

PSG Institute of Technology and Applied Research

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REPORT

The Department of Civil Engineering, in association with the Structural Engineers Association of Tamil Nadu, organized a state-level workshop on "Advances in Rebar Coupler Technology and Their Role in Modern Construction" on July 4th, 2025. The workshop was highly insightful and served as a valuable platform for knowledge sharing among professionals. The latest developments in rebar coupler technology were introduced to the participating structural engineers, enhancing their understanding of modern construction practices.

Rebar Coupler Technology: An Overview

Rebar Coupler Technology is an advanced reinforcement technique used to connect two reinforcing bars (rebars) without the need for lap splicing. It enhances structural integrity, reduces material usage, and expedites construction, making it especially effective in high-rise buildings, bridges, tunnels, and precast elements.

The technology involves the mechanical splicing of rebars using steel sleeves (couplers), providing a compact and reliable connection that efficiently transmits axial forces from one bar to another.

Advantages of Rebar Coupler Technology

1. **Material Savings:** Eliminates the need for lap lengths, reducing steel consumption
2. **Compact Joints:** Ideal for use in congested reinforcement zones.
3. **Time Efficiency:** Faster installation compared to traditional lap splicing.
4. **Enhanced Load Transfer:** Offers superior axial load transmission.
5. **Consistent Quality:** Factory-manufactured couplers ensure uniform quality.
6. **Sustainability:** Minimizes material wastage and lowers the carbon footprint.

Approximately 50 structural engineers, along with faculty members from our department, actively participated in the workshop and greatly benefitted from the technical sessions and technology updates shared.

