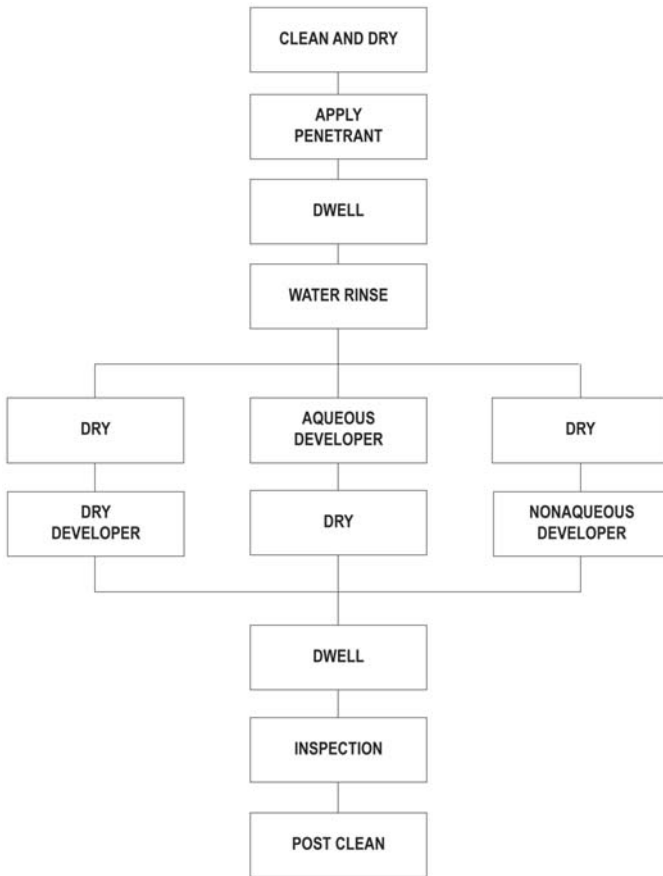
- Stand alone inspection booth
- 304 stainless steel tanks (16 gauge)
- Adaptable to multiple applications
- Durable welded steel frame
- 3 year warranty
- Global authorized service centers

General Specifications:

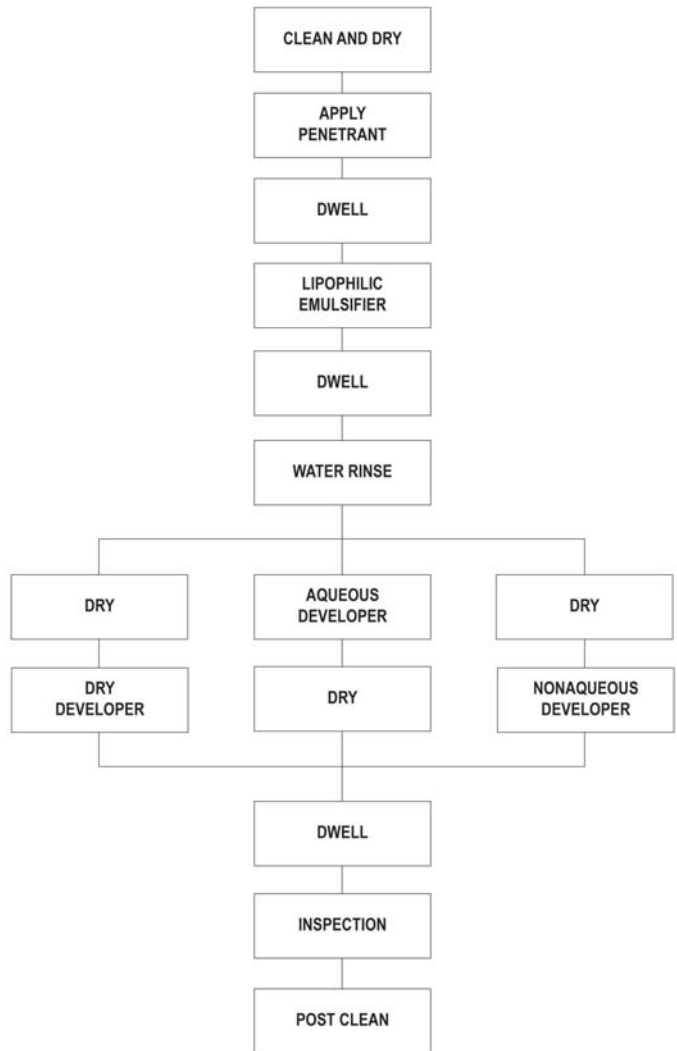
- Elec. Requirements - 230V or 460V, 60Hz, single phase
- Tank Size - 15.75"L x 33"W x 14.75"H (40 cm x 83.8 cm x 37.5 cm)
- Tank Capacity - 27 gallons (102.2L)
- Dryer - Digitally calibrated temperature control
- Black Light - Zygro® ZB-100F handheld, 100 Watt fan-cooled
- Stations:
 - 1) Penetrant
 - 2) Drain #1
 - 3) Pre-Rinse
 - 4) Drain #2
 - 5) Remover
 - 6) Rinse
 - 7) Dryer
 - 8) Developer
 - 9) Inspection

PROCESS FLOW FOR PENETRANT INSPECTION METHODS

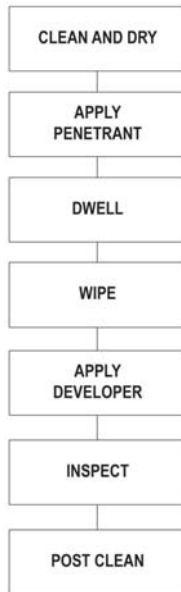
METHOD A, WATER-WASHABLE



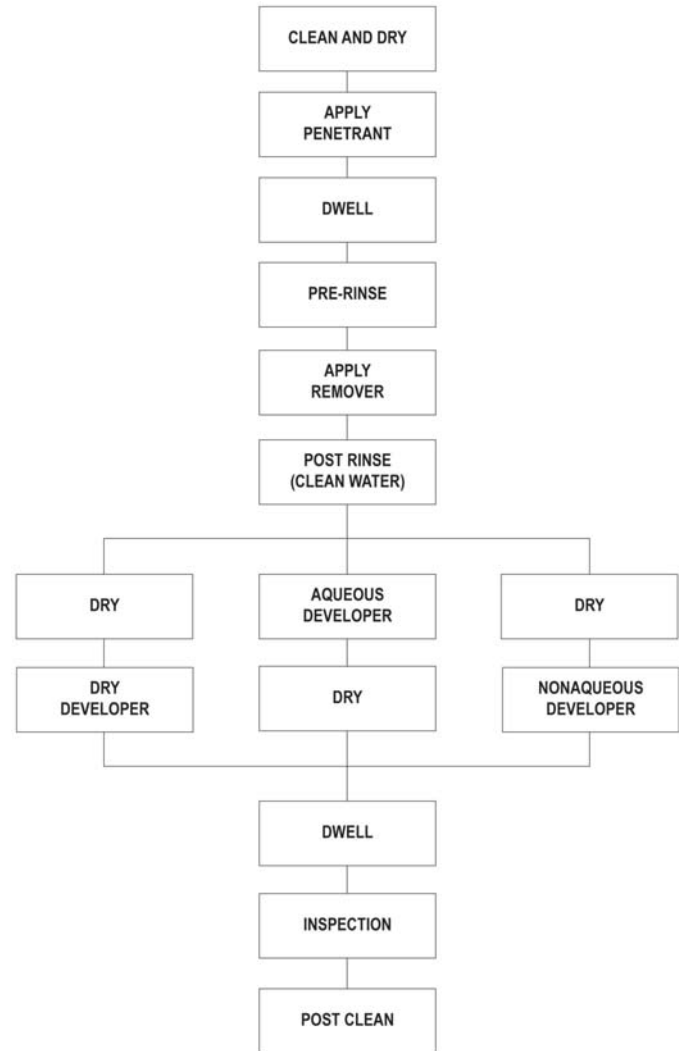
METHOD B, LIPOPHILIC



METHOD C, SOLVENT REMOVABLE



METHOD D, HYDROPHILIC





"MAGNAFLUX Daraclean® brand cleaners and corrosion inhibiting additives are multi-metal safe and packed with soil rejecting properties that promote self-cleaning and prolong bath life."

effective



Magnaflux Daraclean® brand aerospace approved cleaners and corrosion inhibiting additives have been formulated to deliver superior performance effectiveness across a broad range of soils and surfaces.

Superior Formulations

NEUTRAL CLEANERS

Daraclean® 121 Industrial Cleaner

Daraclean® 121 Industrial Cleaner is a mild, neutral cleaning solution formulated with a blend of surfactants and corrosion inhibitors. It is effective on most surfaces, and all components are FDA approved for indirect contact with food.

Applications: Designed to be used by hand and with immersion and ultrasonic applications, Daraclean® 121 is an excellent cleaner for use on a broad spectrum of soils. It has been proven excellent at removing food grade lubricants, machining fluids, lube oils, motor oils, and buffing compounds. Using mild, neutral surfactant chemistry, oils and solids are broken down and pulled free from part surfaces. Foaming action allows the cleaner to penetrate into crevices and holes, rinsing freely with no remaining residue.

Part Number & Container Size:

01-6140-45 55 Gal. Drum



Daraclean® 212 Aerospace Cleaner

Daraclean® 212 Aerospace Cleaner is an aerospace approved foaming, all-purpose neutral cleaning solution. Formulated with a blend of surfactants, emulsifiers, and corrosion inhibitors, it is an excellent cleaner for use on a broad spectrum of soils.

Applications: Designed for ultrasonic applications, Daraclean® 212 is safe for use with most metals and is non-aggressive towards aluminum and titanium alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 212 far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 212 has been tested and certified to meet and exceed most Aerospace industry specifications for aqueous and alkaline cleaners. OEM certifications include Boeing and Douglas. Independent laboratory tests confirm that Daraclean® 212 complies with AMS 1526 (except dichromated magnesium), ARP 1755, and ASTM F-331, F-483, F-484, F-485, F-502, F-519, F-945, F-1110, and F-1111.

Part Number & Container Size:

01-6030-40 5 Gal. Pail
01-6030-45 55 Gal. Drum



AQUEOUS CLEANERS & ADDITIVES

Daraclean® aerospace cleaners make up one of the industry's broadest and most trusted lines of aqueous cleaners with formulas designed to meet or exceed almost every specification and need. Multi-metal safe and packed with soil-rejection technologies that promote self-cleaning and extend bath life, Daraclean® cleaners can improve the effectiveness of your NDT application process and help keep labor and material costs in check.

Daraclean® 235 Aerospace Cleaner

Daraclean® 235 Aerospace Cleaner is an aerospace approved low foaming, all-purpose neutral cleaning solution. Formulated with a blend of surfactants, emulsifiers and corrosion inhibitors, it is an excellent cleaner for use on a broad spectrum of soils.

Applications: Designed for immersion, ultrasonic and light spray applications, Daraclean® 235 is safe for use with most metals and is non-aggressive towards aluminum, brass, copper, titanium and zinc alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 235 far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 235 has been tested and certified to meet and exceed Aerospace industry specifications for aqueous and alkaline cleaners. OEM certifications include Boeing and Douglas. Independent laboratory tests confirm that Daraclean® 235 complies with AMS 1526 (except dichromated magnesium), ARP 1755, and ASTM F-331, F-483, F-484, F-485, F-502, F-519, F-945, F-1110, and F-1111.

Part Number & Container Size:

01-6050-40 5 Gal. Pail
01-6050-45 55 Gal. Drum



Daraclean® 236 Aerospace Cleaner

Daraclean® 236 Aerospace Cleaner is an aerospace approved low foaming, all-purpose neutral cleaning solution. Formulated with a blend of surfactants, emulsifiers, and corrosion inhibitors, it is an excellent cleaner for use on a broad spectrum of soils.

