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GRINDOMETERS – FINENESS OF GRIND GAUGES

VF2104, VF2105, VF2106, VF2107, VF2108, VF2110, VF2111, VF2112, VF2113, VF2118, VF2124, VF2120, VF2121, VF2122, VF2123

DATASHEET

PRODUCT DESCRIPTION

Precision instrument to determine particle size and fineness of many materials like paints, lacquers, pigments, filler, chocolate etc..

TQC Grindometers are available in three models:

- Double grooves with graded slopes graduated in different parameters: Microns, NS (Hegman) and PCU (North)
- Single wide groove with parameters: Microns and Hegman.
- Single groove with only Microns.

Gauge and bevelled scraper are made of Sub Zero Vacuum hardened medical grade stainless tool steel and have an accuracy of 2 µm.

BUSINESS

Food industry, laboratory, pharmaceutical industry

STANDARDS

Check the appropriate standard for a correct execution of the test.
ASTM D1210, ASTM D1316, DIN 53203, DIN EN ISO NF21524, FTMS 141 a M.4411.1 ISO1524, NFT 30 046

FEATURES

- Precision instrument
- Ergonomic shaped scraper, for an easy grip.
- Made of through hardened stainless steel
- Many models available

SCOPE OF SUPPLY

- Pouch
- Grindometer
- Scraper
- Manual

ORDERING INFORMATION

VF2110 Grindometer Din- ISO 0-15µm, double groove
VF2111 Grindometer Din- ISO 0-25µm, double groove
VF2112 Grindometer Din- ISO 0-50µm, double groove
VF2113 Grindometer Din- ISO 0-100µm, double groove
VF2118 Grindometer Din- ISO 0-250µm, double groove

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VF2124 Grindometer Din- ISO 0-500µm, double groove
VF2104 Grindometer Din- ISO 0-15µm, single groove
VF2105 Grindometer Din- ISO 0-25µm, single groove
VF2106 Grindometer Din- ISO 0-50µm, single groove
VF2107 Grindometer Din- ISO 0-100µm, single groove
VF2108 Grindometer Din- ISO 0-250µm, single groove
VF2120 Grindometer Din- ISO 0-15µm, wide groove
VF2121 Grindometer Din- ISO 0-25µm, wide groove
VF2122 Grindometer Din- ISO 0-50µm, wide groove
VF2123 Grindometer Din- ISO 0-100µm, wide groove

SPECIFICATIONS

All models come with a base and a scraper.

Base :
ASAB Stavax ESR medical grade stainless tool steel.
Sub Zero Vacuum hardened (+1756°C to -70°C),
hardness HRC 55 (through hardened*)
Surface treatment: polished
Overall accuracy: ± 2 µm
175 x 60 x 12mm with 120mm groove length

Scraper:
ASAB Stavax ESR medical grade stainless tool steel. Sub Zero Vacuum hardened (+1756°C to -70°C), hardness HRC 55 (through hardened*) and tempered.
Surface treatment: black chromed
Overall straightness: ± 2 µm
75 x 38 x 8mm

**Through hardening versus Case-hardening or surface hardening*
Through-hardening means the metal uniformly is hardened throughout the piece. Case- or surface (face / frame) hardening only hardens the top layer of the metal. Once the top layer is degraded excessive wear and tear will occur on the product limiting its life time and affecting accuracy.

Double groove models:

VF2110
TQC Grindometer Din-ISO
Range: 0-15 micron, 10-8,5 PCU, 8-6,8 Hegman
Graduation: 1,5 micron
Groove: Double, 2 x 12 mm

VF2111
TQC Grindometer Din- ISO
Range: 0-25 micron, 10-7,5 PCU, (north), 8-6 Hegman (NS)
Graduation: 2,5 micron
Groove: Double, 2 x 12 mm

VF2112
TQC Grindometer Din- ISO
Range: 0-50 Micron, 10-5 PCU, (north), 8-4 Hegman (NS)
Graduation: 5 micron
Groove: Double, 2 x 12 mm

VF2113
TQC Grindometer Din- ISO
Range: 0-100 Micron, 10-0 PCU, (north), 8-0 Hegman (NS)
Graduation: 10 micron
Groove: Double, 2 x 12 mm

VF2118
TQC Grindometer Din-ISO
Range: 0-250 Micron, 10-0 PCU, (north), 8-0 Hegman (NS)
Graduation: 25 micron
Groove: Double, 2 x 12 mm

VF2124
TQC Grindometer Din-ISO
Range: 0-500 Micron, 10-0 PCU, (north), 8-0 Hegman (NS)
Graduation: 50 micron
Groove: Double, 2 x 12 mm

Single groove models
VF2104
TQC Grindometer DIN-ISO
Range: 0-15 micron
Graduation: 1,5 µm (micron)
Groove: Single, 12 mm

VF2105
TQC Grindometer DIN-ISO
Range: 0-25 µm micron
Graduation: 2.5 micron
Groove: Single, 12 mm

VF2106
TQC Grindometer DIN-ISO
Range: 0-50 µm micron
Graduation: 5 micron
Groove: Single, 12 mm

VF2107
TQC Grindometer DIN-ISO
Range: 0-100 micron
Graduation: 10 micron
Groove: Single, 12 mm

VF2108
TQC Grindometer DIN-ISO
Range: 0-250 micron
Graduation: 25 micron
Groove: Single, 12 mm

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Wide groove models

VF2120
TQC Grindometer DIN-ISO
Range: 0-15 µm (micron), 8-6.8 NS (Hegman)
Graduation: 1.5 µm (micron)
Groove: Wide, 37 mm

VF2121
TQC Grindometer DIN-ISO
Range: 0-25 µm (micron), 8-6 NS (Hegman)
Graduation: 2.5 µm (micron)
Groove: Wide, 37mm

VF2122
TQC Grindometer DIN-ISO
Range: 0-50 µm (micron), 8-4 NS (Hegman)
Graduation: 5 µm (micron)
Groove: Wide, 37mm

VF2123
TQC Grindometer DIN-ISO
Range: 0-100 µm (micron), 8-0 NS (Hegman)
Graduation: 10 µm (micron)
Groove: Wide, 37mm

USE

- Place the gauge on a flat surface. Place a suitable amount of the material in the deep end of each groove.
- Place the scraper behind the deepest groove.
- Pull the scraper along the length of the gauge at a constant speed and apply sufficient downward pressure to clean excess material from the edges of the gauge.
- Asses the drawn out material within the next 3 seconds. Find a band across the grooves of 3mm wide which contains 5 to 10 particles of the material. Read the position of the upper limit of this band on the scale and record this value.

SPECIAL CARE

- Always clean the instrument after use with a suitable solvent.
- Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- The instruments have to be protected from rust when it is not in use. Rust can appear on the instrument when it is used only occasionally and when it is been handled by a user with sweaty hands.
- Always dry the instrument and scraper after use to protect against rust, and apply a thin layer of oil to the surface of the instrument and scraper before storage.
- Always store the instrument in its pouch when not in use.
- Check regularly whether the gauge and the scraper are worn or damaged.
- Always dry the instrument and scraper after use to protect against rust, and apply a thin layer of preservation oil to the surface of the instrument and scraper before storage.

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DISCLAIMER

The right of technical modifications is reserved.

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