Y-2



The Y-2 is an AC electromagnetic yoke, ergonomically designed to improve productivity and reduce operator arm and wrist fatigue. The yoke generates a strong AC magnetic field for the detection of surface indications during magnetic particle testing.

Lightweight with an ergonomic grip and trigger, the Y-2 is designed for the rugged demands of field inspection. Featuring a field swappable cord and isolated trigger switch; the Y-2 is easily serviceable because a severed cord should not stop a job from getting done.

Part No.	Description	Pur.	Pk
628560	Y2 Yoke AC 230v & case	1	1
628299	Y2 Cord with type I plug	1	1
628557	Y2 Yoke kit 230v	1	1

Y-2 Spare Parts





2

The LED yoke light is an add-on accessory for the Y-2 AC yoke which provides focused, visible light to the yoke inspection area when the yoke is activated. The high brightness light is designed to enhance visible detection of flaws and discontinuities under low conditions and in difficult to reach areas not accessible to a secondary light source.

	Part No.	Description	Pur.	Pk
1	629261	Replacement switch kit	1	1
2	628840	Yoke light for Y-2	1	1

Y-6 Spare Parts



Part No.	Description	Pur.	Pk
43527	Diaphragm Switch	1	1

Y-7





The Y-7 is a durable, high-strength AC/DC magnetic yoke designed to detect surface and sub-surface indications in the most rugged applications.

Featuring sealed chemical-resistant construction, articulating legs to contour to any part shape and robust strain-relieved twelve-foot cord for field use, the Y-7 is ideal for inspection of welds and other remote testing.

Solid-state controls allow the operator to use AC magnetic fields for surface indications or DC magnetic fields for sub-surface indications to meet all inspection needs.

	Part No.	Description	Pur.	Pk
1	625644	Y7 Yoke ACDC 230v & case	1	1
2	620741	Y7 Yoke kit ACDC 230v	1	1

Y-7 Spare Parts



Part No.	Description	Pur.	Pk
43527	Diaphragm Switch	1	1

Y-8



The Y-8 is a battery-powered, DC electromagnetic yoke designed to stand up to the most rugged applications. Its compact battery pack provides a full 8-hour shift of inspection power, making it ideal for inspection in the field and remote locations.

Part No.	Description	Pur.	Pk
630540	Y8 MV Kit battery powered	1	1

Y-8 Spare Parts



Part No.	Description	Pur.	Pk
43527	Diaphragm Switch	1	1

Contact Pads



Magnaflux copper braided contact pads prevent arc burn by helping maintain proper electrical contact between test parts and contact heads. Choose a solid pad if you are inspecting parts with flat ends, pick a braided pad if your parts have rounded or irregular shaped ends.

Part No.	Description	Pur.	Pk
1848	Contact pad 12 x 19cm (4.75 x 7.5 inch)	1	1

Light Meters



The Visible Light Meter accarately measures visible light in either foot-candles or lux and includes a permanently affixed visible light sensor specially constructed to measure visible white light in the range of 400-760 nm for non-destructive testing.



The UVM3059 is designed for measuring ultraviolet radiation, primarily for use in non-destructive material testing. It was developed according to the specifications of ISO 3059.

The housing is dust and splash-proof according to protection class IP54. The optical sensor is integrated into the surface of the meter.

2



Our non-destructive testing light meters will help you check and measure the levels of UV-A black light and visible white light as part of regular NDT testing system performance checks to ensure inspection quality and reliability. A high-resolution instrument to measure the irradiance of daylight sources or the daylight environment. Metering range: 0,01...199,99 x 10³.

3

	Part No.	Description	Pur.	Pk
1	622338	Visible light meter for fluorescent NDT inspection	1	1
2	133200	Digital UV light meter UVM3059	1	1
3	134056	Luxmeter UV Light Meter	1	1

UV Lamps



The EV6500 is a hand-held, portable LED UV lamp with built-in white light LEDs for non-destructive testing applications like fluorescent penetrant testing and fluorescent magnetic particle inspections.

Decrease inspection time by improving indication visibility with 7,000 $\mu\text{W/cm-}$ 2high intensity UV-A illumination and the widest coverage area in its class.

