

# BeDensi P

## Bulk Density Tester - Plastic

The BeDensi P is an apparatus designed for the accurate measurement of bulk density in both plastic materials and molding materials. This equipment adheres to stringent manufacturing standards according to international standard ISO <60>: Plastics - Determination of apparent density of material that can be poured from a specified funnel. With its meticulous design, the BeDensi P serves as a reliable tool for industries seeking precise assessments of material characteristics in accordance with established international protocols.



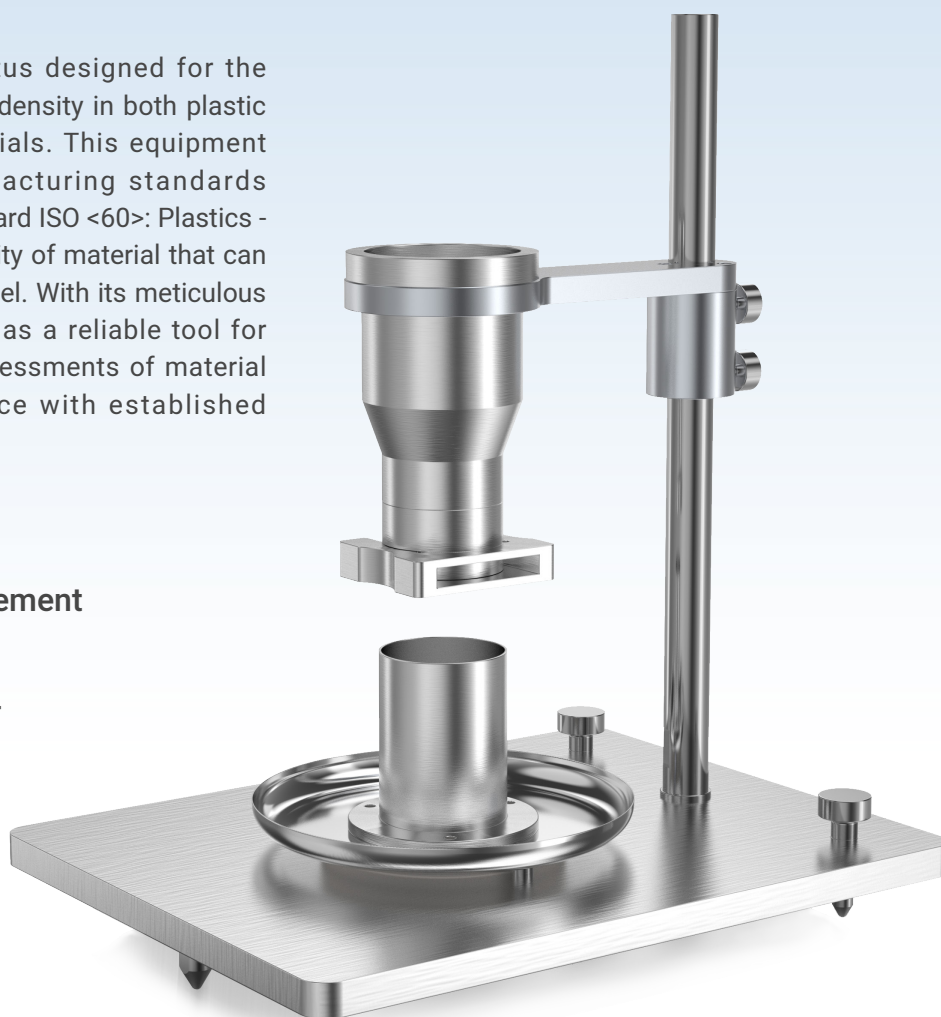
### Bulk Density Measurement



ISO

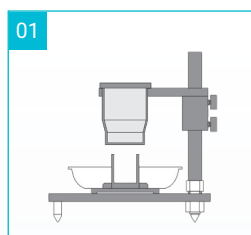


GB/T

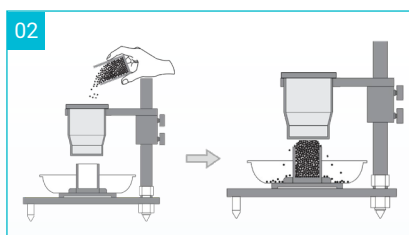


## Measurement Procedure

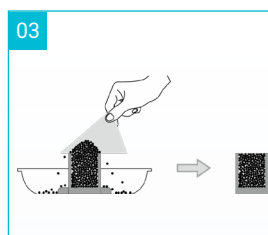
### Bulk Density



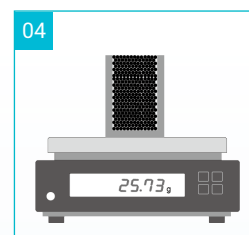
Adjust height with a block



Add sample



Scrape



Weigh

$$\text{Bulk Density } (\rho_B) = \frac{M}{V_B} = \frac{\text{Mass (g)}}{25 \text{ cm}^3}$$

where  $\rho_B$  is the bulk density,  $M$  is mass in grams, and  $V_B$  is the bulk volume in milliliters or cubic centimeters.

\*If needed, assistance in facilitating the flow of thermosetting molding material can be achieved by gently agitating the material with a rod.

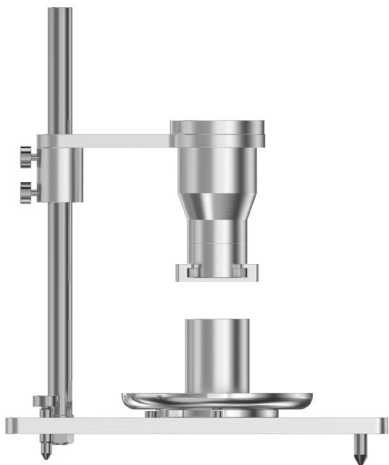
# Application Example

## Exploring bulk density across different plastic samples.

In adherence to international standards, the BeDensi P stands out as a highly effective tool for measuring the bulk density of PMMA, PET, PP, PVC, and PE plastic powders. Employing a meticulous three-cycle evaluation, it comprehensively assesses each plastic type, providing valuable data essential for quality control and process enhancement within the plastics industry. Its precision and adaptability render it an indispensable tool for gaining in-depth insights into the bulk density characteristics of various plastic powders, facilitating informed decision-making in material processing and manufacturing applications.

Sample	Result (g/cm³)			
	NO.1	NO.2	NO.3	Average
PMMA (Polymethyl methacrylate)	0.7061	0.7218	0.7117	0.7132
PET (Polyethylene terephthalate)	0.8433	0.8217	0.8393	0.8348
PP (Polypropylene)	0.8875	0.8973	0.8666	0.8838
PE (Polyethylene)	0.9629	0.9775	0.9732	0.9712
PVC (Polyvinyl chloride)	1.2784	1.2997	1.2223	1.2338

# Specification



Parameter	BeDensi P
Internal Diameter of Funnel	56 mm
Height of Funnel	115 mm
Orifice Diameter	33 mm
Height Between Bottom of Funnel and Cup	20 - 30 mm
Volume of Cup	100 ± 0.05 mL
Internal Diameter of Cup	45 ± 5 mm
Compliance (for bulk density)	● ISO <60>    ● GB/T 1636-2008

