



# Operating Manual

ASTM Centrifuge Tube  
Part Number 135015



## TECHNICAL DESCRIPTION

The ASTM centrifuge is a glass vessel designed in accordance with the ASTM standard D96-73. It has a capacity of 100 ml, with calibrated marks on the outside, and is supplied with a stand to hold the vessel.

## FIELD OF APPLICATION

Use the ASTM centrifuge to check that the concentration of magnetic particles in your test liquid solution is at the correct level.

Once your test equipment has been operating continuously for at approximately 10 - 15 minutes, use the handheld hose to fill the centrifuge's bulb to its maximum capacity of 100 ml. Wait 30 minutes (specified by the ASTM standard) then evaluate the contents of the bulb. We recommend using our Comparison Block 1, which will enable you to photograph the results of the test.

- Too many magnetic particles in your test solution will generate a greater background fluorescence, which reduces the contrast and makes it more difficult to detect crack indications.
- Not enough magnetic particles will prevent optimum contrast and make it difficult to detect crack indications.

The information from this test procedure assumes that solid contamination, which also deposits, is only present in minimum concentration, so that the actual ratio of magnetic particles can be volumetrically measured.

NOTE: For single shift operation, we strongly recommended that you completely drain and clean the test liquid container of your test equipment at least once a week, and re-fill with new test liquid. If this is not done, there is a danger that the container will hold either too much or not enough of the additives that make up the Magnaflux concentrate. This can cause corrosion, foaming and/or odour.

NOTE: In accordance with the ASTM standard, the specifications MIL and AMS require a magnetic particle ratio of 0.1 - 0.5 ml when using fluorescent wet particles.

## VALUES FOR MAGNAFLUX PRODUCTS

Magnaflux product	Settlement volume	Settlement time
601.1: fluorescent magnetic powder combined with oil or water, plus additives	0.1 - 0.2 ml	30 minutes (water) 60 minutes (oil)
<b>Water-based test liquids (concentrates with additives)</b>		
MF-655 WB (fluorescent)	0.21 ml (1:40) 0.13 ml (1:60)	30 minutes
WB-12 (fluorescent)	0.1 - 0.4 ml	30 minutes
WB-27 (black)	1.5 - 2.4 ml	30 minutes
<b>Oil-based test liquids</b>		
622.1 (fluorescent)	0.1 - 0.2 ml	60 minutes
14HF (fluorescent)	0.1 - 0.25 ml	60 minutes
410HF (fluorescent)	0.05 - 0.15 ml	60 minutes
7HF (black)	1.5 - 2.4 ml	60 minutes

The values given above relate exclusively to Magnaflux products and cannot be transferred. For detailed information on the products, please refer to the individual product data sheets.



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