

## Grindometers (Fineness of Grind Gauges)

Thank you for purchasing a Grindometer from Ascott. Please read these instructions carefully and retain for future reference.

### Important Information

This equipment should only be used as intended by suitably qualified and trained personnel.

These instructions should be always readily available to such personnel.

Normal common-sense safety precautions must be taken at all times to avoid the possibility of accidents. We recommend that users produce their own risk assessment for the entire testing process for which this equipment will be used.



Single Channel



Double Channel



Wide Channel

# Operating Instructions

Standard range gauges are scaled in both Microns and Hegman units. Select the correct Gauge so that the pigment size is within the scale of the gauge, for example for a 0-100 microns range gauge, the pigment size should be between 40 to 90 microns.

Place the gauge, with the zero end of the scale closest to you, on a flat, horizontal, non-slip surface, gently wipe the surface of the gauge clean and scraper blade edge, with a lint free cloth to remove any dust or residue

Thoroughly stir the prepared test sample to ensure even distribution, care should be taken to avoid air bubbles from forming and becoming trapped within the sample, which could cause inaccuracy of measurement

Pour enough of the sample onto the deep end of the gauge, so that it just overflows the channel/s. Again, take care to avoid trapping air within the sample

Hold the scraper using the thumbs and fingers of both hands in a vertical position. Place the scraper, (long edge) perpendicular on the gauge surface, at the edge of the deep end, ensuring a right angle between the face of the scraper and the length of groove/s path.

Apply sufficient downward pressure to clean excess sample from the gauge face. Draw the scraper towards the zero end of the scale at a uniform rate, until the zero point has been passed, this should take 1-2 seconds

Immediately (to avoid any issues caused by evaporation) examine the gauge from the side, so that the line of vision is at a right angle to the path/s of the drawdown. Look for a 3 mm wide band area, which contains 5 to 10 particles. Read the position of the upper limit of this band on the scale and record this value.

Where a two-channel gauge is used, average the values of the two readings

Clean the gauge and scraper immediately after the first and any successive drawdown, using a suitable solvent

The first reading is used to establish the test conditions and initial fineness rating, The first reading taken is to establish the test conditions and an initial fineness rating, perform 2 more tests and calculate the average value of the results.

When not in use, make sure that the gauge is stored in the case provided and is clean and dry. If required, use a small amount of protective oil to prevent rust when not in use.

If you have any queries regarding your new equipment, or require any additional accessories or consumables, please contact [info@ascottshop.com](mailto:info@ascottshop.com) or telephone +44 (0)1827 318040. If you wish to contact us by post, our full mailing address is 6-8 Gerard, Tamworth, Staffordshire, B79 7UW