The white light LEDs provide a large, concentrated flood of visible light of over 150 ft-candles.



The EV6000 LED UV lamp is a portable, hand-held UV lamp for fluorescent non-destructive testing applications like fluorescent penetrant testing and fluorescent magnetic particle inspections.

The EV6000 features a uniform beam with no hot-spots and a 9 in / 23 cm wide beam, 33% wider than the next widest hand-held UV lamp in the industry.

Custom-designed optics provide intense and even UV-A coverage of UV-A to easily identify indications, and an integrated filter ensures minimal visible light emission to improve inspection reliability.

	Part No.	Description	Pur.	Pk
1	626803	Dual-light LED UV lamp	1	1
2	625784	EV6000 LED UV Lamp	1	1

Yoke Test Weight



Part No.	Description	Pur.	Pk
624115	AC Yoke test weight 4.5 kg	1	1

Cleaner



SKC-S is an NDT-approved solvent cleaner/remover for pre-cleaning before non-destructive testing and for removing excess surface penetrant from an inspection area before applying developer during liquid penetrant testing.



2

A foaming, all-purpose neutral cleaning solution meant for a broad spectrum of soils, Daraclean® 212 is formulated with a blend of surfactants, emulsifiers, and corrosion inhibitors, and is safe to use on most metals, while being non-aggressive with aluminum and titanium alloys. It boasts excellent soil-rejecting qualities, suspends soils and is designed to be filtered and skimmed to extend the cleaner's life beyond that of emulsion-type cleaners.

Part No. Description Pur. M01-5750-77 SKC-S Cleaner & remover 300g 12 M01-5750-20 SKC-S Cleaner & remover 3.7L Daraclean 212 neutral aqueous M01-6030-40 1

cleaner 18.9 ltr

Developer



ZP-4D is a noncombustible dry powder developer for form A penetrant testing that is ideal for highly sensitive fluorescent penetrant processes. ZP-4D is applied to oven dried parts following the use of penetrants and forms a thin film on parts that enhances the visibility of ultra-fine discontinuities.



ZP-9F is a non-aqueous developer made of organic particles, used often in aerosol cans. It produces a fast-drying, opaque white coating and contrasting background for fluorescent and visible penetrant inspections.



A bright white, non-aqueous developer, SKD-S2 creates an opaque white background for high-contrast penetrant testing and quickly draws penetrant out to create stronger, clearer indications for better inspection reliability and sensitivity.

Noted for its compatibility with special alloys, such as stainless steel, aluminum, magnesium and titanium, SKD-S2 is nonhalogenated, can be used with Type 1 & Type 2 penetrants.



ZP-14A is a water-soluble developer for the enhancing penetrant indications during liquid penetrant inspections. It produces a uniform white porous coating when dry which is easily removed in post inspection cleaning by a water spray. Advantages include bright and highly defined indications, and can be cleaned with water.

	Part No.	Description	Pur.	Pk
1	M01-3330-69	ZP-4D Dry powder developer 4.5 kgs	1	1
	M01-3328-75	ZP-4B Dry powder developer 9 kgs	1	1
2	M01-3354-77	ZP-9F Solvent based developer aerosol 340g	1	12
3	M01-5352-77	SKD-S2 Solvent based developer aerosol 330g	1	12
	M01-5352-20	SKD-S2 Solvent based developer 3.7 ltr	1	4
4	M01-3381-75	ZP-14A Water soluble developer 9 kgs	1	1

Penetrant



A water-removeable Level 1 penetrant, ZL-19 is designed for use on rough or unmachined surfaces such as castings and forgings to find larger discontinuities in non-safety critical components. It is ideal for inspecting automotive and general industrial components such as engine cylinder blocks, power train components, rocker arms, pistons, steering knuckles, etc.



A high-sensitivity Level 3 penetrant, ZL-67 fluorescent water removeable penetrant is designed to find smaller, finer indications in safety-critical components common to aerospace and engineering applications. ZL-67 penetrant is often used to find flaws in investment castings, jet engine components, and highly machined surfaces.



Developed for testing rough machined surfaces, ZL-60D fluorescent water-removeable penetrant is ideal for finding indications in castings, forgings, extrusions and rough surfaces.