Applications: Designed for immersion, ultrasonic and spray applications, Daraclean® 236 is safe for use with most metals and is non-aggressive towards aluminum, brass and copper alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 236 far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 236 has been tested and certified to meet and exceed Aerospace industry specifications for aqueous and alkaline cleaners. OEM certifications include Boeing and Douglas. Independent laboratory tests confirm that Daraclean® 235 complies with AMS 1526 (except dichromated magnesium), ARP 1755, and ASTM F-331, F-483, F-484, F-485, F-502, F-519, F-945, F-1110, and F-1111.

Part Number & Container Size:

01-6040-40 5 Gal. Pail
01-6040-45 55 Gal. Drum





ALKALINE CLEANERS

Daraclean® 232 Aerospace Cleaner

Daraclean® 232 Aerospace Cleaner is an aerospace approved moderately foaming, all-purpose alkaline cleaning solution. Formulated with a blend of surfactants and corrosion inhibitors, it is an excellent cleaner for use on a broad spectrum of soils.

Applications: Designed for immersion, ultrasonic and light spray applications, Daraclean® 232 is safe for use with most metals and is non-aggressive towards aluminum, magnesium and titanium alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 232 far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 232 has been tested and certified to meet and exceed Aerospace industry specifications for aqueous and alkaline cleaners. OEM certification includes Pratt & Whitney requirements. Independent laboratory tests confirmed that Daraclean® 232 complies with ARP 1755 and ASTM F-945.

Part Number & Container Size:

01-6070-45 55 Gal. Drum



Daraclean® 257 Aerospace Cleaner

Daraclean® 257 Aerospace Cleaner is an aerospace approved low foaming, heavy duty alkaline cleaning solution. Formulated with a blend of surfactants, corrosion inhibitors and phosphates, it is an excellent cleaner for use on a broad spectrum of tough soils.

Applications: Designed for immersion, ultrasonic and spray applications, Daraclean® 257 is safe for use with hard metals and is non-aggressive towards aluminum, magnesium and titanium alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 257 far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 257 has been tested and certified to meet and exceed most Aerospace industry specifications for aqueous and alkaline cleaners. OEM certifications include Boeing, Douglas, GE, Canadair, and Pratt & Whitney. Independent laboratory tests confirm that Daraclean® 257 complies with AMS 1526, ARP 1755, and ASTM F-483, F-484, F-485, F-502, F-519, F-945, F-1110, and F-1111. Daraclean® 257 is also SCAQMD Clean Air Certified.

Part Number & Container Size:

01-6090-40 5 Gal. Pail

01-6090-45 55 Gal. Drum



Daraclean® 282 Aerospace Cleaner

Daraclean® 282 is an aerospace approved low foaming, all-purpose alkaline cleaning solution. Formulated with a blend of surfactants, emulsifiers and corrosion inhibitors, it is an excellent cleaner for use on a broad spectrum of soils.

Applications: Designed for immersion, ultrasonic and spray applications, Daraclean® 282 is safe for use with hard metals and is non-aggressive towards aluminum, magnesium and titanium alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 282 far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 282 has been tested and certified to meet and exceed most Aerospace industry specifications for aqueous and alkaline cleaners. OEM certifications include Boeing, Douglas, GE, Honeywell, Lockheed, Pratt & Whitney, Raytheon, Rolls Royce and Sunstrand. Independent laboratory tests confirm that Daraclean® 282 complies with AMS 1526, AMS 1537, ARP 1755, and ASTM F-483, F-484, F-485, F-502, F-519, F-945, F-1110, and F-1111.

Part Number & Container Size:

01-6000-40 5 Gal. Pail
01-6000-45 55 Gal. Drum



Daraclean® 282GF Aerospace Cleaner

Daraclean® 282GF (Glycol-Free) is an aerospace approved low foaming, all-purpose alkaline cleaning solution. Formulated with a blend of surfactants and corrosion inhibitors, it is an excellent cleaner for use on a broad spectrum of soils.

Applications: Designed for immersion, ultrasonic and spray applications, Daraclean® 282GF is safe for use with most metals and is non-aggressive towards aluminum, magnesium and titanium alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 282GF far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 282GF has been tested and certified to meet and exceed most Aerospace industry specifications for aqueous and alkaline cleaners. OEM certifications include Boeing, Douglas, GE, Pratt & Whitney, and Rolls Royce. Independent laboratory tests confirm that Daraclean® 282GF complies with AMS 1526, ARP 1755, and ASTM F-483, F-484, F-485, F-502, F-519, F-945, F-1110 and F-1111. Daraclean® 282GF is SCAQMD Clean Air Certified and is approved to MIL-C-29602.

Part Number & Container Size:

01-6010-40 5 Gal. Pail
01-6010-45 55 Gal. Drum





HEAVY DUTY CLEANERS

Daraclean® 200 Industrial Cleaner

Daraclean® 200 is a low foaming, all-purpose alkaline cleaning solution. Formulated with a blend of surfactants, emulsifiers, and corrosion inhibitors, it is an excellent cleaner for use on a broad spectrum of soils.

Applications: Designed for immersion, ultrasonic and spray applications, Daraclean® 200 is safe for use with most metals and is non-aggressive towards brass, copper, and titanium alloys. It has been proven effective at removing machine oils, lube oils, cutting fluids, buffing compounds, and even tough, carbonized soils. Using aggressive alkaline chemistry, heavy petroleum-based oils and carbonized soils are broken down and pulled free from part surfaces.

Specification Compliance: Daraclean® 200 is easy to use and maintain and is Clean Air Certified to SCAQMD requirements.

Part Number & Container Size:

- 01-6020-40 5 Gal. Pail
- 01-6020-45 55 Gal. Drum



Daraclean® 238 Aerospace Cleaner

Daraclean® 238 is an aerospace approved foaming, heavy duty alkaline cleaning solution. Formulated with a blend of surfactants, corrosion inhibitors, and phosphates, it is an excellent cleaner for use on a broad spectrum of tough soils.

Applications: Designed for immersion and ultrasonic applications, Daraclean® 238 is safe for use with hard metals and is non-aggressive towards aluminum, magnesium, and titanium alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 238 far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 238 has been tested and certified to meet and exceed Aerospace industry specifications for aqueous and alkaline cleaners. OEM certifications include Boeing, Douglas, Lockheed, and Pratt & Whitney. Independent laboratory tests confirm that Daraclean® 238 complies with AMS 1526, ARP 1755, and ASTM F-483, F-484, F-485, F-502, F-519, F-945, F-1110, and F-1111. Daraclean® 238 is also SCAQMD Clean Air Certified.

Part Number & Container Size:

- 01-6080-45 55 Gal. Drum



Daraclean® 259 Optic Cleaner

Daraclean® 259 Optic Cleaner is a low foaming, all-purpose alkaline cleaning solution formulated with a blend of surfactants, corrosion inhibitors, and phosphates. It is an excellent cleaner for use on a broad spectrum of soils and is safe to use with glass, ceramics, plastics, and metal.

Applications: Designed for immersion, spray, and ultrasonic applications, Daraclean® 259 has been proven effective at removing machine oils, lube oils, cutting fluids, buffing compounds, and even tough, carbonized soils. Using aggressive alkaline chemistry, heavy petroleum- based oils and carbonized soils are broken down and pulled free from part surfaces.

Part Number & Container Size:

01-6160-45 55 Gal. Drum



Daraclean® 283 Aerospace Cleaner

Daraclean® 283 is an aerospace approved low foaming, heavy duty alkaline cleaning solution. Formulated with a blend of surfactants, emulsifiers and corrosion inhibitors, it is an excellent cleaner for use on a broad spectrum of soils.

Applications: Designed for immersion, ultrasonic and spray applications, Daraclean® 283 is safe for use with most metals and is non-aggressive towards titanium alloys. It possesses excellent soil-rejecting qualities, suspending soils in the cleaner for a short period of time after lifting from a part's surface. Over time, solids will settle out, and oil and grease droplets will coalesce and float on the surface of the solution. Removal of soils can easily be accomplished using filters or skimmers as necessary. This action extends the useful life of Daraclean® 283 far beyond that of emulsion-type cleaning solutions.

Specification Compliance: Daraclean® 283 has been tested and certified to meet and exceed Aerospace industry specifications for aqueous and alkaline cleaners. OEM Certifications include Boeing, Canadair, and Pratt & Whitney. Independent laboratory tests confirm that Daraclean® 283 complies with AMS 1526†, ARP 1755, and ASTM F-483, F-484, F-485†, F-502, F-519, F-945, F-1110†, and F-1111.

†Except dichromated magnesium, anodized aluminum, and zinc.

Part Number & Container Size:

01-6060-40 5 Gal. Pail

01-6060-45 55 Gal. Drum



HEAVY DUTY POWDER CLEANERS

Daraclean® LC5 Industrial Cleaner

Daraclean® LC5 Industrial Cleaner is a heavy duty powder detergent for use with most metals and hard surfaces. It has proven highly effective at removing dirt, grease, grime, oil, waxes, and buffing compounds. Using powerful chemical action, oils and solids are broken down and pulled free from part surfaces while inhibitors prevent surface pitting and corrosion.

Part Number & Container Size:

01-6400-87 45lb. Pail





MAGNAVU® CLEANERS

MagnaVu® Dip & Spray Cleaners

MagnaVu® formula cleaners are comprised of alkaline builders, surfactants, a corrosion inhibitor, pH adjuster and coupler, and come in both dip and spray formulas to meet all application needs. MagnaVu® cleaners have been tested in pre-cleaning and post-cleaning phases of NDT and determined to have no effect on processing if the part is thoroughly rinsed after cleaning.

Part Number & Container Size:

- 01-5731-40 MagnaVu® Dip Cleaner - 5 Gal. Pail
- 01-5731-45 MagnaVu® Dip Cleaner - 55 Gal. Drum
- 01-5733-45 MagnaVu® Spray Cleaner - 55 Gal. Drum



ADDITIVES

Daraclean® 615 Inhibitor

Daraclean® 615 is a non-foaming additive that prevents rust and corrosion. Formulated with a blend of inhibitors and emulsifiers, it is hard water tolerant, free-rinsing, and will not leave mineral films on part surfaces. Daraclean® 615 provides excellent broad-spectrum corrosion resistance to critical part surfaces, without depositing any mineral scale or insoluble films. It forms a monomolecular layer over clean metal surfaces, providing a barrier between the metal and environmental oxidizers and humidity. The monomolecular film rinses away cleanly with solvent, coating prep, or aqueous cleaning.

Applications: Daraclean® 615 is designed to be used with immersion and spray rinses and is safe for use with most metals, and non-aggressive towards aluminum, brass, copper, and titanium alloys.

