- ❑ FLUORESCENT AND COLOUR CONTRAST
- ❑ OIL AND WATER BASED PRODUCTS
- ❑ READY TO USE INKS

MAGNETIC PARTICLE INSPECTION

MAGNAFLUX®
MAGNETIC INKS AND POWDERS

Magnetic Inks and Powders are used with magnetic particle inspection equipment to locate surface and near surface flaws in ferrous components

Viewed under UV(A) using MAGNAGLO®

Approved and specified worldwide, MAGNAFLUX® and MAGNAGLO® represent the ultimate in quality and performance for the magnetic particle inspection process.

Both wet and dry method magnetic particles are available in either fluorescent or colour contrast to meet all applications.

Whether standard bench, special purpose machines or one-man portable kits, there's a MAGNAFLUX®/MAGNAGLO® Magnetic Ink or Powder to suit every application.

Furthermore, when used in conjunction with MAGNAFLUX® Magnetic Particle Inspection equipment, they provide a matched system second to none in non-destructive testing.

SPECIFICATIONS

MAGNAFLUX® and MAGNAGLO® concentrates, ready to use inks and powders meet the requirements of BS 4069, ASME,ASTM. Oil suspended inks and concentrates meet AMS, appropriate Industrial and Government specifications.
Certification is available on request.

MAGNAGLO® FLUORESCENT INKS

	CONCENTRATION	IN OIL	IN WATER	PARTICLE SIZE
MAGNAGLO® 14A Can be suspended in oil or in water in which Magnaflux WA 2B or WA 4E has been dissolved.	14A WA2B WA4E	1.25 g/L - -	1.25 g/L 10 g/L 1% v/v	6-7μ m
MAGNAGLO® 20B A balanced blend of Magnaglo 14A with Magnaflux WA2B. Magnaglo 20B is thus directly water Suspendable giving an aqueous ink which both wets part surfaces and protects them from corrosion during testing.	20B	-	10 g/L	6-7 μ m
MAGNAGLO® WB 12 A mixed liquid concentrate of Magnaglo 14A with water conditioners and corrosion inhibitors. Magnaglo WB 12 is nitrate free.	WB12	-	250ml makes 25 Litres	6-7 μ m
MAGNAGLO® MG410 Ultra bright Magnaglo material suspendable in oil or water in which Magnaflux WA2B or WA4E has been dissolved.	MG410 WA2B WA4E	1.0-1.5 g/L - -	1.0-1.5 g/L 10 g/l 1%v/v	8-12 μ m

READY TO USE INKS

	FLASH POINT (PMCC)	VISCOSITY AT 21°C	SPECIFIC GRAVITY	PARTICLE SIZE	SETTLEMENT VOLUME
MAGNAGLO® 14HF A ready to use ink consisting of Magnaglo 14A in high flash carrier II of low odour.	93°C min	3.45 cS	0.81	6-7μ m	0.1- 0.35 ml
MAGNAGLO® 410HF A ready to use ink consisting of Magnaglo MG 410HF in high flash carrier II of low odour.	93°C min	3.45 cS	0.81	8-12 μ m	0.1- 0.35 ml
MAGNAFLUX® 7HF A ready to use ink consisting of Magnaflux 7C in high flash carrier II of low odour.	93°C min	3.45 cS	0.81	2-6 μ m	1.5 –2.4 ml

COLOUR CONTRAST CONCENTRATES

	CONCENTRATION	IN OIL	IN WATER	PARTICLE SIZE
MAGNAFLUX® 7C Can be suspended in oil or water in which Magnaflux WA2B or WA4E has been dissolved.	7C WA2B WA4E	9.5g/L - -	9.5g/L 10g/L 1% v/v	2-6 μ m
MAGNAFLUX® 27B BLACK A balanced blend of Magnaflux 7C with Magnaflux WA2B to give a concentrate which can be suspended directly in water to give black magnetic ink.	27B	-	20g/L	2-6 μ m
MAGNAFLUX® 9C Can be suspended in oil or in water in which WA2B or WA4E has been dissolved.	9C WA2B WA4E	9.5g/L - -	9.5g/L 10g/L 1% v/v	2-6 μ m

WATER CONDITIONERS

	CONCENTRATION	IN WATER
MAGNAFLUX® WA2B A water-soluble granular solid designed to be dissolved in water to prepare a suitable aqueous carrier for the oil suspendable Magnaflux and Magnaglo concentrates. The three-fold actions of Magnaflux WA2B are: **1)** to suspend magnetic particles in water; **2)** to protect surfaces from corrosion during testing; **3)** to wet surfaces under test.	WA2B	10 g/L
MAGNAFLUX® WA4E A liquid water conditioner which assists suspension of Magnaflux or Magnaglo particles very efficiently, wets surfaces and protects them from corrosion during tests. Magnaflux WA4E also leaves light corrosion protection after testing.	WA4E	1% v/v

CARRIER FLUID

	FLASH POINT (PMCC)
MAGNAFLUX® CARRIER II A blend of hydrocarbon distillates designed to suspend magnetic particles for preparation of magnetic inks. It allows good particle mobility and suspends particles efficiently.	93°C min

CONTRAST PAINT

	FLASH POINT (PMCC)
MAGNAFLUX® WCP2 A quick drying white contrast paint which can be applied as thin coating prior to testing where enhanced contrast is required.	< 0°C

DRY METHOD MAGNETIC PARTICLES

	PRODUCT	COLOUR	PARTICLE SIZE	TEMP. RANGE
Magnaflux dry powders offer a range of colours to give good contrast on a wide variety of finishes. In the event of contrast being poor, a thin layer of WCP2 can be applied prior to testing.	1Grey 3A Black 8A Red	Grey Black Red	1 – 150 μ m 1 – 150 μ m 1 – 150 μ m	0 - 315°C 0 - 230°C 0 - 175°C

Envirocoustics Non Destructive Testing

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