



SEDIMENTATION GLASS TUBE



DESCRIPTION

The CGM CIGIEMME S.p.A. sedimentation glass tube is specially calibrated to allow simple and accurate measurement of the magnetic particles concentration and the level of contamination in the bath, in compliance with ASTM E709, ASTM E1444 and ASME BPVC standards. The glass tube is divided into 0.05 mL increments for fluorescent magnetic ink and 0.1 mL increments for black magnetic ink.

USER INSTRUCTIONS

To use the sedimentation glass tube correctly for non-destructive testing (NDT), fill it to the 100 mL mark with the magnetic particle suspension from the bath to be tested, then place it on a support and allow the particles to settle for approximately 30 minutes (for suspensions in water) or approximately 60 minutes (for kerosenoil suspensions). Finally, read the volume of the settled particles.

STEP-BY-STEP DESCRIPTION

1. **Preparing the bath:** ensure that the magnetic ink has been thoroughly stirred (preferably using a pump) for at least 15 minutes to guarantee uniform particle distribution.



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Controlli Non Distruttivi - Non Destructive Testing

- 2. Fill the glass tube:** insert the flexible tube or bath nozzle into the glass tube and fill it up to the 100 mL line.
- 3. Demagnetize (if required):** if the particles have been magnetized, demagnetize the glass tube by placing it in a demagnetizing coil or using a decreasing alternating current.
- 4. Let the particles settle:** place the full glass tube on the appropriate stand in an area free from vibrations. For suspensions in water, leave to rest for approximately 30 minutes; for suspensions in kerosenoil, leave to rest for approximately 60 minutes.
- 5. Read the concentration:** at the end of the sedimentation phase, read the volume of sedimented particles in the glass tube. The value indicates the concentration of particles in the bath.
- 6. Result interpretation:** compare the volume value with the acceptable range for the specific type of particles (e.g., fluorescent or visible) to determine whether it is necessary to add more particles or suspension liquid in order to maintain the correct bath concentration.

AVAILABLE MODELS

PART NUMBER	DESCRIPTION	REF.
04099893	Fluorescent magnetic particle baths	94.8
04099894	Magnetic particle baths visible at daylight	94.4
04099895	Support for 100 CC graduated glass tube	94.2/01



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