This medium-sensitivity penetrant washes off parts quickly and easily, leaving less fluorescent background – even on rough surface – for clearer indications and better inspection reliability.



This bright red penetrant was developed for large surface areas and rough surfaces where excess penetrant is difficult to remove with a solvent removable cleaner or emulsifier, SKL-WP2 is a water-removeable dye penetrant for Type 2 penetrant testing in visible white light.



SKL-SP2 is a solvent removable visible red dye penetrant. SKL-SP2 locates surface-breaking discontinuities with a simple three-step process that is ideal for basic industrial nondestructive testing. SKL-SP2 features high-performance penetrating characteristics and produces clear vivid red indications.

	Part No.	Description	Pur.	Pk
1	M01-3263-40	ZL-19 Penetrant 18.9 ltr	1	1
2	M01-3274-30	ZL-67 Level 3 water washable fluorescent penetrant 75.7 ltr	1	1
	M01-3274-40	ZL-67 Level 3 water washable fluorescent penetrant 18.9 ltr	1	1
3	M01-3272-20	ZL-60D Level 2 Water washable fluorescent penetrant 3.7 ltr	1	4
	M01-3272-40	ZL-60D Level 2 water washable fluorescent penetrant 18.9 ltr	1	1
	M01-3272-77	ZL-60D Level 2 water washable fluorescent penetrant aerosol 315 gr	1	12
4	M01-5190-77	SKL-WP2 Water washable visible dye penetrant aerosol 330g	1	12
	M01-5190-35	SKL-WP2 Water washable visible dye penetrant 3.7ltr	1	1
5	M01-5155-77	SKL-SP2 Solvent removable visible dye penetrant aerosol 300g	1	12

Penetrant



Essential for critical component applications, ultrahigh sensitivity ZL-37 post-emulsifiable penetrant is designed for detecting fine, tight discontinuities in safety-critical components, such as titanium turbine components, and in high-stress parts, such as investment castings.



Post-emulsifiable ZL-27A is a Level 3, high-sensitivity Type 1 penetrant designed for inspections which require maximum process control and reliability, such as safety-critical aerospace testing.

Since ZL-27A is not water soluble, there is minimal risk of this penetrant being removed from a fine or shallow defect through over-washing to provide the highest reliability of any penetrant inspection method.

	Part No.	Description	Pur.	Pk
1	M01-3188-77	ZL-37 Level 4 Post Emulsifiable Fluorescent Penetrant 300 gr	1	12
2	M01-3187-77	ZL-27A Level 3 Post Emulsifiable Fluorescent Penetrant	1	12

Penetrant Test Kit



SK Kits are a convenient collection of Magnaflux dye penetrant testing consumable products in easy-to-use aerosol form for Type 2 penetrant non-destructive testing.

Each penetrant testing kit comes with SKL-SP2 solvent removable penetrant, SKD-S2 solvent-based developer and SKC-S remover.

SK Kits are portable and great for job sites or field inspections to check welds, forgings, pressure vessels, castings, general metal work and many other applications.

Part No.	Description	Pur.	Pk
M01-5920-48	SK-816 Solvent removable visible penetrant testing kit	1	1

Magnetic Particles



#1 Gray provides strong contrast on most metal surfaces during dry method mag particle testing in visible light. It is ready-to-use for visible light flaw detection of surface and slightly subsurface discontinuities in ferrous metals.

It can be used in a powder blower or shaken from a bottle during magnetization, and blown off while current is still being applied. On material with a high magnetic retentivity, indications can still be formed after the current has been turned off



#8A Red provides strong contrast on most metal surfaces during dry method mag particle testing in visible light. It is ready-to-use for visible light flaw detection of surface and slightly subsurface discontinuities in ferrous metals. It can be used in a powder blower or shaken from a bottle during magnetization, and blown off while current is still being applied.



#2 Yellow provides strong contrast on most metal surfaces during dry method mag particle testing in visible light. It is ready-to-use for visible light flaw detection of surface and slightly subsurface discontinuities in ferrous metals.