Part Number & Container Size:

- 01-6120-40 5 Gal. Pail
- 01-6120-45 55 Gal. Drum

SPECIFICATIONS

DARACLEAN® and MAGNAVU® CLEANERS

Daraclean® and MagnaVu® Cleaners											
SPECIFICATIONS	200	212	235	236	238	257	282	282GF	283	MVD	MVS
AMS 1526 - Aircraft Exterior Surfaces		X ¹	X ¹	X ¹	X	X	X	X	X ²	X	
AMS 1537 - Alkaline Hot Tank Cleaner							X				
ARP 1511 - Low Embrittling Cadmium Plate		X	X		X	X	X	X	X	X	
ARP 1512 - Sandwich Corrosion		X	X	X	X	X	X	X	X ²	X	
ARP 1755 - Stock Loss Testing		X	X	X	X	X	X	X	X	X	X
ASTM F-331 - Nonvolatile Residue		X	X								
ASTM F-483 - Immersion Corrosion		X ¹	X ¹	X ¹	X	X	X	X	X ²	X	
ASTM F-484 - Stress Cracking of Acrylic Plastic		X	X	X	X	X	X	X	X	X	
ASTM F-485 - Unpainted Aircraft Surfaces		X	X	X	X	X	X	X	X ²	X	
ASTMF-502 - Painted Aircraft Surfaces		X	X	X	X	X	X	X	X	X	
ASTM F-519 - Hydrogen Embrittlement		X	X		X	X	X	X	X	X	X
ASTM F-945 - Titanium Stress Cracking		X	X	X	X	X	X	X	X	X	X
ASTM F-1110 - Sandwich Corrosion		X	X	X	X	X	X	X	X ²	X	
ASTM F-1111 - Low Embrittling Cadmium Plate		X	X		X	X	X	X	X	X	
Boeing BAC 5749 - Alkaline Cleaning									X		
Boeing BAC 5763 - Emulsion Aqueous Cleaning		X	X		X		X				
Boeing D6-17487										X	
Boeing D6-48809 Sandwich Corrosion		X	X	X	X	X	X	X	X ²		
Calif. Dept. of Health Title 22 - Aquatic Toxicity				X							
Canadair BW-92/333						X					
Bombardier/Canadair MPS 180-40									X		
Douglas CSD#1 - General Purpose Cleaner		X	X		X	X	X	X		X	
Douglas Helicopter HMS20-1267/2125						X				X	
Douglas Helicopter HMS20-1267/2127						X					
Douglas MD PS 1204					X	X					
GEAE CT-882 - Hot Corrosion						X					
GEAE Method 22 70-21-22							X	X			X
Honeywell EMS 53170							X			X	
Lockheed ADC - G32001					X		X				
Lockheed STM32-301					X						
Mil-C-29602 - Cleaning Compounds								X			
Mil-C-87937 TO 4W-1-61								X			
Pratt & Whitney PMC				1438			1429	237	1421	1435	1439
Raytheon MP-921							X				
Rolls Royce CSS 204 Type A							X	X			
SCAQMD Certification	X				X	X		X			
Sundstrand Data #037-0228-000								X			

X¹ Except dichromated magnesium

X² Except dichromated magnesium, anodized aluminum and zinc

MAGNETIC PARTICLE TESTING MATERIALS



MPI Fluorescent
Materials



MPI Non-Fluorescent
(Visible) Materials



“MAGNAFLUX Magnaglo® fluorescent and Magnavis® visible magnetic particle testing materials provide vivid, superior indications under black light and daylight inspection conditions.”

brilliant



Magnaflux® certified fluorescent and visible magnetic particle inspection materials offer NDT professionals superior detection capabilities in the identification of surface and slightly subsurface discontinuities in ferrous materials under daylight and black light conditions.

Vivid Performance

MAGNAGLO® FLUORESCENT PARTICLE INSPECTION MATERIALS

FLUORESCENT WET METHOD PARTICLES

Magnaglo® 14A Fluorescent Magnetic Powder

Magnaglo® 14A is intended for use in high sensitivity, wet method magnetic particle inspection and may be suspended in either a petroleum-based vehicle (oil) such as Carrier II or water.

Specification Compliance: ASTM E 1444, ASME B&PV Code, Sec. V, NAVSEA 250-1500-1, ASTM E-709 (E-138), MIL-STD-271, AMS-3044, Cummins IS-16048-13, MIL-STD-2132, Boeing PS 21201, British Std. B.S. 4069.

Applications: Magnaglo® 14A is used to locate fine surface and slightly sub-surface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks, and fatigue cracks.

Part Number & Container Size:

- 01-0130-57 1 lb. Plastic Jar
- 01-0130-71 1 lb. Plastic Jar (6)
- 01-3130-69 20 lb. Plastic Pail



Magnaglo® 14AM Prepared Oil Bath

Magnaglo® 14AM is a fluorescent prepared bath of 14A powder mixed with Carrier II (a high flash point petroleum vehicle). It comes ready to use without measuring and mixing.

Specification Compliance: ASTM E 1444, ASTM E 709 (E-138), Cummins IS-16048-13, MIL-STD-2132, Boeing PS 21201, British Std. B.S. 4069, DOD-F-87935, AMS-3045, AMS-3046 (aerosol package only).

Applications: Magnaglo® 14AM is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

- 01-0145-40 5 Gal. Pail
- Also available in 16 oz. aerosol cans.



MAGNETIC PARTICLE TESTING MATERIALS

Magnaflux Magnaglo® fluorescent and Magnavis® visible magnetic particle testing materials are two of the industry's most widely used and trusted NDT product lines. Their superior, finely controlled particles deliver maximum sensitivity to produce vivid indications that are unmatched in their detection of surface and slightly subsurface discontinuities across a range of ferrous materials. Backed by more than 80 years of magnetic particle experience and an expansive line-up of accessories and equipment, Magnaglo® and Magnavis® products are designed to support your NDT inspection process both in the field and in the shop with the level of performance that only Magnaflux® can provide.

Magnaglo® 14A Redi-Bath

Magnaglo® 14A Redi-Bath is a prepared liquid concentrate of 14A Fluorescent Powder, wetting agents, anti-foaming agents, and long lasting rust inhibitors.

Specification Compliance: ASTM E 1444, ASTM E 709, NAVSEA 250-1500-1, MIL-STD-271, MIL-STD-2132, ASME B & PV Code, Sec. V.

Applications: Magnaglo® 14A Redi-Bath is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

- 01-9130-35 Case of (4) 1 Gal. Jugs
- 01-9130-41 Case of (6) 27 oz. Containers



Magnaglo® 14A Aqua-Glo®

Magnaglo® 14A Aqua-Glo® is a prepared liquid solution of 14A Fluorescent Powder, water, conditioning agents, corrosion inhibitors and carbon dioxide propellant. It is designed to offer the benefits of a water bath in a convenient ready to use aerosol form. Magnaglo® 14A Aqua-Glo® is ideally suited for applications where portability is required, and flammability is a concern.

Specification Compliance: ASTM E 1444, ASTM E 709, NAVSEA 250-1500-1, ASME.

Applications: Magnaglo® 14A Aqua-Glo® is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

Available in 16 oz. aerosol cans.



Magnaglo® 20B

Magnaglo® 20B is a dry mix formula of 14A Fluorescent Powder and WA-2B water conditioner containing wetting agents and corrosion inhibitors designed to be added to a water bath.

Specification Compliance: ASTM E 1444, ASTM E 709 (E-138), NAVSEA 250-1500-1, MIL-STD-271, MIL-STD-2132, ASME B & PV Code, Sec. V.

Applications: Magnaglo® 20B is used to locate fine surface and slightly subsurface discontinuities such as inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

- 01-0179-71 Case of (6) 1 lb. Containers
- 01-0179-70 15 lb. Pail
- 01-0179-84 30 lb. Pail





Magnaglo® MG-410 Wet Method Fluorescent Magnetic Powder

Magnaglo® MG-410 Wet Method Fluorescent Magnetic Powder is a dry, free flowing magnetic powder that fluoresces bright yellow-green under black light (wavelength of 365 nm). Its fluorescent yellow-green color provides a vivid contrast against metal parts when viewed under black light in a darkened area but does not require total darkness for viewing.

MG-410 is closely controlled to assure optimum batch to batch consistency and inspection reliability and can be used with either water or oil vehicles.

Specification Compliance: ASME B & PV Code, Sec. V, NAVSEA 250-1500-1, MIL-STD-2132, ASTM E 709, NAVSEA T9074-AS-GIB-010/271.

Applications: Magnaglo® MG-410 is used for general purpose wet method magnetic particle inspection of inclusions, seams, cracks, tears, laps, flakes and welding defects.

Part Number & Container Size:

01-0191-59 2 lb. Jar



OIL VEHICLE

Magnaglo® Carrier II Oil

Magnaglo® Carrier II Oil is used to suspend wet (oil) method magnetic particles when water is not used as a suspension vehicle. It has virtually no odor or fluorescence and possesses a flash point in excess of 200°F allowing it to meet OSHA requirements for a Class III B liquid.

Specification Compliance: ASTM E 1444, ASTM E 709, Pratt & Whitney PMC 1887, A-A-59230, ASME B & PV Code, Sec. V, AMS-2641.

Part Number & Container Size:

01-2122-40 5 Gal. Pail
 01-2122-30 20 Gal. Drum
 01-2122-45 55 Gal. Drum



WATER BATH ADDITIVES

Magnaglo® AX-52 Corrosion Inhibitor

Magnaglo® AX-52 is a pale yellow to amber colored liquid corrosion inhibitor that mixes in and quickly dissolves in the water bath. It is an outstanding corrosion inhibitor for wet method magnetic particle inspection.

Part Number & Container Size:

01-2190-40 5 Gal. Jug



Magnaglo® WA-2B Water Conditioner

Magnaglo® WA-2B is a white granular powder water conditioner used in wet method magnetic particle testing when water is used as the bath vehicle. It is an excellent general-purpose water conditioner that gives a water bath good surface wetting and magnetic particle dispersion capabilities, along with a blend of wetting agents, corrosion inhibitors and anti foaming agents.

Part Number & Container Size:

01-2148-63 5 lb. Pail



Magnaglo® WC-1 Water Conditioner

Magnaglo® WC-1 is used in wet method magnetic particle testing when water is used as the bath vehicle. It is more rapidly dispersed than powdered conditioners and its unique blend of wetting agents, corrosion inhibitors and anti foaming agents eliminates the need for additional water conditioners. WC-1 provides good surface wetting and magnetic particle dispersion capabilities.

Part Number & Container Size:

01-2173-40 5 Gal. Pail



Magnaglo® ZAF-2 Non-Silicone Anti-Foam

Magnaglo® ZAF-2 Non-Silicone Anti-Foam is a clear, colorless liquid used to eliminate foaming in aqueous developer baths, water based magnetic particle baths and hydrophilic remover baths. A few drops of ZAF-2 sprinkled around on the surface of a bath is all that is required to eliminate most foaming.

Part Number & Container Size:

01-9410-20 1 Gal. Plastic Bottle



PORTABLE FLUORESCENT INSPECTION KITS

Magnaglo® Portable Fluorescent Inspection Kits

Magnaglo® Portable Fluorescent Inspection Kits come with a ZB-100F Ultraviolet Black Light and materials used to perform magnetic particle inspection. (No magnetic yoke is included with kit.)

Part Number:

600088 - Magnaglo® Kit with 115V - 60 Hz ZB-100F Black Light

Each kit contains:*

- (1) ZB-100F Fan-Cooled Ultraviolet Black Light
- (2) Cans of 14AM
- (2) Cans of SKC-S Cleaner
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case and Instructions

600089 - Magnaglo® Kit with 230V - 60 Hz ZB-100F Black Light

Each kit contains:*

- (1) ZB-100F Fan-Cooled Ultraviolet Black Light
- (2) Cans of 14AM
- (2) Cans of SKC-S Cleaner
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case and Instructions

* Note: No magnetizing device is supplied with this kit.



600088



MAGNAVIS® VISIBLE PARTICLE INSPECTION MATERIALS

VISIBLE WET METHOD PARTICLES

Magnavis® 7C Black Visible Wet Method Dry Powder Concentrate

Magnaglo® 7C Black Visible Wet Method Dry Powder Concentrate is ideally suited for use on light colored surfaces where optimum color contrast is needed. Magnaglo® 7C is composed of compounded magnetic powder and may be suspended in either Carrier II Oil Vehicle or in water.

Specification Compliance: ASME B & PV Code, Sec. V, ASTM E 709 (E-138), ASTM E 1444, AMS 3042, MIL-STD-271, MIL-STD-2132, NAVSEA 250-1500-1.

Applications: Magnaglo® 7C Black Visible Wet Method Dry Powder Concentrate is used to locate inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks and fatigue cracks.

Part Number & Container Size:

01-1116-66 8 lb. Pail



Magnavis® 7HF Black Visible Magnetic Particle Wet Method Prepared Bath

Magnavis® 7HF Black Visible Magnetic Particle Wet Method Prepared Bath is designed for spot inspections of parts that, because of their size or location, must be inspected in the field.

Magnavis® 7HF is composed of 7C Black Magnaflux® magnetic powder suspended in a low volatility mineral oil. It offers significant advantages in situations where bulk processing is found to be impractical and is often used in combination with WCP-2 White Contrast Paint.

