

Stainless Steel Fineness of Grind Gauges (0-100µm) Single-Channel

BGD 241-3

Product Description

Many solid materials require grinding or milling into finer particles for dispersion in suitable liquid vehicles. The characteristics of these dispersions, often referred to as "grinds," are influenced by both the size of the particles and their dispersion level. Fineness gauges, also known as Hegman gauges, grind gauges, or grindometers, play a crucial role in assessing the fineness of these grinds. They help identify the presence of coarse particles or agglomerates in a dispersion but do not measure particle size or distribution directly.

These gauges are instrumental across various industries, including paint, plastics, pigments, printing inks, paper, ceramics, pharmaceuticals, food, and more, for controlling production, storage, and application of dispersion products. A fineness gauge consists of a flat steel block featuring one or two flat-bottomed grooves that vary uniformly in depth. The depth of these grooves, which is graduated on the block, helps in measuring particle size.

The gauge and its scraper are crafted from hardened stainless steel. Depending on the model, they feature one or two grooves with a graded slope, graduated in microns, mils, or Hegman units. Precision control ensures a tolerance of $\pm 2\mu m$, with flatness of both upper and lower planes being less than $3\mu m$.



Standards

- ISO 1524
- ASTM D 3333
- ASTM D 1210
- ASTM D 1316
- DIN EN 21524



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Technical Specification

Dispersion degree is indicated in microns (μ m) or Hegman (H) units, with the Hegman scale ranging from 0 to 8. A lower Hegman number corresponds to a coarser grind, as follows:

- 0 Hegman = 100 microns particle size
- 4 Hegman = 50 microns particle size
- 8 Hegman = near 0 microns particle size (indicating a very fine grind)



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Main Technical Parameters

| Model | Groove Size (LxW) | Range | Overall Dimension | Graduation | Number of Grooves | Unit |
|-----------|----------------------|---------|----------------------|------------|----------------------|---------|
| BGD 241/0 | | 0-15µm | | 0.625µm | | μm/ |
| BGD 241/1 | | 0-25µm | | 1.25 μm | | |
| BGD 241/2 | 140x12.5mm | 0-50µm | 175x50x12mm | 2.5 μm | 1 | Hegman/ |
| BGD 241/3 | | 0-100µm | | 5 μm | | Mils |
| BGD 241/4 | | 0-150µm | | 7.5 µm | | |

Ordering information: BGD 241/3

Disclaimer

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