Part N	lo.	Description	Pur.	Pk
1 M01-1	716-87	Non-fluorescent magnetic particles #1 gray 20.4kgs	1	1
M01-1	716-69	Non-fluorescent magnetic particles #1 gray 4.5kgs	1	1
2 M01-1	780-87	Non-fluorescent magnetic particles #8 red 20.4kgs	1	1
M01-1	780-69	Non-fluorescent magnetic particles #8 red 4.5kgs	1	1
3 M01-1	732-69	Non-fluorescent magnetic particles #2 yellow 4.5kgs	1	1

Magnetic Particles Aerosol



14AM is a ready-to-use magnetic particle suspension liquid for locating very fine discontinuities in critical parts and applications by providing clear, bright, fluorescent green indications for excellent inspection quality and accuracy.



A bright white, opaque NDT contrast paint, WCP-2 provides a high contrast background to improve probability of detection and sensitivity during visible magnetic particle inspections.

This fast drying paint aerosol sprays on evenly, without flaking, before inspection so when non-florescent / colored magnetic particles are applied, the indications appear clearly against the opaque white background.

2



A highly-sensitive oil-based magnetic particle aerosol for nonfluorescent (visible) wet method magnetic particle testing to locate fine and medium discontinuities on finished parts.

7HF provides clear, strong indications due to the heavy buildup of the highly magnetic particles. The convenient aerosol packaging is ideal for field testing, spot inspections and places where bulk processing is impractical, and the wide spray pattern makes it easy to cover large areas for faster processing during remote inspections of tubing, piping and large structures.



A highly-sensitive water-based magnetic particle fluid for non-fluorescent (visible) wet method magnetic particle testing to locate fine and medium discontinuities on finished parts.

MV-740 provides clear, strong indications due to the heavy buildup of the highly magnetic particles. MV-740 is often used with WCP-2 white contrast paint to improve contrast and inspection sensitivity.

4

	Part No.	Description	Pur.	Pk
1	M01-0145-77	14AM Fluorescent magnetic particles aerosol 300g (10.5 oz)	1	1
2	M01-2250-77	White contrast paint non-fluorescent magnetic particles aerosol 300g (10.5 oz)	1	1
3	M01-1580-77	Non-fluorescent magnetic particles 7HF oil-based visible aerosol 300g (10.5 oz)	1	1
4	M01-9140-77	Water-Based Visible Magnetic Particle Suspension MV-740 aerosol 347g (12.2 oz)	1	1

Magnetic Particles



14AM is a ready-to-use magnetic particle suspension liquid for locating very fine discontinuities in critical parts and applications by providing clear, bright, fluorescent green indications for excellent inspection quality and accuracy.



A highly sensitive magnetic particle powder, 14A fluorescent mag particles are engineered to locate very fine discontinuities in critical parts and applications.

Designed with strong fluorescent properties, 14A magnetic powder is made with a carefully optimized range of particle sizes & shapes to ensure particles move quickly and easily to indications, while minimizing background and particle clumping. The result is faster inspections with better reliability and greater



14A Redi-Bath is a highly sensitive waterbased magnetic particle liquid with for locating very fine discontinuities in critical parts during fluorescent mag particle inspection. 14A Redi-Bath is designed to be diluted with water to make magnetic particle water bath. The ultra-sensitive 14A particles provide clear, bright, fluorescent green indications under ultra-violet black light for unbeatable inspection quality and accuracy, with superior corrosion protection.



20B is a highly-sensitive magnetic particle premix powder for locating fine discontinuities in high volume applications, such as forging, casting, stamping and welding.

	Part No.	Description	Pur.	Pk
1	M01-0145-40	14AM Fluorescent magnetic particles 18.9lt	1	1
2	M01-0130-71	14A Wet method fuorescent magnetic particles 453g	1	1
3	M01-9130-20	14A Redi-bath water-based fluorescent magnetic particle concentrate 3.7lt	1	1
	M01-9130-80	14A Redi-bath water-based fluorescent magnetic particle concentrate 798ml	1	1
4	M01-0179-84	20B Fluorescent magnetic particle premix 13.6kgs	1	1
	M01-0179-57	20B Fluorescent magnetic particle 453g	1	1

Magnetic Particles



7C Black is a highly-sensitive magnetic particle powder for nonfluorescent (visible) wet method magnetic particle testing. Particle suspensions prepared with 7C Black provide clear, strong indications and are ideal for locating fine and medium discontinuities on finished parts.