Specification Compliance: ASME B & PV Code, Sec. V, ASTM E 709, ASTM E 1444, AMS 3041, AMS 3043, Boeing PS-21201, MIL-STD-2132.

Applications: Magnavis® 7HF is ideal for remote inspection of tubes, piping, and other large structures.

Part Number & Container Size:

Available in 16 oz. aerosol cans.



WHITE CONTRAST PAINT

Magnavis® WCP-2 Contrast Paint

Magnavis® WCP-2 Contrast Paint provides a white background that enhances magnetic particle indications. It is composed of acetone and inorganic pigments and utilizes a carbon dioxide aerosol propellant for ease of application.

Specification Compliance: BS 5044.

Applications: Magnavis® WCP-2 is designed for use in applications where the contrast in color between the part being tested and the magnetic particles being used is insufficient for reliable identification of flaws. WCP-2 can be used with both dry and wet-method magnetic particles.

Part Number & Container Size:

Available in 16 oz. aerosol cans.



NON-FLUORESCENT (Visible) INSPECTION KITS

Magnavis® Non-Fluorescent Inspection Kit

Magnavis® Non-Fluorescent Inspection Kits come with all materials (Yoke not included) required to perform in-field or in-shop non-fluorescent NDT inspections.

Applications: Portable non-fluorescent NDT inspections.

Part Number:

45295 - Each Magnavis® Non-Fluorescent Inspection Kit Contains:*

- 1 lb. #1 Gray Magnetic Powder
- 1 lb. #8A Red Magnetic Powder
- 1 lb. #3A Black Magnetic Powder
- (2) Cans (16 oz.) 7HF
- (1) Can (16 oz.) WCP
- (2) Cans (16 oz.) SKC-S Cleaner/Remover
- Powder Spray Bulb
- Field Indicator (2480)
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case and Instructions

* Note: No magnetizing device is supplied with this kit.



45295



VISIBLE DRY METHOD PRODUCTS

Magnavis® Dry Method Non-Fluorescent Magnetic Powders

Magnavis® Dry Method Non-Fluorescent Magnetic Powders produce clear, sharp indications across a variety of surfaces and background colors. Available in #1 Gray, #2 Yellow, #3A Black and #8A Red, Magnavis® magnetic powders are ready to use, free flowing, general purpose magnetic powders designed to produce, superior indications of surface and slightly subsurface discontinuities in ferrous materials.

Specification Compliance: ASME B & PV Code, Sec. V, ASTM E 709, NAVSEA 250-1500-1, NAVSEA T9074-AS-GIB-010/271, MIL-STD-2132, AMS-3040.

Applications: Magnavis® Dry Method Non-Fluorescent Magnetic Powders are used to identify indications in welds, large forgings and castings.

Part Number & Container Size:

- 01-1716-69 #1 Gray Magnetic Powder - 10 lb. Pail
- 01-1716-87 #1 Gray Magnetic Powder - 45 lb. Pail
- 01-1732-69 #2 Yellow Magnetic Powder - 10 lb. Pail
- 01-1732-87 #2 Yellow Magnetic Powder - 45 lb. Pail
- 01-1748-87 #3A Black Magnetic Powder - 45 lb. Pail
- 01-1780-69 #8A Red Magnetic Powder - 10 lb. Pail
- 01-1780-87 #8A Red Magnetic Powder - 45 lb. Pail



SPECIFICATIONS

MAGNAGLO® MAGNETIC PARTICLES

Magnaglo® Fluorescent Wet Method Magnetic Particles									
SPECIFICATIONS	14A	14AM	14 Aqua Glo	14A Redi-Bath	208	MG-410	7C Black	7HF Black	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
AMS 2641									X
AMD 3041								X	
AMS 3042							X		
AMS 3043								X	
AMS 3044	X		X	X	X				
AMS 305		X							
AMS 3046		X							
ASME B & PV Code, Sec. V	X	X	X	X	X	X	X	X	X
ASTM E 709	X	X	X	X	X	X	X	X	X
ASTM E 1444	X	X	X	X	X		X	X	X
A-A-59230		X							X
Boeing PS-21201	X	X	X	X	X		X	X	X
NAVSEA 250-1500-1	X		X	X	X	X	X		
Pratt & Whitney PMC 1887									X

MAGNAVIS® MAGNETIC PARTICLES

Magnavis® Visible Dry Method Magnetic Particles				
SPECIFICATIONS	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
NAVESEA 250 -1500-1	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

MAGNETIC PARTICLE TESTING ACCESSORIES



MPI Accessories

"MAGNAFLUX® Magnetic Particle Testing Accessories have allowed us to streamline and simplify our NDT process, while simultaneously boosting inspection speed and reducing cost."

simplify



Magnaflux® Magnetic Particle Testing Accessories are designed to help improve the speed, detection capabilities, and cost effectiveness of your MPI system.

Simplifying Inspection

CABLES, CONNECTORS & REMOTE DEVICES

Cables

Rubber covered flexible cables are available in standard lengths of 15' (4.57m) and 20' (6.09m) with a choice of either end or lug connectors. Custom cables and replacement connectors are also available.

Part Number:

- 11306 15' (4.57m) lugs at both ends
- 11307 15' (4.57m) lug and either end
- 11308 15' (4.57m) either ends at both ends
- 11312 20' (6.09m) lugs at both ends
- 11313 20' (6.09m) lug and either ends
- 11312 20' (6.09m) either ends at both ends



Connectors

Connectors for attaching 4/0 cables to Magnaflux® magnetizing equipment, including wet benches, powerpacks and mobile units.

Part Number:

- 1238 Either end connector (allows quick cable disconnect for maximum flexibility)
- 1238A Connector boot only
- 1574 Either end lug adapter (changes lug terminal to either end terminal)
- 1576 90° either end lug adapter (same as lug adapter 1574 but 90°)
- 2590 4/0 lug for permanent attachment to magnetizing equipment



Remote Control Cable

15' (4.57m) cable allows for remote energizing of portable power packs. Comes standard with 3 PTL plug.

Part Number:

- 157657 Remote Control Cable



Remote Palm Button

Remote palm button that mounts on side of Mag Kit for energizing current from power pack. Comes standard with 3 PTL plug.

Part Number:

- 169621 Mag Kit Remote Palm Button



MAGNETIC PARTICLE TESTING ACCESSORIES

Quality experts the world over count on Magnaflux® Magnetic Particle Testing Accessories to maintain their manufacturing standards and to help simplify, expand and improve their magnetic particle inspection processes. If you are looking to add to, or replace outdated MPI test components, you will find that Magnaflux offers an impressive line-up of accessories designed to meet your exact needs. From coils and prod sets, to field indicators, monitoring devices and spray applicators, Magnaflux® brand MPI accessories will help keep your process control operations performing at peak productivity and quality levels.

CENTRIFUGE TUBES & STANDS

Magnaflux® centrifuge tubes are individually calibrated to monitor the precise concentrations of Magnaglo® and Magnavis® particles in baths, as well as the contamination levels of their solutions.

Part Number: 8493 - Centrifuge Tube for Magnaglo® 14A, 14AM and 20B Fluorescent Particles. Measures in increments between 0 and 1.0 ml in 0.05 increments.

Part Number: 2461 - Centrifuge Tube for Magnaglo® MG-410 Fluorescent Particles. Measures in increments between 0 and 0.2 ml in 0.01 increments.

Part Number: 507923 - Centrifuge Tube for Magnavis® 7C and 9C Visible Particles. Measures in increments between 0 and 1.5 ml in 0.10 increments.

Part Number: 1837A - Aluminum Centrifuge Stand. Safely holds centrifuge tubes when mixing bath concentrations.



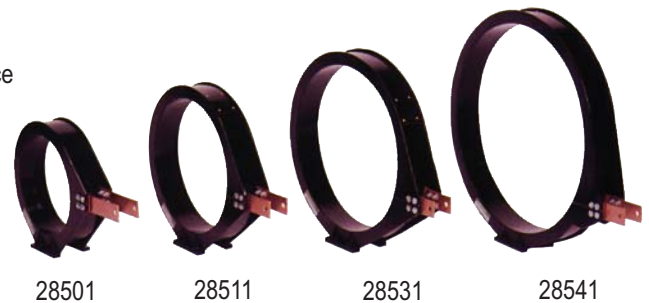
COILS

Coils for Bench Units

Five-turn coils in sizes from 12" to 25" that conform to most parts and produce optimal magnetic field applications.

Part Number:

- 28501 12" (30 cm) Coil
- 28511 16" (41 cm) Coil
- 28531 20" (51 cm) Coil
- 28541 25" (64 cm) Coil



Flat Magnetic Coil

For non-contact magnetic particle inspection of small parts such as fasteners and ring-like parts. Can be used with any magnetic particle unit or power pack to allow for the quick, easy processing of multiple parts at one time.

Part Number:

- 611700 Flat Magnetic Coil



L-10 Coil

Portable AC coil for use in the detection of surface cracks.

Part Number:

- 50651 Coil size 10" (25 cm) I.D. / 15" (38 cm) O.D. Comes with durable carrying case, flexible 10' (3 m) power cord. 115v, 60hz, 1-phase power source required to operate. 2,800 amp. turns.
- 620983 Coil size 10" (25 cm) I.D. / 15" (38 cm) O.D. Comes with durable carrying case, flexible 10' (3 m) power cord. 230V, 50/60hz, 1-phase power source required to operate. 2,800 amp. turns.



Clam Shell Coil Assembly

Part Number:

- 623031 19.7" (50 cm) Clam Shell Coil Assembly





CONDUCTORS & ADAPTERS

Central Conductors

Solid copper rods in diameters of .50" to 1.00" that provide circular magnetization of hollow parts.

Part Number:

622632 .50" Diameter x 15.875" Length

622633 .75" Diameter x 15.875" Length

622634 1.00" Diameter x 15.875" Length



622639

Small Parts Adapters

Magnaflux® small part adapters allow standard wet horizontal MPI test units to be used for inspecting small parts such as bolts, screws and pins. *Not for use with 12 x 12 contacts.*

Part Number: 28470 - Headstock Adapter. Made of solid copper and mounts directly to headstock.

Part Number: 28471 - Tailstock Adapter. Made of solid copper and mounts directly to tailstock.



28470

28471

CONTACT CLAMPS

Magnaflux® spring loaded and heavy-duty contact clamps facilitate the easier, more accurate inspection of tubing, bars, and tubular assemblies such as aircraft engine mounts, fuselage sections and large welded structures.

Part Number: 1865A - Spring Loaded Contact Clamp. For 1.25" to 2.50" diameter parts. Replacement copper braid (Part Number: 14710) also available.

Part Number: 169802 - Heavy-Duty Contact Clamp. For parts up to 7.00" diameter.

Part Number: 54975 - Magnetic Leach. Permanent magnet with 4/0 either end connector for attaching to parts.



1865A

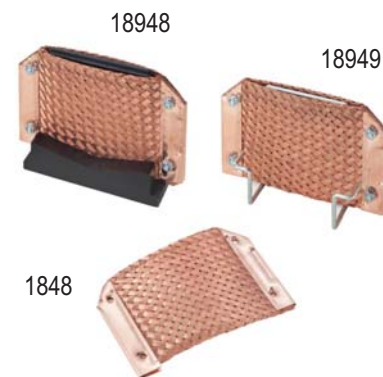
CONTACT PADS & PLATES

Magnaflux® long lasting copper braided contact pads and lead contact plates prevent arc burn by helping to maintain proper electrical contact between test parts and contact heads. Available in a variety of sizes to fit most MPI units.

Part Number: 1848 - Replacement Copper pad for 18948 and 18949. 4.75" (120.65mm) x 7.5" (190.5mm).

Part Number: 18948 - Double-Braided Pad with V-Block. Heavy copper braid provides contact over a larger surface area. Built with neoprene, the V-Block base centers and supports test parts. Can be reversed to provide two wear faces. Fits all units except A-915 and smaller Mag Series units.

