



RebarX

Rust Free, 2X Strength

COMPANY PROFILE

REINFORCING INDIA'S FUTURE

Glass Fiber Reinforced Polymer Rebar | Made in India | Built for Infrastructure

4×

Lighter
than Steel

2×

Stronger
in Tension

75%

Less
CO2 Emission

80+

Years
Service Life

KEY MARKET FOCUS



NATIONAL HIGHWAYS

Crash barriers
& drainage lines



INDUSTRIAL FLOORING

Warehouses &
Factories



INFRASTRUCTURE

Internal Roads, Culverts
& Tunnels, Precast
Elements



CONSTRUCTION

Plinth Slabs, Boundary
Walls
& Water Tanks

The Man Behind RebarX



Kapil Agrawal
Founder & Director, RebarX

IIT KHARAGPUR
ALUMNUS

20+ Years
Experience

2025 RebarX
Founded

ISO Certified
Company

On a Mission to Make Indian Construction Corrosion-Free.

With a B.Tech in Mechanical Engineering from IIT Kharagpur and nearly two decades of experience spanning the oil industry and retail technology, Kapil built RebarX with a singular vision — to fix one of India's most persistent infrastructure problems: the corrosion of steel rebar inside concrete.

Founded in 2025, Credific Ventures Pvt. Ltd. operates from Pithampur, MP, combining world-class **European pultrusion technology with IIT-trained** first-principles engineering.

FOUNDER JOURNEY

IIT KGP	Oil Sector	Retail Tech	2025
B.Tech (Hons.) Mechanical Engineering	Industry Operations & Engineering	Startup founder, Scaled Operations to 25+ cities	Founded RebarX

Quality Is Our Foundation



IIT Kharagpur
Alumnus



Global Business
Leader



ISO Certified
Company

IN

Made in
India

WHAT IS GFRP REBAR?

Glass Fiber Reinforced Polymer rebar is a modern composite material that replaces conventional steel TMT bars in concrete reinforcement.

E-Glass fibers

aligned in resin matrix

Pultrusion process

continuous manufacturing

Surface wound

helical belt for concrete bond

BIS 18256:2023

Indian standard compliant

First used in the Soviet Union in 1975, GFRP rebar has 50+ years of proven global performance in USA, Canada, Japan, and Europe. India's BIS standard IS 18256:2023 now enables full domestic deployment.

HOW IT COMPARES

Property	Steel TMT	RebarX
Weight	Heavy	4× Lighter ✓
Corrosion	Rusts	100% Immune ✓
Strength	500 MPa	1000 MPa ✓
Service Life	Varies	80+ Years ✓
Conductivity	Conductive	Dielectric ✓

Operations Overview

Credific Ventures Private Limited operates from Pithampur, Madhya Pradesh — manufacturing premium GFRP rebars under the RebarX brand. We combine IIT-trained engineering with world-class European pultrusion technology to deliver India's most technically credible composite rebars and bent elements.

 LOCATION Pithampur, MP Industrial Zone	 FACILITY Pultrusion Line Straight + Bent	 GLOBAL Dubai Office Middle East Ops
 TECH PARTNER Composite Tech Europe	 COMPLIANCE BIS 18256 IRC 137:2022	 CERTIFICATIONS ISO Certified MSME MP 2025

OUR TWO BRANDS



RebarX
Rust Free, 2X Strength

PRODUCT BRAND

India's precision-grade GFRP rebar brand. Marketed to EPC contractors, PWD, and NHAI highway projects. Built on compliance, traceability, and technical credibility.

Straight Rebar

Bent Profiles

B2B / B2G

NHAI Projects

**COMPOSITE
TECH MACHINERY**

MACHINERY BRAND

World-class pultrusion machinery from Composite Tech — the only GFRP machine manufacturer globally partnered with FRP Institute USA. Complete line supply, installation, commissioning and training.

Pultrusion Lines

Commissioning

European Tech

Training

ROADS & HIGHWAYS

Our Primary Target Market

GFRP mesh inside road cross-section · Crash barrier reinforcement · Drainage channelling · IRC 137:2022 compliant

IRC 137:2022 COMPLIANT · MoRTH / NHAI APPROVED



Crash Barriers & Dividers

GFRP stirrups replace steel in central verge & roadside barriers. Zero rust in chloride-exposed environments.



Drainage Lines & Channels

GFRP mesh for drainage channels along national & state highways. 100% immune to water + soil corrosion.



Road Slab Reinforcement

Concrete pavement slabs with GFRP mesh. Approved for NHAI and MoRTH projects under IRC 137.



Culverts & Approach Slabs

Box culverts & bridge approach slabs requiring corrosion-free reinforcement in water-exposed zones.

RebarX In Action



GFRP REBAR

AT CONSTRUCTION SITES ACROSS INDIA

GFRP mesh and reinforcement mesh prepared and installed on a large Industrial floor

Industrial Flooring

LARGE WAREHOUSE FLOOR SLABS

GFRP mesh reinforcement in factory & logistics park floors

GFRP mesh being laid for industrial floor slab · Zero corrosion from chemical spills, moisture, and heavy machinery loads

Why GFRP for Industrial Floors?



