

# Stainless Steel Fineness of Grind Gauges (0-150µm) Single-Channel

BGD 241-4

### **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



## Stainless Steel Fineness of Grind Gauges (0-150µm)

### **Single-Channel**

BGD 241-4

### **Technical Specification**

Dispersion degree is indicated in microns ( $\mu$ 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)



## Stainless Steel Fineness of Grind Gauges (0-150µm)

## Single-Channel

BGD 241-4

### **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 241/4

### Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development