Part Number: 18949 - Double-Braided Pad with Clip. Offers the same performance features as the 18948 but clips over the headstocks of A-915 and smaller Mag Series units.



18948

18949

1848

Contact Pads & Plates Continued -

Part Number: 605647 - Lead Contact Plate. Soft lead plate provides excellent contact with test parts and duplicates original headstock/tailstock contact plates. Fits all units except the A-915 and smaller Mag Series units. Size: 6.75" (171.45mm) x 6.635" (168.275mm) x .25" (6.35mm) thick.

Part Number: 605657 - Heavy Duty Lead Contact Plate. Copper impregnated lead contact plate that lasts 10 times longer than standard lead contact plates. Fits all units except A-915 and smaller Mag Series units.



FIELD INDICATORS

Field Indicators

Magnaflux® rugged, pocket-size 10 and 20 gauss field indicators are used to measure residual magnetism remaining in parts after magnetization.

Part Number: 2480 - Field Indicator. Inexpensive and disposable non certified 10 gauss field indicator.

Part Number: 505056 - 10 Gauss Calibrated Field Indicator. 10 gauss certified field indicator accurate to +0.5 gauss with a scale range of 10-0-10. Certification is provided with meter.

Part Number: 105645 - 20 Gauss Calibrated Field Indicator. 20 gauss certified field indicator accurate to +0.5 gauss with a scale range of 20-0-20. Certification is provided with meter.



Digital Hall Effect Meter Probe Gaussmeter

Magnaflux® digital hall effect meter measures AC and DC field strength. Includes meter, traverse probe, zero gauss chamber, batteries, manual, and case.

Part Number:

- 622604 Hall Effect Meter
- 622606 Axial Probe for Digital Hall Effect

622604



Pie Field Indicator

The Magnaflux® magnetic particle pie gauge is used as an aid in determining the direction of magnetic fields used in the detection of discontinuities in ferrous metal parts.

Part Number:

- 169799 Pie Field Indicator

169799



PORTABLE HAND SPRAYERS

Magnetic Particle Spray System

30 Gallon portable MPI spray system with 15 ft. recirculation hose and fan-pattern spray gun for inspection of large parts. May be used with water or oil based solutions. Continuous agitation for even particle suspension and fully portable with casters for easy mobility.

Part Number:

- 621778 Magnetic Particle Spray System

621778





Portable Pressure Sprayer

Easy to use, heavy-duty pressure sprayer for spot application of magnetic particle bath.

- Chrome-plated solid brass construction
- 1 quart capacity
- 200 psi maximum pressure

Part Number:

195260 Portable Pressure Sprayer

195260



Powder Spray Bulb

Lightweight, easy to use spray bulb for applying Magnavis® dry powders. Cap removes for easy refilling.

Part Number:

501232 Powder Spray Bulb

501232



MONITORING DEVICES

Quick Break Tester + Shot Timer

The Magnaflux® Quick Break Tester and Shot Timer displays peak quick break voltage in a quantitative way to facilitate detection of possible degradation of quick break.

Part Number:

622646 Quick Break Tester + Shot Timer

622646

Shot Timer

The Magnaflux® Shot Timer provides universal shot time detection for all MPI equipment.

- Reads shot time with 10ms resolution on digital display
- Microprocessor controlled for accurate signal capture and peak detection
- Low battery detection

Part Number:

622901 Shot Timer

622901



Digital Amperage Meter Kit

The Magnaflux® Digital Amperage Meter Kit is specifically designed for NDT applications and will certify the amperage on all MPI equipment manufactured by Magnaflux® up to 10,000 amps. Checks AC, HWDC, 1 Phase FWDC, and 3 Phase FWDC.

Part Number:

622350 Digital Amperage Meter Kit



622350

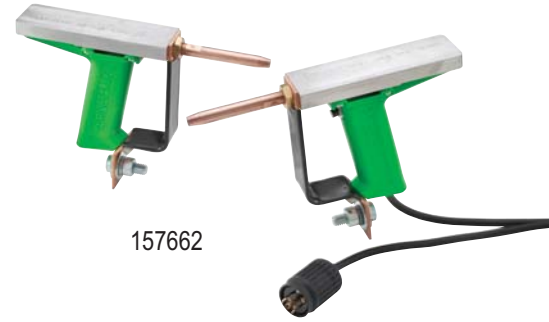
PROD SETS

Magnaflux® prod sets are convenient handheld electrodes used for conducting sectional inspections of welds, casting, forgings and other large and complex part shapes. Comfortable, pistol style grips and out-of-the-way cable hookups make it easy for testing parts that are not wet bench friendly.

Standard Prod Sets

Part Number: 622088 - For use with M-2000 Series units

Part Number: 157662 - For use with P-70 and P-1500 units



157662

Dual Horizontal Prod Assemblies

Part Number: 622499 - For use with M-2000 Series units

Part Number: 157781 - For use with P-70 and P-1500 units



622499

STEADYRESTS & CONTACT BLOCKS

Steadyrests

Used to support and stabilize long or heavy parts during the inspection process.

Part Number: 1857 - Rail Mounted Roller Type Steadyrest. Mounts and moves on rails with adjustable height to accommodate various part lengths. Fits all units except A-915 and small Mag Series units. Weight capacity up to 1,500 lbs.

Part Number: 605750 - Headstock Mounted Roller Type Steadyrest. Mounts on headstock to support one end of part (use rail-mounted Part Number 1857 to support other end). Speeds up part loading as coil may be retracted past the headstock. Fits all units except A-915 and small Mag Series units.

Part Number: 621658 - Tailstock Steadyrest. Designed for mounting on the tailstock and will work with either headstock or tailstock steadyrests.



1857

Contact Block

Permits remote testing of parts that are too heavy for processing on a unit. When clamped between head and tailstock, the block supplies magnetizing current to remote prods or clamps through flexible cables (cables not included, see cables & connectors).

Part Number:

1830 Contact Block



1830

TEST BLOCKS

Continuous Method Test Block

The Magnaflux® Continuous Method Test Block is used to check for proper magnetizing techniques on wet horizontal MPI units. Crack indications form on the test block when current flow and bath concentrations are at proper levels.

Part Number:

75130 Continuous Method Test Block



75130



TEST PIECES

Magnetic Particle Test Bar

The Magnaflux® Magnetic Particle Test Bar contains coarse and fine surface and subsurface defects in both directions. It meets or exceeds most industry and military standards for artificial test specimens.

Part Number:

189838 Magnetic Particle Test Bar



189838

Quantitative Quality Indicator Test Pieces

Quantitative Quality Indicators (QQI) are magnetic particle test pieces with artificial defects that are used to verify field direction and relative strength. They are also used to balance multi-directional fields and to increase productivity by minimizing magnetizing shots.

Part Number: 519630 - Standard QQI Model #KSC-230. Basic circular and cross bar flaw configuration suitable for longitudinal and circular fields. Flaw depth of 30% of shim thickness, .002" thick.

Part Number: 521048 - Standard QQI Model #KSC-430. Basic circular and cross bar flaw configuration suitable for longitudinal and circular fields. Flaw depth of 30% of shim thickness, .004" thick.

Part Number: 519631 - Miniature QQI Model #KSC-4-230. Similar to KSC-230 except miniature design for small areas on test part. The 4 circles may be cut apart for individual use. Flaw depth of 30% of shim thickness, .002" thick.

Part Number: 519632 - Variable Depth QQI Model #KSCT-234. Used for more quantitative work, the KSCT-234 contains 3 concentric circular flaws of varying depths. Flaw depths of 20%, 30% and 40% of shim thickness, .002" thick.

Part Number: 521049 - Variable Depth QQI Model #KSC4-234. Used for more quantitative work, the KSC4-234 contains 3 concentric circular flaws of differing depth. Flaw depths of 20%, 30% and 40% of shim thickness, .004" thick.



519630

519631

519632

521048

521049

Tool Steel Test Ring

The Magnaflux® Tool Steel Test Ring is a magnetic particle test piece with pre-drilled holes to simulate subsurface discontinuities. It provides a reliable method of verifying magnetic particle system performance when actual test parts with discontinuities are not available.

Part Number:

159999 Tool Steel Test Ring



159999

Magnetic Flux Indicators

Magnaflux® Type G (General use) magnetic flux indicators come in a packet of 5 and are used to detect appropriate levels of magnetic field strength. These flexible indicators also assist in determining directional orientation of the magnetic field.

Part Number:

008M004 Magnetic Flux Indicators (set of 5)

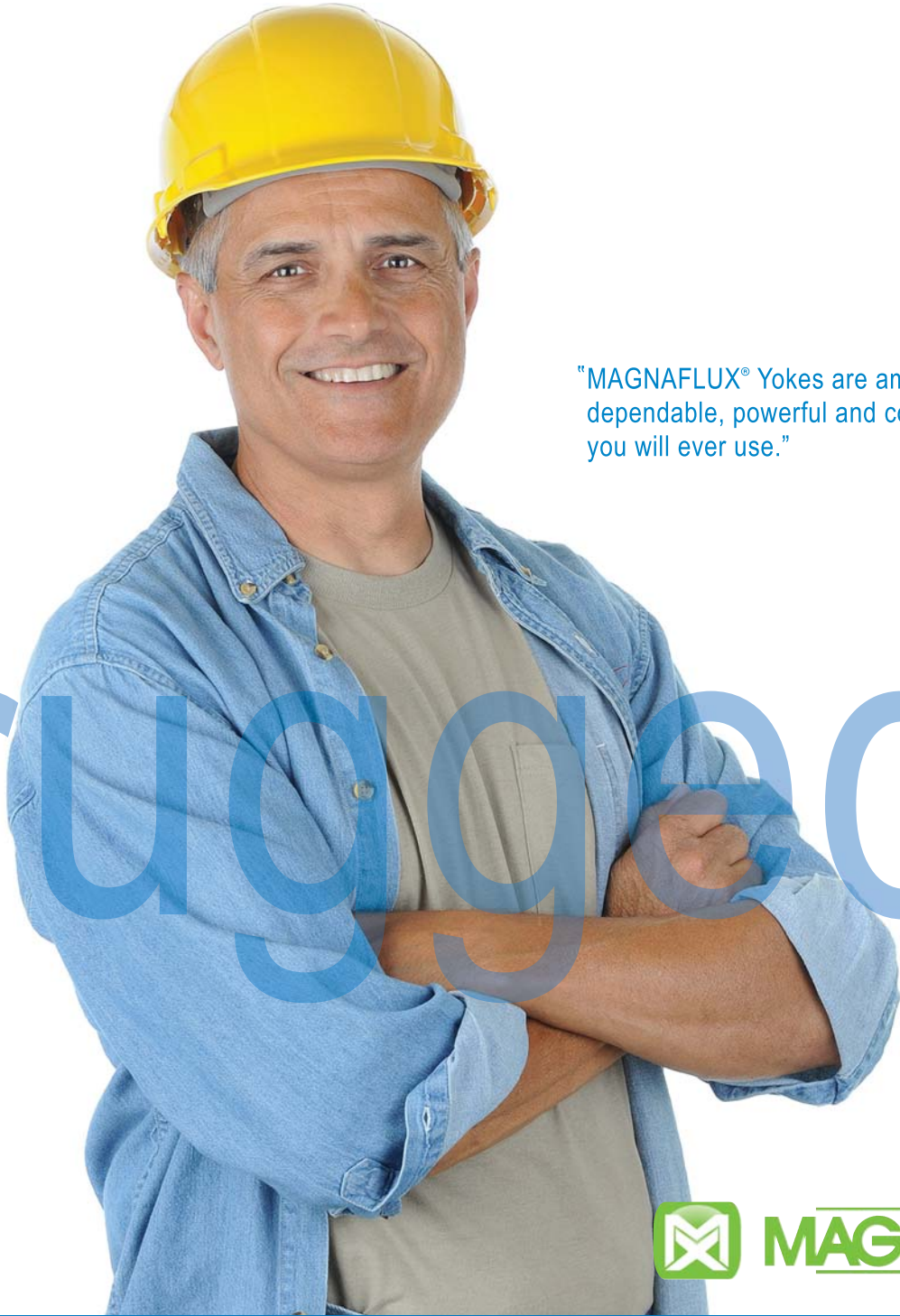


008M004

MAGNETIC YOKES



Magnetic Yokes



"MAGNAFLUX® Yokes are among the most dependable, powerful and comfortable yokes you will ever use."

rugged



Magnaflux® Magnetic Yokes are built rugged to withstand years of shop and field inspection abuse, yet are among the most ergonomically and technically advanced yokes on the market today.

