



UNIVERSE

CURVED BEAM DEFLECTION APPARATUS AZA1338

The AZA1338 Curved Beam Deflection Apparatus is a precision laboratory instrument designed to study the horizontal and vertical deflection characteristics of curved beams subjected to end loading.

Widely used in:

- Strength of Materials laboratories
- Theory of Structures practicals
- Applied Mechanics experiments
- Civil and Mechanical Engineering education

the apparatus enables students and researchers to

investigate the deformation behavior of curved structural members under cantilever loading conditions.

The system provides a practical demonstration of how beam curvature and geometry influence:

- Stress distribution
- Structural stiffness
- Horizontal deflection
- Vertical deflection

The apparatus includes interchangeable curved beam configurations and a precision dial gauge measurement system for accurate experimental analysis and comparison with theoretical calculations.





UNIVERSE TECHNICAL SPECIFICATIONS

| Parameter | Details |
|---------------------|--|
| Model | AZA1338 |
| Apparatus Type | Curved Beam Deflection Apparatus |
| Beam Material | High-strength steel |
| Beam Configurations | Circle, semicircle with straight arm, quadrant, quadrant with straight arm |
| End Condition | Fixed at base, load applied at free end |
| Measurement Type | Horizontal and vertical deflection |
| Dial Gauge | 25 mm travel with magnetic base |
| Mounting | Rigid base frame |
| Usage | Educational and laboratory experiments |
| Brand | AZALAB |

Standard Supply Includes

- Curved beam test members
- Rigid base frame
- Precision dial gauge
- Magnetic gauge stand
- Experimental accessories