Fineness of Grind Gauges

15,25, 50 and 100 microns Hegman Precision Grindometer

Aplicación

This instrument is intended for measuring the thinness of ground paints. It is also used in food (f.e..: chocolate) and pharmaceutical (creams) industries.

General features

- Consists of a hardened and gauged part, which makes it more economic, lighter and smaller.
- It is delivered with a hardened scraper, in a practical leather case.
- Elimination of the notches for the scale that used to be necessary. The scale is not part of the measuring surface anymore, but rather electrically inscribed in the sides. This makes cleaning simpler, it is sufficient to use a cloth, and the readjustment is easier and cheaper, when the measuring surface is worn.
- It is made of corrosion resistant steel. Greasing or special care is not necessary, so it can also be used in watery agglutinating agents.
- All the executions also have the graduation in Herman-NS scale, which prevents wrong indications of the grain.
- Good value for money, it features two slots, so that by measuring a single sample a double determination can be achieved.
- INTA's version is excluded. This model only has one measuring slot, but it is equipped with three scales, in NS, in μm and in mils. The NS scale is found in the measuring surface, close to the slot.
- In addition to the graduation according to NSA, the scale FPVPC can also be used. In the chart on the back the connections between the different units are shown.

Why is the grinding fineness grade measured?

- The paints that are insufficiently ground form films that are not clear, with lack of brightness and poor protective force.
- Grinding is expensive; therefore it must not take any longer than necessary.
- The most economically convenient grinding procedure must be determined for each product.
- In order to set the grinding elements to the most effective and favourable grade.
- Comparison of the grinding effect, between pigments of the same nature, but different origin, in the same conditions.
- Determining of the grinding grade of foreign products.
- Outgoing quality control in paints factories.
- Incoming quality control for paints consumers.
- To sum up: "Rationalization of the production and quality control to avoid complaints".

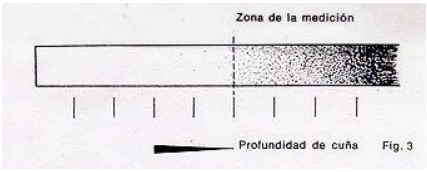
NEURTEK T. +34 943 82 00 82 info@neurtek.com www.neurtek.com

Usage

Some drops of the product to be tested are poured into the deepest part of the slots, and with the scratch, maintaining it slightly oblique; the paint is collected, extending it to the ends of the slots, with the minimum adjustment.

Immediately after having made the extension, the result of the measurement in the scale NS o FPVPC is displayed in the place that is marked in figure 3. To do so, the grindometer must be held at eye-level, looking at the place of the measurement, obliquely, against the light. Pay attention, and read the result, where a lot of pigment particles can be seen in the thin superficial film. Don't pay attention to the particles that sometimes can be seen in deeper parts of the slot.

In paints with volatile solvents, the reading must be done within 15 minutes. In synthetic enamels and oils, it must be done within one minute.



Possibility of error

Never put just ground and still hot paints in a cold grindometer, otherwise a coagulation of agglutinating agents and an agglomeration of the pigment could easily occur. Heat the grindometer and the scratch, or even better, wait until the recently ground product cools down.

If the extension of the paint through the surface causes undulations, it means that there is excessive viscosity. Thinning down the paint with 10 to 15% of a high volatility solvent, this problem can be solved immediately without any risk for the result of the measurement.

The paints with a spillage time in the DIN cup lower than 15 seconds cannot be checked with due precision by the grindometer.

Cleaning and care

Alter using it; the grindometer must be cleaned carefully with a paint brush and a solvent. Avoid using hard and sharp objects.

Hegman models

Single Slots

Code	Model	Execution	Margin measurement		Elevation	Length scale	Nº of slots	Length
			µ	N S	x fraction			
0236410	15µ	Hegman	0-15	-	1,5µ	125mm	1	160 mm
0236420	25µ	Hegman	0-25	8-6	2,5µ	125mm	1	160 mm
0236430	50µ	Hegman	0-50	8-4	5,0µ	125mm	1	160 mm
0236440	100µ	Hegman	0-100	8-0	10,0µ	125mm	1	160 mm

Doble Slots

Code	Model	Execution	Margin measurement		Elevation	Length scale	Nº of slots	Length
			µ	N S	x fraction			

0236300	15µ	Hegman	0-15	-	1,5µ	125mm	2	160 mm
0236000	25µ	Hegman	0-25	8-6	2,5µ	125mm	2	160 mm
0236100	50µ	Hegman	0-50	8-4	5,0µ	125mm	2	160 mm
0236200	100µ	Hegman	0-100	8-0	10,0µ	125mm	2	160 mm

Precision Models

Code	Mode	Execution	Margin of measurement		Number of slots	Length
			µ	Resolution		
0236500	25µ	Hegman	0-25	1 microns	2	200 mm
0236520	50µ	Hegman	0-50	2 microns	2	200 mm
0236530	100µ	Hegman	0-100	5 microns	2	200 mm

Certificate of calibration

ZPEX018 Certificate of Calibration with traceability.

How to order

The codes go depending on the model, according to the attached charts.