Technology Driven

MAGNETIC YOKES

Y-1 AC Magnetic Yoke

The Magnaflux® Y-1 AC Magnetic Yoke is a new generation of lightweight, ergonomic yoke designed to improve job performance and productivity by reducing operator arm and wrist fatigue when testing for prolonged periods or in tight, confined spaces. The Y-1 is easier and more comfortable to operate than standard yokes and comes with a rugged chemical and impact resistant outer shell that will stand up to years of inspection abuse. Each unit is individually serial numbered and certified for performance prior to shipment.

- Lightweight ergonomic design reduces muscle fatigue and stress
- Angled body and soft handgrip improve arm and wrist positioning
- Trigger style on/off switch
- Stainless steel protective foot guards prevent repeated contact damage
- Available in 115V and 230V models

General Specifications:

- Elec. Requirements - 115V/60hz/1ph or 230V/50-60hz/1ph
- Max. Line Current Draw - 3.7 amp 115V or 1.6 amp 230V
- Weight - 5.35 lb. (2.43 kg)
- Leg Span - Up to 11in. (20 cm)
- Cord Length - 10 ft. (3.05m)
- Warranty - 1 year

Part Number:

- 623502 Y-1 115V Yoke
623503 Y-1 230V Yoke



Y-1 AC Magnetic Yoke Kit

The Magnaflux® Y-1 AC Magnetic Yoke Kit contains all key elements necessary to perform visible magnetic particle inspections:

- Y-1 Magnetic Yoke 115V/60hz/1ph or 230V/50-60hz/1ph
- 1 lb. #1 Gray Magnetic Powder
- 1 lb. #8A Red Magnetic Powder
- Powder Spray Bulb
- Paint Marker
- SCRUBS™ Hand Cleaner
- Portable Carrying Case and Instructions

Part Number:

- 623529 Y-1 115V Yoke Kit
623530 Y-1 230V Yoke Kit



MAGNETIC YOKES

Magnaflux Magnavis® brand magnetic yokes lead the industry in design innovation and magnetic particle inspection performance. From the lightweight ergonomic design and increased lifting power of our recently enhanced Y-1 AC Yoke to the 100% field portability of the battery powered Y-8, you will find every yoke we manufacture to be built as tough as you work.

Y-7 AC/DC Magnetic Yoke

The Magnaflux® Y-7 AC/DC Magnetic Yoke is designed for portable testing of ferrous parts and is ideal for the inspection of welds and other remote testing applications.

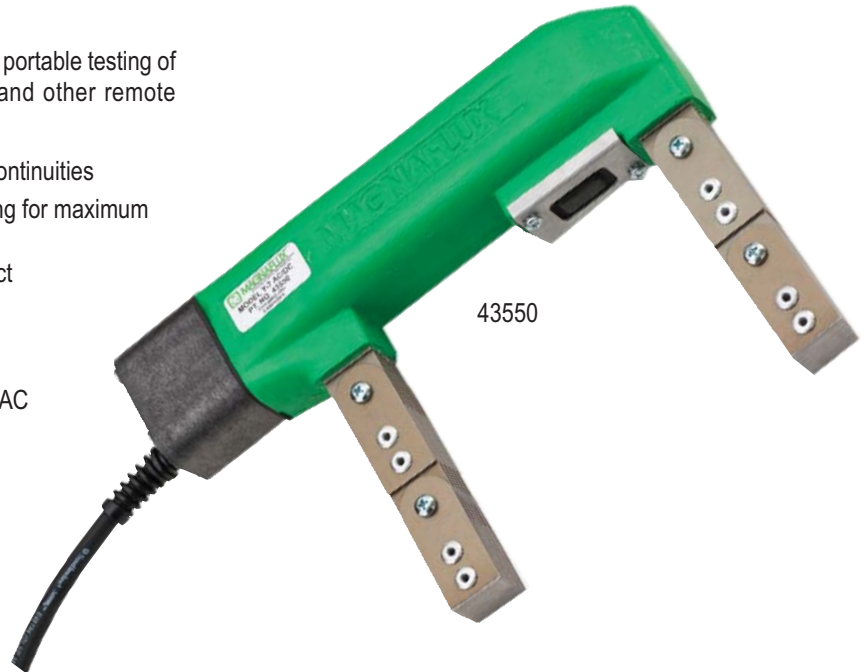
- Can be used to find both surface and near-surface discontinuities
- Solid state controls located in the interior of yoke housing for maximum safety and reliability
- Articulating, double-jointed legs assure good part contact

General Specifications:

- Elec. Requirements - 115V/50-60hz or 230V/50-60hz
- Max. Line Current Draw - 9 amp 115V AC, 4 amp 115V AC or 4 amp 230V
- Weight - 7.4 lb. (3.36 kg) 115V or 7.2 lb. (3.27kg) 230V
- Leg Span - 0" - 12" (0 - 30cm)
- Cord Length - 12 ft. (3.66 m)
- Warranty - 1 year

Part Number:

- 43550 Y-7 AC/DC Magnetic Yoke 115V/60hz
- 43560 Y-7 AC/DC Magnetic Yoke 230V/50-60hz



Y-7 AC/DC Magnetic Yoke Kit

The Magnaflux® Y-7 AC/DC Magnetic Yoke Kit contains all key elements necessary to perform visible magnetic particle inspections:

- Y-7 AC/DC Magnetic Yoke 115V/60hz or 230V/50-60hz
- 1 lb. #1 Gray Magnetic Powder
- 1 lb. #8A Red Magnetic Powder
- Powder Spray Bulb
- Paint Marker
- SCRUBS™ Hand Cleaner
- Portable Carrying Case and Instructions

Part Number:

- 43509 Y-7 AC/DC Magnetic Yoke Kit 115V/60hz
- 620741 Y-7 AC/DC Magnetic Yoke Kit 230V/50-60hz/1ph





Y-8 Battery Operated Magnetic Yoke Kit

The Magnaflux® Y-8 Battery Operated Magnetic Yoke Kit is ideal for remote testing applications. The kit allows for 100% portability in field inspections of ferrous parts with the use of the battery operated Y-8 Yoke.

- 100% portable for field inspections
- Battery pack comes with convenient shoulder strap
- Solid state controls located in the interior of yoke housing for maximum safety and reliability
- Articulating, double-jointed legs assure good part contact

General Specifications:

- Yoke Current Draw - 14 amp @ 6 Volts
- Battery Charger Current Draw - 0.2 amp @ 115V or 230V
- Weight - 7.75 lb. (3.52kg)
- Leg Span - 0" - 12" (0 - 30cm)
- Cord Length - 12 ft. (3.66 m)
- Warranty - 1 year
- Battery Charger:
 - 6V, 12 amp hr.
 - 5.25 lb. (2.38kg)
 - 4.25" x 2.75" x 5.5" (10.8cm x 7cm x 14cm)
 - Output Voltage Charge 6.84V or 7.35V
 - Battery Output Current 1.6 amp Maximum
 - Battery Operating Temp. Range -40°C to 60°C (-40°F to 140°F)



611710

Kit Part Number:

- 611710 Y-8 Magnetic Yoke Kit 115V
- 611710-01 Y-8 Magnetic Yoke Kit 230V

YOKE ACCESSORIES

Yoke Light Kits

The Magnaflux® Yoke Light Kits provide enhanced visible method detection of flaws and discontinuities under low and no light conditions.

Part Number: 623745 - Light Kit for Y-1 AC Yoke

Part Number: 621785 - Light Kit for Y-7 AC/DC Yoke



623745

10 lb. Test Weight for Y-1 Yoke

The Magnaflux® 10 lb. Test Weight is designed specifically for use with the Y-1 Yoke. It provides balanced weight distribution and comes with a built-in leg positioning guide to assure accurate test results every time. Each weight measures 9" x 2" x 2", is individually serialized, and comes with a certificate stating that it meets ASTM E 1444.

Part Number:

- 624115 10 lb. Y-1 Yoke Test Weight



624115

MAGNETIC PARTICLE INSPECTION EQUIPMENT



MPI Equipment

"MAGNAFLUX® Magnetic Particle Testing Equipment was completely scalable to our needs, allowing us to start small and add more capabilities as our business grew."

scalable



Magnaflux® Magnetic Particle Testing Equipment has been value engineered to meet or exceed government and industry inspection standards while remaining sensitive to the operating cost, speed and volume requirements of NDT customers.

Modular Capabilities

MAG KIT

Magnaflux Mag Kit

The Magnaflux® Mag Kit is a modular mag particle inspection system that allows lower volume NDT users to tailor a fully operational bench unit to their personal application needs by adding only the components that they currently require.

Using a portable power pack as a power supply, the Mag Kit is an economical, easy to operate alternative to more expensive, higher volume bench units when volume processing is not required. It provides the same level of inspection dependability in a lower volume, lower cost equipment package.

Dimensions: 50.5" L x 20.5" W x 50.25" H (Table Height 36")
128cm L x 52.1cm W x 127.6cm H (Table Height 91.4 cm)

Flexibility Features:

- Purchase just the base unit (bench, headstock, tailstock and coil) if you already have a portable power pack
- Purchase the base unit with portable power pack
- Specify recirculating pump spray system with original purchase or add it later (not needed if aerosols are used)
- Conveniently switch magnetizing current from head/tail to coil by changing 2 plug-in cable connections
- Conduct remote inspections of large, heavy parts with the same portable power pack by using cables and prods

General Specifications:

- Coil Diameter - 11" I.D. (28.0cm)
- Max Part Weight - 350 lb. (159kg)
- Max Part Length - 39" (99.1cm)
- Mag Kit Weight - 300 lb. (136kg)

Mag Kit Hood Assembly is available - 623830

Shown with optional power pack and ZB-100F UV Black Light.



MAGNETIC PARTICLE INSPECTION EQUIPMENT

NDT professionals rely on Magnaflux to provide the best solution in Magnetic Particle Inspection Equipment for the detection of surface and near surface defects in manufactured parts of all shapes and sizes. Built to stand up to tough industrial environments, Magnaflux equipment is prized for its ease of operation, rugged dependability and economical performance.

Mag Kit Pump

The Magnaflux® Mag Kit Pump has been developed for use with Magnaflux® Mag Kit units to provide continuous spray and recapture of the Magnaglo® bath. The pump includes hose, nozzle, fittings and 5-gallon pail and operates on standard 115V/60hz/1ph current.

Part Number:

69390 Mag Kit Pump

DEMAG EQUIPMENT

S-66 Demagnetizing System

The Magnaflux® S-66 Demagnetization System is a compact tabletop unit designed to be conveniently integrated into existing mag particle inspection systems. Oil and waterproof by virtue of its plastic-impregnated glass coating, the S-66 can be flush mounted to the work surface with supplied angle supports to facilitate easy part insertion by the operator.

Dimensions: 15.5" L x 9.4" W x 14.4" H (39.4cm L x 23.9cm W x 36.6cm H)

General Specifications:

- Elec. Requirements - 115V - 12 amp
230V - 6 amp
460V - 3 amp
- Opening Size - 6" x 6" (15.2cm x 15.2cm)
- Shipping Weight - 85 lb. (38.6kg)

Part Number:

197250 S-66 Demagnetizer 115V - 12 amp
197251 S-66 Demagnetizer 230V - 6 amp
197252 S-66 Demagnetizer 460V - 3 amp



69390



197250



S-1212 Demagnetizing System

The Magnaflux® S-1212 Demagnetization System is a compact tabletop unit designed to be conveniently integrated into existing mag particle inspection systems. Oil and waterproof by virtue of its plastic-impregnated glass coating, the S-1212 can be flush mounted to the work surface with supplied angle supports to facilitate easy part insertion by the operator.

