



GURU[™]
Steel Fibres

High-Performance **Stainless Steel Fibres**
for Durable Concrete Reinforcement

STRENGTH IN
EVERY **FIBER**



Stainless Steel Fibers are thin, short pieces of steel that are added to concrete mixtures to improve their structural performance. These fibers help to control cracking, enhance flexural strength, increase impact resistance & improve durability of concrete structures.

About GURU : Stainless Steel Fibres Division

GURU, Stainless Steel Fiber Division, specializes in the manufacturing of high-performance stainless steel fibres designed to enhance the durability and service life of concrete.

- In-house production of straight & hooked-end stainless steel fibres
- We provide customised packaging solutions designed to meet customer's unique requirements, ensuring safe, efficient, and brand-aligned delivery.
- Certified under EN 14889-1 (CE), ASTM A820, ISO 9001, and ISO 14001
- Serving ready-mix suppliers, precast manufacturers, contractors, distributors, & infrastructure companies across India and global markets

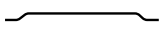


Why Stainless Steel Fibres?

Unlike carbon steel, stainless steel maintains its passive protective film even in chloride-rich environments, preventing rust, cracking, and spalling. This translates to service life exceeding 100 years, even under aggressive exposure conditions.



Product Range & Specifications

Material	Fibre Type		Length Range	Diameter Range	Tensile Strength	Fibres per kg
Stainless Steel		Hooked End, Bright round drawn wire	20mm to 60mm	0.20mm to 0.75mm	1,200 N/mm ² to 3,000 N/mm ²	Based on Fiber diameter and length selection
Stainless Steel		Straight Type, Bright round drawn wire	13mm to 30mm	0.15mm to 0.30mm	1,200 N/mm ² to 3,000 N/mm ²	Based on Fiber diameter and length selection

Product Applications:



Tunneling



Port Pavements



Industrial Flooring

Standard Dosage Ranges*

Application Typew	Dosage Range (kg/m³)	Volume Fraction (%)
Industrial Floors	20-40	0.25-0.5
Structural Elements	40-60	0.5-0.75
Shotcrete Applications	30-50	0.38-0.64
Precast Elements	25-60	0.32-0.75
High Performance Applications	60-100	0.75-1.25

Performance Impact by Dosage

Increasing steel fiber dosage typically provides the following improvements:

- **Flexural Strength:** 25-100% improvement depending on fiber type and dosage.
- **Impact Resistance:** Up to 10x improvement at higher dosages.
- **Fatigue Resistance:** 50-200% improvement.
- **Crack Control:** Significant reduction in crack widths and spacing.

Factors Affecting Dosage Selection

- **Fiber Type and Geometry:** Aspect ratio (length/diameter) significantly impacts performance.
- **Concrete Strength Requirements:** Higher strength applications generally require higher dosages.
- **Loading Conditions:** Dynamic vs. static loading considerations.
- **Environmental Exposure:** Corrosive environments may require special considerations.

Stainless Steel Fibers ensures structural integrity where other Steel Fibers fails.

*Dosage information are indicative. Final dosage to be contributed by the structured engineer based on design and performance requirements

Mixing Considerations

Adding steel fibers to concrete mixtures requires attention to the following:

- **Mixing Sequence:** Typically added after all other ingredients are combined.
- **Mixing Time:** Additional 3-5 minutes to ensure proper dispersion.
- **Workability:** Higher dosages may reduce workability, requiring adjustments to the mixture design.
- **Fiber Balling:** Proper addition techniques help prevent fiber clumping.

CERTIFICATIONS



EN 14889-1
(CE Certified
for Structural Use)



ISO 9001 Certified
(System Approvals)

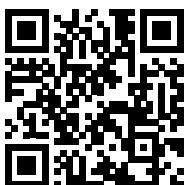


ASTM A820
Compliant

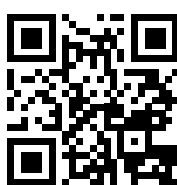


ISO 14001 Certified
(System Approvals)

Website



Whatsapp



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