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## AZA LAB CUT MODEL OF PLANETARY GEAR SYSTEM AZA1250

The AZA LAB Cut Model of Planetary Gear System (Model AZA1250) is an advanced educational training aid designed to demonstrate the working principles of a planetary gear train in a clear, visual, and interactive manner.

This fully functional, hand-operated cutaway model enables students and trainees to understand torque flow, gear interaction, and power distribution in real time.

Planetary gear systems are widely used in automatic transmissions, marine propulsion systems, turbines, and industrial gearboxes, where compact and efficient power transmission is essential. The AZA1250 model simplifies these complex concepts through full internal visibility and hands-on operation, making it an essential tool for engineering education and vocational training.



### Key Features

#### 1. Clear Demonstration of Gear Operation

Visually demonstrates interaction between sun gear, planet gears, ring gear, and carrier, showing real-time torque distribution and motion transfer.

#### 2. Fully Functional Hand-Powered System

Manual operation allows step-by-step demonstration of gear behavior and rotational relationships.



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### 3. Cutaway Transparent Design

All key components are exposed for direct observation of internal movement and mechanical engagement.

### 4. Industrial-Grade Construction

Built using realistic, industry-based components to accurately represent actual planetary gear systems.

### 5. Educational Support Material

Includes technical documentation and schematic diagrams for structured teaching and laboratory use.

### 6. Portable and Stable Base Design

Mounted on a rigid base plate with integrated handles for safe handling and easy mobility.

### **Educational Value**

The AZA1250 planetary gear model helps learners clearly understand:

- Torque distribution in planetary gear trains
- Function of sun, planet, and ring gears
- Compact power transmission mechanisms
- Real-world applications in automotive and industrial systems



## UNIVERSE TECHNICAL SPECIFICATIONS

Specification	Details
Model	AZA1250
Make	AZA LAB
Gear System	Sun gear, planet gears, ring gear, carrier
Drive Type	Hand-powered
Functionality	Fully operational cutaway model
Mounting	Heavy-duty base plate with handles
Dimensions (L × W × H)	450 × 400 × 300 mm
Weight	10 kg

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