Dimensions: 24" L x 11.75" W x 24" H (61cmL x 29.8cmW x 61cmH)

General Specifications:

- Elec. Requirements - 230V - 30 amp
460V - 14 amp
- Opening Size - 12" x 12" (30.5cm x 30.5cm)
- Shipping Weight - 285 lb. (129.3kg)

Part Number:

- 197260 S-1212 Demagnetizer 230V - 30 amp
- 197260 S-1212 Demagnetizer 460V - 14 amp



197260

UV BLACK LIGHTS & ACCESSORIES



UV Black Light
Equipment



UV Black Light
Accessories



"MAGNAFLUX® UV Black Lights and Accessories helped us stay on budget by improving the detection capabilities of our magnetic particle and liquid penetrant inspection process."

better



Magnaflux® UV Black Lights and Accessories are built to help maximize the detection capabilities of your magnetic particle and liquid penetrant inspection processes by providing UV equipment that performs better, lasts longer and costs less to operate than more conventional UV lights.

Built-in Efficiency

UV BLACK LIGHTS

Vibrance® EV5000 UV LED Black Light

The Vibrance® EV5000 UV LED Black Light may not only be the best UV LED black light you ever buy, but the last as well. Individually tested and certified to a wavelength between 365 - 370 nm, the Vibrance® EV5000 Black Light offers an average bulb life of up to 50,000 hours, a radical new lightweight ergonomic design that is 30% lighter and 90% more energy efficient than traditional mercury vapor UV lights, and a limited lifetime warranty that provides original purchasers with a free loaner light during any warranty approved repairs.

- Lightweight ergonomic design reduces muscle fatigue and stress
- Average LED bulb life of up to 50,000 hours
- Individually serial numbered and certified to wavelength between 365- 370 nm
- Industry's most comprehensive warranty plan includes Free in-service loaner light during warranty approved repairs
- Rugged aluminum housing assures years of NDT inspection performance

General Specifications:

- Weight - Approximately 2lbs. (.91kg)
- Dimensions - 9.5" x 6.5" x 4" (24.1cm x 26.5cm x 10.2cm)
- UV Source - 4x high performance UV-LED clusters
- UV LED Bulb Life - Approximately 50,000 hrs.
- Wavelength - Between 365 - 370 nm
- UV Emission - No UVB or UVC radiation generated
- Operating Voltage - 24V DC
- Power Supply - 115V AC/60Hz/1 Phase
- Power Consumption - <15W

Part Number:

624673 Vibrance® EV5000 UV LED Black Light



UV BLACK LIGHTS & ACCESSORIES

Magnaflux® brand UV Black Lights and Accessories provide improved detection and design features not offered by other UV manufacturers, while simultaneously delivering one of the industry's lowest operating cost and longest bulb life. Our new Vibrance® EV5000 UV LED Black Light weighs in a full 30% lighter than conventional mercury vapor UV lights, costs considerably less to operate, has a projected bulb life of up to 50,000 hrs., and comes with a warranty that includes the use of a FREE loaner light during any warranty approved repairs.

ZB-100F® Fan-Cooled UV Black Light

The Magnaflux ZB-100F® Portable Black Light System produces ultraviolet light at 365 nm. A built-in, quiet operating fan located at the rear of the ZB-100F® lamp housing dramatically reduces operating temperatures to under 85°F, for improved operator safety and comfort, while simultaneously expanding bulb life.

- Cool running for increased safety and comfort
- Extended bulb life for greater operating efficiency
- Polycarbonate bezel shields operator hands from lens
- Recessed lens for improved bulb protection
- Rugged aluminum housing assures years of NDT inspection performance

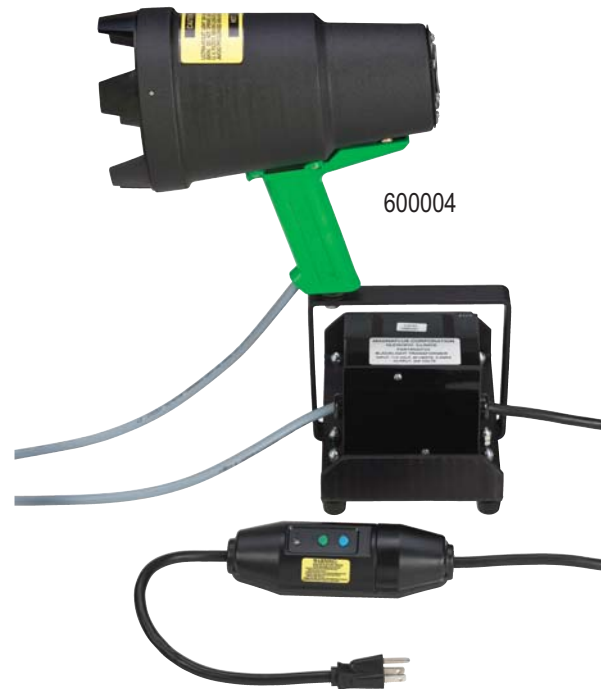
General Specifications:

- Weight - 12 lbs. (5.44 kg) hand lamp with transformer
- Typical Output - 5000 $\mu\text{w}/\text{cm}^2$
- Current Draw - 1.9 amps
- Typical Visible Light - 10 Lux or 1 ft. candle @ 15" (38cm)
- Bulb- 100 watts
- Running Temperature - 85°F (30°C)
- Cord Length - 10ft. (3.05m) lamp to transformer
- Main Cable Supply - 12ft. (3.66m)

Specification Compliance: Industry and Military Standards @ 15" (38cm).

Part Number:

600005	ZB-100F® 100 Watt, 115V/60Hz/1Phase
621254	ZB-100F® 100 Watt, 220V/50Hz/1Phase
600004	ZB-100F® 100 Watt, 115V/60Hz/1Phase with Portable Cart
621311	ZB-100F® 100 Watt, 220V/50Hz/1Phase with Portable Cart
621312	ZB-100F® 100 Watt, 230V/60Hz/1Phase with Portable Cart



ZB-100F-MB® Portable Mag Shot UV Black Light

The Magnaflux ZB-100F-MB® Portable Mag Shot UV Black Light adds the benefit of being able to energize power packs and wet bench units remotely from your black light, when checking for discontinuities in extra long parts. The ZB-100F-MB® has a remote button integrated into the handle of the black light to eliminate the need for continuously returning to the MPI unit to initiate a mag shot.

- Offers the ability to operate MPI unit remotely
- Cool running for increased safety and comfort
- Extended bulb life for greater operating efficiency
- Polycarbonate bezel shields operator hands from lens
- Recessed lens for improved bulb protection
- Rugged aluminum housing assures years of NDT inspection performance





ZB-100F-MB® Portable Mag Shot UV Black Light Continued.

General Specifications:

- Weight - Hand lamp 3lbs. (1.36kg), hand lamp with transformer - 12.5lbs. (5.67kg).
- Typical Output - 5000µw/cm²
- Current Draw - 1.9 amps
- Typical Visible Light - 10 Lux or 1 ft. candle @ 15" (38cm)
- Bulb- 100 watts
- Running Temperature - 85°F (30°C)
- Cord Length - 10ft. (3.05m) lamp to transformer
- Main Cable Supply - 12ft. (3.66m)

Specification Compliance: Industry and Military Standards @ 15" (38cm).

Part Number:

600086 ZB-100F-MB® 100 Watt, 115V/60Hz/1Phase

ZB-150F-SB® Self-Ballasted UV Black Light

The Magnaflux ZB-150F-SB® Self-Ballasted UV Black Light offers the same outstanding performance as our popular ZB-100F® fan cooled UV black light but is self-ballasted to avoid the need to pull along a transformer as inspections are being performed.

- No bulky transformer to pull along
- Cool running for increased safety and comfort
- Extended bulb life for greater operating efficiency
- Polycarbonate bezel shields operator hands from lens
- Recessed lens for improved bulb protection
- Rugged aluminum housing assures years of NDT inspection performance

General Specifications:

- Weight - Hand lamp 2.7lbs. (1.22kg), hand held lamp - 9 lbs. (4.08kg)
- Typical Output - 5000µw/cm²
- Current Draw - 1.9 amps
- Typical Visible Light - 10 Lux or 1 ft. candle @ 15" (38cm)
- Bulb- 150 watts
- Running Temperature - 85°F (30°C)
- Main Cable Supply - 12ft. (3.66m)

Specification Compliance: Industry and Military Standards @ 15" (38cm).

Part Number:

621135 ZB-150F-SB® 100 Watt, 115V/60Hz/1Phase



ZB-12® Hands-Free Portable Battery Powered UV Black Light

The Magnaflux ZB-12® Hands-Free Portable Battery Powered UV Black Light produces ultraviolet light at 365nm. Head and hardhat mountable, the compact, lightweight ZB-12® provides up to 220 minutes of operation on a single charge for in-field hands-free inspection of difficult to reach tanks, pipes and tubes. Battery life expectancy is approximately 1,000 hours based upon lab testing.

- Portable hands-free operation
- Exceeds industry light output standards
- Head or hardhat mountable
- Extended operating time
- Multi-positional lamp head

General Specifications:

- Weight - 4 lbs. (1.81kg)
- Batteries - 2 rechargeable offering 220 minutes per charge
- Typical UV Intensity - Exceeds $1000 \mu\text{w}/\text{cm}^2$ @ 15"
- Typical White Light Emission - Less than 2 ft. candles
- Bulb - 40 watts
- Operating Time - Up to 220 minutes per charge
- Charger - 110V - 240V

Part Number:

623066 ZB-12® Hands-Free Portable Battery Powered UV Black Light. (System Includes: lamp head, (2) battery packs, belt mounting canvas battery bag, wall adapter with U.S. plug, battery charger, cigarette lighter adapter, head/hardhat mount, extension cord, and durable carrying case.)



623066

UV BLACK LIGHT ACCESSORIES

Replacement Bulbs for Standard UV Black Lights

Magnaflux maintains a full inventory of high quality replacement bulbs for all of its standard black light equipment.

Part Number: 507320 - 100 Watt Medium Base Black Light Bulb.

Replacement bulb for ZB-100F® and ZB-100F-MB® UV Black Lights.

Part Number: 519296 - 150 Watt Built-In Ballast Bulb. Replacement built-in ballast bulb for ZB-150F-SB® UV Black Lights.



507320



519296

UV Black Light Filter

Magnaflux offers a smooth output filter designed to improve the operating range and performance of its UV black lights.

Part Number: 519227 - Smooth Filter Glass. Used with ZB-100F®, ZB-100F-MB®, and ZB-150F-SB® UV Black Lights.



519227



UV Black Light Ceiling Mount Assembly

The Magnaflux Ceiling Mount Assembly® comes with hardware to permanently attach hand-held black lights, such as the ZB-100F®, ZB-100F-MB® and ZB-150F-SB®, to the solid roof of an inspection area.

When it is important to bring a black light closer to the inspection area, you may purchase one of the extensions shown below.

Part Number: 623367 - Black Light Ceiling Mount Assembly

Part Number: 622596 - Modular Black Light 5.5 Extension

Part Number: 622597 - Modular Black Light 7.5 Extension



UV Black Light Flat Surface Mount Assembly

The Magnaflux Surface Mount Assembly® provides an adjustable angle for affixing hand-held black lights, such as the ZB-100F®, ZB-100F-MB® and ZB-150F-SB®, to any flat surface.