Chemical Resistance

Immune to acids, alkalis, industrial solvents that rapidly corrode steel reinforcement in manufacturing environments.



Zero Moisture Corrosion

Floors in contact with water, STP effluent, and drainage are fully protected with GFRP reinforcement.



80+ Year Service Life

Eliminates costly maintenance cycles for corrosion treatment, crack repair, and floor replacement.



Higher Tensile Capacity

GFRP at 1000 MPa vs steel at 500–600 MPa enables lighter, more efficient slab designs.

BUILDING APPLICATIONS

*Where RebarX GFRP replaces TMT steel
for permanent corrosion protection*



Boundary Wall Columns & Beams

GFRP cage in wall structural members. Visible rebar cage, concrete poured around — no spalling, no cracks, no maintenance. Perfect for coastal & industrial sites.



Underground Water Tanks

100% corrosion-free reinforcement for RCC water tanks. Eliminates the leading cause of tank leakage. Water + chloride environment with zero risk.



Plinth Slabs & Grade Beams

Ground-level concrete in aggressive soil contact. GFRP delivers long-term structural integrity without anti-corrosion treatment costs.

Note: Not permitted as primary reinforcement in main structural columns per current IS codes.

MADE FOR WATER & HARSH ENVIRONMENTS



Water Reservoirs

Constant contact with water



Coastal Structures

Salt air + chloride exposure



Effluent Treatment

Chemical attack



Sewage Treatment

Chemical & biological attack

Spectrum of Applications



RCC Roads

National & State Highways



Crash Barriers

Central verge & roadside



Drainage Channels

Highway drainage lines



Bridge Decks

Deck slabs & approach



Culverts

Box & slab culverts



Industrial Floors

Warehouses & factories



Boundary Walls

Columns & beams



Water Tanks

UG tanks & reservoirs



Plinth Slabs

Grade beams & slabs



MRI & Hospitals

Non-magnetic zones



Marine Structures

Jetties & seawalls



Precast Pipes

IS 458 (Proposed)



Chemical Plants

Corrosive environments



Swimming Pools

Chlorides rust TMT



Airport Runways

Non-magnetic, durable



Tunnels & Metro

Underground structures

STRAIGHT GFRP REBAR

CORE PRODUCT

Continuous pultrusion line. Every bar is traceable, tested and BIS 18256:2023 compliant. Available in straight lengths and coil form.

Diameters	6 mm – 20 mm
Material	E-Glass + Epoxy Resins
Tensile Strength	900 – 1300 MPa
Density	1.95 g/cm ³ (vs 7.8 for steel)
Surface Treatment	Helical Wound
Standard	BIS 18256 : 2023
Lengths	12 m straight / Coil form
Glass Content	> 75% by weight
Tg (Glass Transition)	> 100°C
Bond Strength	≥ 8 MPa (BIS 18256)



Custom Bent Profiles

✓ IN-HOUSE BENDING MACHINE

Project-specific bent elements fabricated in-house — no outsourcing, no delays, no quality compromise.

- Stirrups**
Square, rectangular, circular
- U-Bars**
Foundation & pile cage use
- L-Bends**
Corner & edge reinforcement
- S-Bends**
Offset connection profiles
- Spirals**
Column & pipe winding
- Custom Shapes**
Drawing-based, any profile



Bent profiles fabricated to project drawings

SPECIFICATIONS

Basis	Drawing / BOQ based
Min. Bend Radius	As per BIS 18256
Turnaround	Per project schedule
Capability	Any shape up to 16mm diameter

WHY IN-HOUSE BENDING MATTERS



No Outsourcing

Faster turnaround, full quality control



Drawing Accuracy

Profiles made exactly per project BOQ



Cost Efficiency

No third-party markup on fabrication



QC Tested

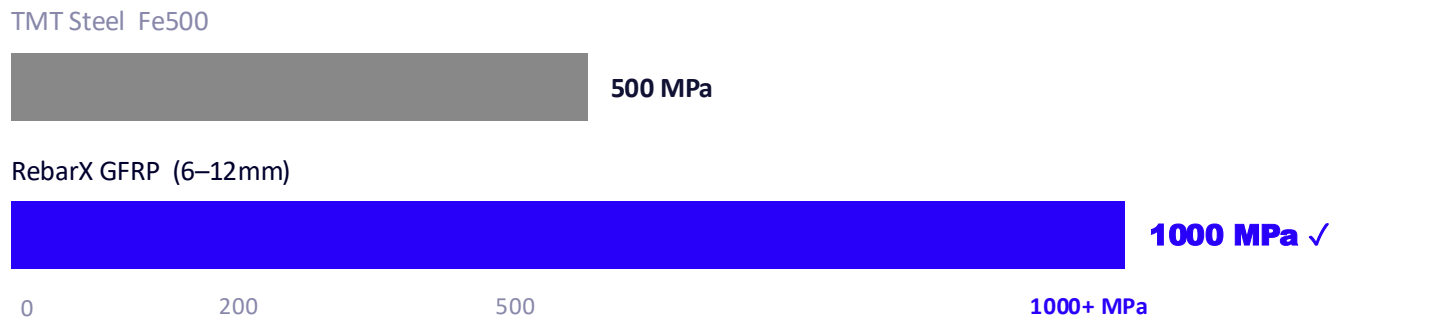
In-house testing lab on every batch

"Every bent profile is fabricated in-house to exact drawing specifications — no outsourcing, no dimensional surprises on site."

