

Magnetic Particles for NDT

Super-Magna series



luorescent Magnetic Particles(FMP)

FMP shows fluorescence by UV radiation. Used as the suspension of water or oil with conditioner.

Features

- High fluorescent brightness assures excellent visibility to the fine defects.
- Less fluorescence deterioration produces long lasting performance.
- Inspection cost will be reduced by smaller consumption.

on-fluorescent Magnetic Particles(MP)

There are three colors MP. Those are White/Red/Black. Wet method is used as the suspension of water or oil with conditioner.

Dry method is used with applicator.

Features

- Vivid colors show good contrast to the objective surface.
- · Less peel off has realized by special production process.
- Dry method is suitable for sub-surface MPI.



Type, characteristics and application

Туре	Color	Fluorescent coefficient(cd/W)	Particle size(µm)	Applications				
Fluorescent Magnetic Particles (for wet method only)								
LY-10	GY	8.2	9	Multi-purpose, *, **				
LY-20	GY	11.2	12	High-brightness, law material, *, **				
LY-30	GY	5.8	4	Precision inspection, aircraft parts etc., *,** and DIN				
LY-40	GY	5.8	9	Multi-purpose, *, **				
LY-50	YG	5.4	9	Multi purpose, for oil suspension, **				
Non-fluorescent Magnetic Particles								
WD-55	White	_	_	Multi-purpose, for dry method				
WD-103Y	White	_	_	Multi-purpose, for dry method				
RD-203	Red	_	_	Multi-purpose, for dry method				
BW-334	Black	_	_	Multi-purpose, for wet method				

- 1. Color: GY = Greenish Yellow YG = Yellowish Green
- 2. Evaluation by fluorescent coefficient(cd/W)(JIS Z2320-2) Fluorescent coefficient = luminance / intensity of ultraviolet
- 3. Particle size (by laser scattering particle size distribution analyzer)
- 4. * = Water suspension only
- 5. ** = AMS 3044 (ASTM E 1444) Certificate is possible to be issued based on request. Please inform us when you place the order.

Particle concentration ml/100ml

Standard	FMP	Non-FMP	
ASTM	0.1-0.4	1.2-2.4	

Suspension vehicles

As the suspension vehicle, water or oil shall be used. For oil suspension, SO-220B (meets AMS) or SO-220C (meets AMS) shall be used. For water suspension, water conditioner shall be used.

- $$\sharp$$ Super-keep AR-100K(1-5%) addition to the suspension is effective for short time rustproof.

Water conditioner

Туре	Concentration	Features	
Eco-Magna EC-4	5ml (5g) /L	Liquid type, human and environmental safty, dispersing ability and wetting ability	
BC-700	1-2%	Liquid type, adaptable for painting of workpiece after inspection	

Ready for use suspension

Туре	Vehicles	Features/Concentration				
LY-10 (oil)	Oil base	No need for care of rust	2.0g/L	(450cc Aerosol)		
LY-10 (water)	Water base	Safe and clean	0.75g/L	(450cc Aerosol)		
LY-10 (rapid dry)	Solvent base	Good operation efficiency	1.5g/L	(450cc Aerosol)		
LY-10 Conc.						
LY-20 Conc.	Dilute one bottle of LY Conc. with 100 litter of water and agitate it, FMP suspension (1.0g/L) has prepared.					
LY-30 Conc.	(concentrated suspension)					
LY-40 Conc.						

Caution: Aerosol propellant, oil and solvent are flammable.

Integrated supplier of Non-Destructive Testing and Marking

 $\ensuremath{\bowtie}$ All specifications and designing are subject to change without notice.



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