Part Number: 623366 - Black Light Surface Mount Assembly

Part Number: 622596 - Modular Black Light 5.5 Extension

Part Number: 622597 - Modular Black Light 7.5 Extension



UV Black Light Wet Bench Mounting System

The Magnaflux Wet Bench Mounting System® provides an adjustable mounting system for affixing hand-held black lights, such as the ZB-100F®, ZB-100F-MB® and ZB-150F-SB®, to Magnaflux wet bench units.

Part Number: 623365 - Black Light Wet Bench Mounting System

Part Number: 622596 - Modular Black Light 5.5 Extension

Part Number: 622597 - Modular Black Light 7.5 Extension



UV-A Light Meter

The Magnaflux® UV-A Digital Light Meter is a compact, rugged, easy to operate, multi-function UV meter proven to be highly effective for measuring and calibrating UV-A light sources used in fluorescent magnetic particle and liquid penetrant NDT inspections. It comes with a detachable remote sensor, high-contrast digital LCD display, 9V battery and carrying case.

Part Number:

625024 UV-A Light Meter



White Light Meter

The Magnaflux® White Light Meter accurately measures visible light by foot candles and Lux, and includes white light meter, permanently affixed white light sensor, battery and carrying case.

Part Number:

622338 White Light Meter



ZB-12® UV Black Light Accessories

Keep your Magnaflux ZB-12® Hands-Free, Portable Battery Powered UV Black Light systems running at peak performance with these long-lasting replacement bulbs, lens filters, battery packs and chargers.

Part Number: 623469 - ZB-12® Replacement Bulb

Part Number: 623470 - ZB-12® Replacement Battery Pack

Part Number: 623471 - ZB-12® Replacement 110/120V Battery Charger

Part Number: 623478 - ZB-12® Replacement Filter Lens/Bezel



623469



623470



623471



623478



506249

UV Absorbing Safety Glasses

Magnaflux® UV Absorbing Safety Glasses are designed to protect black light users from repeated, day-long exposure to ultraviolet light sources.

Part Number:

506249 UV Absorbing Safety Glasses



"Sonotech® ultrasonic couplants helped us to redefine our expectations in terms of the level of results achievable in our NDT inspection process."



The Sonotech® line of ultrasonic NDT couplants offers outstanding couplants with precisely formulated properties to maximize inspection results.

Enhancing Results

GENERAL PURPOSE COUPLANTS

Ultrigel II® (Silicone Free)

Ultrigel II® has been recognized as the industry's most specified and used ultrasonic couplant for more than 35 years. It possesses outstanding acoustic performance, chemical characteristics and corrosion inhibition and is ideal for flaw detection, thickness gauging, flow metering and acoustic emission testing across a broad temperature boundary (-10° to 210° F). Ferrous corrosion inhibition rating of 90.

Specification Compliance: ASTM F519, F945, Boeing BAC 5439-PSD622, 5968, 5980, Pratt & Whitney PWA 286, 275, 1484, 36604, 36700, MCL E-205 Type II (ASTM F945), AMS 5544, 5536, 6359, 4037, 5608 (Haynes 188), 5508, 4375.

Part Number & Container Size:

25-901	1 Gal.	25-904	4 oz. Bottle (12-pack)
25-905	5 Gal.	25-912	12 oz. Bottle (12-pack)
25-955	55 Gal.		



Sonotrace® (Glycerine Free)

Sonotrace® is a glycerine and silicone-free, water-based couplant formulated for flaw detection and thickness gauging applications where halogens, sulfur and low melting point metals must be kept to a minimum. It comes in two viscosities, low viscosity fluid and very high viscosity gel, and has an operational temperature range of 25° - 175° F. Ferrous corrosion inhibition rating of 80.

Specification Compliance: Boeing BAC 5968 and 5980.

Part Number & Container Size:

Grade 30

42-901	1 Gal.	42-955	55 Gal.
42-905	5 Gal.		

Grade 40

43-901	1 Gal.	43-955	55 Gal.
43-905	5 Gal.		



NDT ULTRASONIC COUPLANTS

Whether your requirements include meeting Halogen, Sulfur and low melting point specifications for the nuclear power industry, high level environmental and acoustical standards, or temperature operating ranges beyond 1000° F, you will find all your needs well met by an industry leading Sonotech® couplant. Available in four categories; General Purpose, Environmentally Benign, High Temperature and Speciality Application, along with pack sizes to meet every testing need, Sonotech® brand couplants and support staff are dedicated to bringing ease, consistency and unparalleled results to your NDT inspection process.

Echogel® (Glycerine Free)

Echogel® is a glycerine and silicone-free couplant formulated for use in inspections where salt cake or metal corrosion salts are present. It resists viscosity breakdown on salt-caked boiler surfaces and other corroded materials and contains a ferrous corrosion inhibitor with a relative effectiveness rating of 65. Operating temperature range: 27° to 140° F.

Specification Compliance: ASTM F 519, Boeing BAC 5439-PSD622, NAV-SHIPS MIL-STD-767 and 2041.

Part Number & Container Size:

Grade 14

47-901	1 Gal.	47-955	55 Gal.
47-905	5 Gal.		

Grade 20

48-901	1 Gal.	48-955	55 Gal.
48-905	5 Gal.		



ENVIRONMENTALLY BENIGN COUPLANTS

Soundsafe®

Soundsafe® is a silicone-free, environmentally benign high-performance couplant formulated for use in overhead vertical and horizontal applications where concern for the environment is a primary consideration. It possesses high humectant levels to slow drying, increase acoustic impedance and provide transducer lubrication. Soundsafe® contains ferrous corrosion inhibitors with a relative effectiveness rating of 75.

Soundsafe® has an operating temperature range of 0° - 200° F and is compatible with most composites and metals, except magnesium and magnesium alloys which should be pretreated before use.

Specification Compliance: ASTM F 945, Boeing BAC 5439-PSD622, 5968, 5980, Pratt & Whitney PWA 286, 275, 1484, 36604, 36700, MCL E-205 Type II (ASTM F945), AMS 5544, 5536, 6359, 4037, 5608 (Haynes 188), 5508, 4375.

Part Number & Container Size:

20-901	1 Gal.	20-904	4 oz. Bottle (12-pack)
20-905	5 Gal.	20-912	12 oz. Bottle (12-pack)
20-955	55 Gal.		



Sonoglide® FE (Silicone Free)

Sonoglide® FE is an environmentally benign, silicone-free couplant specially formulated for ferrous metals where short-term corrosion is a concern. It contains a ferrous corrosion inhibitor with a relative effectiveness rating of 75, is slow drying and will remain stable on corroded or salt covered surfaces. Operating temperature range: -60° to 250° F.

Part Number & Container Size:

Grade 10

76-955	55 Gal.	<i>(Minimum order of 4 drums)</i>	
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Grade 20

82-901	1 Gal.	82-955	55 Gal.
82-905	5 Gal.		





Sonoglide® UP (Ultra-Pure)

Sonoglide® UP is an ultra-pure, environmentally benign, silicone-free couplant that is compatible with titanium, aluminum, copper, stainless steel, plastics, many magnesium alloys, and many composites. It is the perfect choice for applications where halogens and sulfur must be at a minimum and broad material compatibility, slow drying and water wash removability are desired. Operating temperature range: -60° to 250° F.

Specification Compliance: Pratt & Whitney PWA 286, 275, 1484, 36604, 36700, MCL E-205 Type II (ASTM F 945), AMS 5544, 5536, 6359, 4037, 5608 (Haynes 188), 5508, 4375, ASTM F P45.

Part Number & Container Size:

Grade 7

84-901	1 Gal.	84-955	55 Gal.
84-905	5 Gal.		

Grade 10

85-901	1 Gal.	85-955	55 Gal.
85-905	5 Gal.		

Grade 40

87-901	1 Gal.	87-955	55 Gal.
87-905	5 Gal.		



Soundclear®

Soundclear® is an excellent price to performance ratio environmentally benign couplant for flaw detection and thickness gauging. It contains humectants to slow drying and increase acoustic impedance and has an operating temperature range of 20° to 200° F. Soundclear® contains a corrosion inhibitor for steel with a relative effectiveness rating of 45 and is compatible with aluminum, titanium and plastics. *It is not recommended for use with magnesium.*

Part Number & Container Size:

Grade 60

31-901	1 Gal.	31-955	55 Gal.
31-905	5 Gal.		



UT-X® POWDER

UT-X® Powder is a couplant concentrate useful for flaw detection and thickness gauging applications where ferrous corrosion inhibition is not a concern. It retains viscosity on salt caked boiler tubes, corroded pipe, structural steel, steel billets, plates and welds. Operating temperature range: 32° to 120° F.

Part Number & Container Size:

62-001	1-Gal. Packet
62-005	5-Gal. Packet



UT-X FE® POWDER

UT-X FE® Powder is an environmentally benign couplant concentrate useful for flaw detection and thickness gauging applications where ferrous corrosion inhibition is required. It performs well and retains viscosity on salt caked boiler tubes, corroded pipe, structural steel, steel billets, welds and ship plate. Operating temperature range: 32° to 120° F.

Part Number & Container Size:

- 63-001 1-Gal. Packet
- 63-005 5-Gal. Packet



HIGH TEMPERATURE COUPLANTS

SONO®

The Sonotech® family of Sono® couplants comes in temperature formulas of 600° through 1100° F. The product's biodegradable formulas have made it the leading choice for use in flaw detection, thickness gauging and acoustic emission testing in the petrochemical, power generation, food processing machinery and pharmaceutical manufacturing and storage equipment markets.

Part Number & Container Size:

Sono® 600 (0° to 600°F)

- 45-901 1 Gal.
- 45-T04 4 oz. Tube

Sono® 900 (600° to 900°F)

- 40-901 1 Gal.
- 40-T04 4 oz. Tube

Sono® 950 (600° to 950°F)

- 29-901 1 Gal.
- 29-T04 4 oz. Tube

Sono® 1100 (700° to 1100°F)

- 30-901 1 Gal.
- 30-T04 4 oz. Tube



Pyrogel®

Pyrogel® couplant offers the broadest temperature range (-50° to 880 °F) for thickness gauging, flow metering, acoustic emissions testing and flaw detection. It is radiation proof, contains no polymers and resists drying, making it an excellent choice for long term flow metering applications. Ferrous corrosion inhibition rating of 100.

Part Number & Container Size:

Grade 7

- 21-901 1 Gal. (Minimum order of 2)

Grade 60

- 23-901 1 Gal.
- 23-T04 4 oz. Tube

Grade 100

- 24-901 1 Gal.
- 24-T04 4 oz. Tube





SPECIALTY APPLICATION COUPLANTS

THERMASONIC®

Thermasonic® has been formulated for use where rapid wetting, slow drying, broad temperature range (0° to 325°F) and easy water removal are required. It is environmentally benign, offers excellent corrosion inhibition, resists running and dripping and has a slow evaporation rate. Ferrous corrosion inhibition rating of 85.

Part Number & Container Size:

Grade 8

28-901 1 Gal. (Minimum order of 2)

Grade 60

79-901 1 Gal.



High Z®

High Z® provides the highest acoustic impedance of all Sonotech® couplants to reduce surface noise and improve coupling performance on curved, rough, pitted and corroded surfaces. Its environmentally benign formula can be removed with water and it will often facilitate flaw inspection and thickness gauging when no other couplant will function. High Z® is available in two viscosities (low viscosity and high viscosity) with an operating temperature range of 0° to 200° F. Ferrous corrosion inhibition rating of 70.

Part Number & Container Size:

High Z® LV (Low Viscosity)

58-T04 4 oz. Tube

High Z® HV (High Viscosity)

59-T04 4 oz. Tube



SHEAR GEL®

Shear Gel® is specially formulated to provide coupling for shear wave generated by normal incidence (zero degrees) shear wave transducers. It has an extremely high viscosity and an operation temperature range of 40° to 90°F. Ferrous corrosion inhibition rating of 85.

Part Number & Container Size:

54-T04 4 oz. Tube





MAGNAFLUX® NDT MATERIALS, EQUIPMENT & ACCESSORIES

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Global Leadership in NDT