# IS 8674 : 2013 Fibre ropes – Polyethylene – 3- and 4 -strand ropes (third revision)

**IS 8674:2013 standard** outlines specifications for **polyethylene fibre ropes**, including **3-strand hawser-laid** and **4-strand shroud-laid ropes**, designed for versatile use across industries such as **lifting, securing, and mooring**. These **high-quality polyethylene ropes** are commonly chosen by consumers for their **strength, durability**, and **cost-effectiveness** in demanding applications.

Consumers expect **strong, durable polyethylene fibre ropes** that can reliably handle significant loads without breaking or deteriorating. To meet these expectations, IS 8674 sets stringent criteria for rope **design, construction, and physical properties**, ensuring dependable **performance and safety**.

Key quality parameters addressed by the standard include:

- **Linear Density Measurement**: Ensures the mass per unit length aligns with standards for reliable performance and cost control.
- **Minimum Breaking Force**: Verifies the rope's strength to endure load-bearing applications safely, minimizing risks in critical operations.
- **Tolerance Levels**: Regulates manufacturing variations to maintain consistent performance across rope batches.
- **Influence of Terminations**: Accounts for strength reduction due to terminations (such as eye-splicing or knots), which can reduce breaking strength by approximately 10%.

Through these standardized tests, **IS 8674** guarantees that **polyethylene fibre ropes** provide **consistent safety, strength**, and **durability**, meeting consumer demands in **various industrial applications**.