7C Black can be mixed with water or oil and used to find inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks, fatigue cracks and

	Part No.	Description	Pur.	Pk
1	M01-1116-81	7C Black wet method colored non fluorescent magnetic particles 11.3kgs	1	1

Magnetic Coil



The handy L-10 portable magnetic coil is great for field applications to magnetize a variety of part sizes and shapes for magnetic particle inspection. It is specifically designed to detect transverse defects in shafts, spindles and similar components.

The L-10 has a wear-resistant resin coating, and is supplied with a footswitch to energise the coil and 10 metres of flexible supply cable.

	Part No.	Description	Pur.	Pk
1	630516	L-10 Portable magnetic coil for magnetic particle inspection 230V	1	1
2	630533	L-10 Portable magnetic coil for magnetic particle inspection 115V	1	1

Hinged Magnetising Coil



Ensure your magnetic inspection bench fits every part you test with this line of fixed magnetising coils. Whether you are testing a large pieces or small bolts, these heavy-duty magnetic coils will help you set up your Magnaflux machine just the way you need.

Part No.	Description	Pur.	Pk
129021	Hinged Magnetising Coil 350 mm clearance Ø	1	1

Petroleum Base Suspension Vehicle



Carrier II is a high-purity NDT-approved suspension vehicle developed specifically for wet method magnetic particle testing.

This petroleum distillate carrier oil provides excellent particle mobility, good suspension stability and enhanced corrosion protection for reliable, spec-compliant mag particle inspections.

Carrier II is made with highly refined petroleum oil with virtually no odor for improved operator comfort, while the high flash point and low toxicity reduce EHS concerns.

Part No.	Description	Pur.	Pk
M01-2122-40	Carrier II petroleum base suspension vehicle 18.9 ltr (5 gal)	1	1
M01-2122-45	Carrier II petroleum base suspension vehicle 208 ltr (55 gal)	1	1

Magnetic Field Indicators



General Purpose Field Indicator is a non-certified rugged, pocket sized, non-calibrated field indicator that measures 2 1/2" in diameter and is perfect for field use. It is scaled +10 or -10 gauss from 0 center. Each division represents 1 gauss. The field indicator is used to determine if there is residual magnetism left in the part.



The Magnaflux® 20 Gauss Calibrated Field Indicator is for general purpose use as may be required in various demagnetization specifications. Scaled +20 or -20 gauss from 0 center with large divisions at 2 gauss and small divisions at 1 gauss.

The gauss field indicator will withstand exposure to fields as strong as 400 oersteds without affecting calibration and is accurate to +/- 1.0 gauss.

Certification is provided.



The Magnaflux® 10 Gauss Calibrated Field Indicator has a scale range of +10 or -10 gauss from 0 center. Each large-scale division represents 1 gauss and the small divisions represent 1/2 gauss. The 10 gauss calibrated field indicator is accurate to +/- 0.5 gauss. Certification is provided.

	Part No.	Description	Pur.	Pk
1	2480	General magnetic field indicators 10 gauss	1	1
2	105645	Magnetic field indicators 20 gauss calibrated	1	1
3	505056	Magnetic field indicators 10 gauss calibrated	1	1

Quantitative Quality Test Shims



Quantitative Quality Indicators (QQI) are magnetic particle test piece shims with artificial defects used to verify field direction and relative strength. QQI's are also used to balance multi-directional fields and to increase productivity by minimizing magnetizing shots. The QQI indicator shims are packaged in sets of five.

Part No.	Description	Pur.	Pk
631590	Circle cross quantitative quality indicator test piece shims - 5 pces	1	1
631592	Mini circle cross quantitative quality indicator test piece shims - 5 pces	1	1
631650	Circle cross self adhesive quantitative quality indicator test piece shims - 5 pces	1	1

Laminated Magnetic Flux Indicator Strips



Magnetic Flux Indicators provide a guide to the direction of the magnetic field, and can provide an estimate of the magnetic field strength.

The indicators have a core of high-permeability steel with brass cladding 0.05 mm thick on both sides. The core material has three slots of different widths, providing discontinuities that show as linear indications in a magnetic field.

