

2-12-97

STANDARDS MANUFACTURING PRACTICE DIESEL COMPONENT WORKS/Patiala.	Index	31PD5671
	Number	31P5671
GENERAL INSTRUCTIONS FOR NON-DESTRUCTIVE TESTING FLOURESCENT PARTICLE INSPECTION (WET) METHOD	Sheet	'A'
	Date	21.12.90

Scope: This specification covers general instructions and procedure for non-destructive testing of parts by the Magnetic Fluorescent Particle inspection(WET) method.

SOLUTION CONCENTRATION:

(A) CONCENTRATION WILL BE AS PER VENDOR RECOMENDATION.

PROCEDURE:

1. Clean parts to remove oil, grease or other contaminants,
2. Place part in coil, to determine circumferential defects, using recommended intermittent current as solution is applied.
3. Inspect.
4. Place part between plates, to determine longitudinal-defects, using recommended intermittent current as solution is applied.
5. Inspect.
6. Demagnetise after inspection.

RECOMMENDED CURRENTS:

Type of part	Coil Shot	Head Shot
1. Solid or Hollow Cylinder-1" dia	300/700 amp.	500/1000Amp
2. Solid or Hollow Cylinder-2" dia	500/900 amp.	900/1800Amp
3. Solid or Hollow Cylinder-3" dia	1000 Amp.	max1500/3000Amp
4. Short Hollow Cylinders(use Central Conductor between Plates		
a) Rings, nuts, washers, spacers-1" O.D-		400/1000Amp
b) Rings, nuts, washers, spacers-2" O.D-		900/1800Amp
c) Rings, nuts, washers, spacers-3" O.D-		1500/3000Amp
5. Large diameter parts(to 8" dia)	-	2000/amp.max
6. Large diameter parts(to 15" dia)	-	3000Amp. max
7. Irregularly Shaped parts		
a) Upto 2" dia	400amp max.	800 amp. max
b) upto 4" dia	600amp.max.	1000 amp max.
c) upto 6" dia	800amp.max.	1200 amp.max.
d) upto 8" dia	1000amp.max.	1400 amp.max.
e) upto12" dia	1200amp.max.	1600 amp.max.

NOTE:

- 1) When no coil shot required two head shots shall be made rotating part 90° after first inspection.
- 2) See Applicable Alco manufacturing practice sheets for inspection standards(acceptance limits) covering part being inspected.

CHD	SE	DATE	16/12/04
SE/DRG	SE	VALIDATED BY	SE
SE	SE	DATE	16/12/04
ALTERNATION	SOLUTION CONCENTRATION REVISED (VIDE DLW ALT. R1)		
ALT. NO.	(A)		
CHD	APP		
20/12	21/12/90		

RE-TYPED