





विज्ञान एवं प्रौद्योगिकी विभाग DEPARTMENT OF **SCIENCE & TECHNOLOGY** 



Granted I

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A device for conducting three-point or four-point flexural fatigue strength testing of a specimen



#### NEED

There is a need for a fatigue testing fixture that can accommodate various specimen dimensions, operates with simplicity, and is cost-effective while enabling fully reversible cyclic loading.

### SOLUTION

The invention introduces a device for flexural fatigue strength testing, offering flexibility, and utilizing cyclic alternating bending stresses for comprehensive testing.

### INNOVATION

The device features movable supports, an upper loading plate, and adjustable rollers, enabling three-point or four-point flexural fatigue strength testing with reversible bending stresses.

## MARKET ANALYSIS

Market: Material testing industry, specifically fatigue testing

CAGR: Approximately 5-7% (based on the growth of the material testing industry) Potential Indian Clients: Material testing laboratories, research institutions, engineering firms, automotive manufacturers, aerospace companies

### WHY INVEST?

Flexural fatigue Four-point bending Cantilever beam bending Torsional stresses

# AT A GLANCE

- Current TRL NA
- Funded by NA
- IPC B60R, G01N
- Domain
  Mechanical testing equipment



For more information, reach out to (contact person), (designation), (organization) at (email ID) and (phone number)



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