Laminated Magnetic Flux Strips are stiffer than QQIs, and do not conform to curved surfaces easily. But unlike QQIs, Laminated Magnetic Flux Strips are not permanently affixed to a part so they can be reused for multiple applications.

Part No.	Description	Pur.	Pk
M008M005	Laminated magnetic flux indicator strips type A	1	1

Magnetic Particle Test Bar



The MPI Test Bar can be used with wet bench equipment, power packs, or magnetic vokes

Test bar contains coarse and fine surface and subsurface defects in both directions. Meets or exceeds most industrial and military standards for artificial test specimens.

Part No.	Description	Pur.	Pk
189838	Magnetic particle test bar	1	1

Magnetic Field Strength Meter



The FSM-2 is used for tangential measuring of the magnetic field strength in DC & AC fields. A tangential field probe is attached to the work piece's surface during magnetization, and the hall sensor measures the voltage change produced by the magnetic field. This meter measures the true RMS of asymmetric magnetic fields.

Part No.	Description	Pur.	Pk
133034	Magnetic field strength meter & Reference block kit	1	1

Soundsafe



Soundsafe® is a high-performance, general-purpose ultrasonic couplant for flaw detection and sizing, thickness gauging, flow metering and acoustic emission testing.

This medium viscosity gel couplant is well known for its outstanding performance, excellent corrosion protection, thixotropic properties and comprehensive range of specifications and approvals.

Part No.	Description	Pur.	Pk
20-901	Soundsafe High Performance Ultrasonic Couplant	1	1

Ultrasonic Couplant



Ultrasonic couplant for flaw detection and sizing, thickness gauging, flow metering and acoustic emission testing.



Sono 600 is a versatile, multi-purpose couplant with a wide operating temperature range for flaw detection, thickness gauging and acoustic emission testing in petrochemical, power generation, automotive, aerospace, food processing equipment and pharmaceutical manufacturing.

Recommended temperature range is 0 to 700°F / -18 to 371°C.



UT-X® Powder is a cost-effective couplant powder for flaw detection and thickness gaging applications where ferrous corrosion inhibition is required.

UT-X Powder retains viscosity on salt caked boiler tubes, corroded pipe, structural steel, steel billets, welds and ship plate. Mixed with water at the inspection site, its compact and lightweight packets are easy to transport to a job site.

> Pk 1

1

1

1



3 62-001

62-005

	Part No.	Description
1	25-901	Ultragel II 3.7I (1 gal)
	25-912	Ultragel II 354ml
	25-905	Ultragel II 18.9I
2	45-6XT04	Sono 600 high-temperature ultrasonic couplant 118ml (4 oz)
	45-901	Sono 600 high-temperature ultrasonic couplant 3.78I (1 gal)

UT-X Powder 3.78I (1 gal)

UT-X Powder 18.9l (5 gal)

Tool Steel Ring



A magnetic particle test piece with pre-drilled holes to simulate subsurface discontinuities. It offers a reliable method of verifying magnetic particle system performance when actual test parts with discontinuities are not available.

Part No.	Description	Pur.	Pk
159999	Tool Steel Ring	1	1

Centrifuge



Help you easily and accurately measure the magnetic particle concentration of your mag particle bath as part of your regular system performance checks for ASTM E709, ASTM E1444 or ASME BPVC.

Magnaflux centrifuge tubes are individually calibrated to monitor the precise concentration of magnetic particles in suspensions, as well as contamination levels of the bath.



	Part No.	Description	Pur.	Pk
1	M044C005	Centrifuge Tubes for Fluroescent Ink 0-1ml	1	1
	10085A	Centrifuge	1	1
2	M044C004	Stand for Centrifuge tubes	1	1

Digital Ammeter & Shunt Kit



The Ammeter Shunt Kit is used to verify magnetizing current output of magnetic particle inspection equipment up to 10,000 amps on half-wave DC, 1-phase full-wave DC and 3-phase full-wave DC output, and up to 6,000 amps on AC current output.

Use the calibrated Ammeter Shunt Kit as part of regular system performance checks to ensure equipment accuracy and repeatability for the most consistent mag particle inspections.

Part No.	Description	Pur.	Pk
622350	Digital Ammeter and Shunt Test Kit	1	1