GFRP vs Steel TMT

By the Numbers — Why GFRP Wins

TENSILE STRENGTH (MPa)



PROPERTY	TMT STEEL	RebarX GFRP
Tensile Strength	500–600 MPa	600–1000 MPa ✓
Density	7.8 g/cm³	1.9 g/cm³ (4× lighter) ✓
Corrosion	✗ Corrodes	✓ 100% Immune
Electrical	Conductive	Dielectric ✓
Magnetic	Magnetic	Non-Magnetic ✓
Service Life	Depends on cover	80+ Years ✓
Compliance	IS 1786	BIS 18256 + IRC 137 ✓
Maintenance	High (anti-corrosion)	Zero ✓

WEIGHT SAVING — TMT Vs RebarX – 12meter

Ø 8mm	4.74 kg steel	1.19 kg GFRP	-75%
Ø 12mm	10.65 kg steel	2.71 kg GFRP	-75%
Ø 16mm	18.96 kg steel	4.82 kg GFRP	-75%

Our Competitive Edge

01



IIT Kharagpur Engineering

IIT KGP · CLASS OF 2008

Founded by an IIT Kharagpur Mechanical Engineering alumnus with 20+ years of industry experience. Every technical decision — from resin selection to process optimization — is driven by first-principles thinking, not guesswork.

02



European Technology Partner

COMPOSITE TECH · EUROPE

Manufacturing technology sourced from Composite Tech — the only GFRP rebar machine manufacturer in the world that is officially partnered with FRP Institute USA. This unique global positioning delivers process knowledge and quality protocols unavailable from any other machine supplier.

03



In-House Bending Machine

OWN BENDING FACILITY

The mic

Dedicated GFRP bending equipment fabricates stirrups, spirals, U-bars, L-bends, and S-bends to drawing. No outsourcing. Faster delivery, full quality control, zero dimensional compromise on bent profiles.

04



In-House Testing Lab

QC ON EVERY BATCH

Our on-site testing laboratory conducts tensile, shear, bond strength, and modulus tests on every production batch. Batch-wise QC reports issued to clients. No reliance on external labs for routine compliance testing.

05



ISO Certified Operations

ISO CERTIFIED

Our operations are ISO certified — bringing documented process control, traceability, and quality management systems to every meter of rebar we produce. Premium clients can audit our processes with confidence.

06



Regulatory Pioneering

BIS + IRC + IS 458

Actively working with IIT researchers to extend GFRP acceptance to IS 458 precast concrete pipes — expanding the eligible procurement base for government projects. We invest in the regulatory ecosystem, not just product sales.

Built to Standard

COMPLIANCE

BIS 18256 : 2023

Glass Fibre Reinforced Polymer (GFRP) Rebars for Concrete Reinforcement

The primary Indian standard governing GFRP rebar. RebarX products are manufactured in full compliance — covering tensile strength, bond, shear, moisture absorption, and glass transition temperature requirements.

COMPLIANCE

IRC 137 : 2022

Guidelines for Use of FRP Composites in Road Projects — Indian Roads Congress

The current governing guideline for use of GFRP in NHAI and MoRTH road projects. RebarX GFRP qualifies under IRC 137 for crash barriers, drainage channels, approach slabs, and pavement reinforcement.

PURSURING

IS 458

Specification for Precast Concrete Pipes — Amendment in Progress

GFRP Rebars show excellent performance in RCC pipes for spiral and straight section reinforcement. RebarX is actively working with an IIT research scholar on a first-principles derivation for GFRP spiral reinforcement in NP2–NP4 precast pipes — seeking formal amendment to IS 458 to enable government procurement.

CERTIFIED

ISO 9001

Quality Management Systems Certification

Our Pithampur manufacturing operations are ISO certified, ensuring documented process control, calibrated testing equipment, traceability, and corrective action systems for consistent product quality.

In-House Testing Lab



IN-HOUSE TESTING FACILITY

Batch-wise QC reports issued with every supply
BIS 18256:2023 test protocols

Every batch tested in-house · Full traceability · Client QC reports on demand

What We Test — In-House



Tensile Strength

Ultimate tensile load & stress per BIS 18256

≥ 600–1000 MPa



Modulus of Elasticity

Tensile modulus (E-value) measurement

≥ 45,000 MPa



Diameter

Vernier & volumetric check per BIS 18256

As per BIS



Transverse Shear

Shear strength of rebar cross-section

≥ 130 MPa



Fiber Content

Burn-off test per ASTM D3171

> 75% by weight



Moisture Absorption

Short-term and long-term moisture uptake

< 0.25% / < 1%



STRENGTH THAT ENDURES

GLOBAL STANDARDS & SUSTAINABILITY

GFRP rebar has 50+ years of proven use in USA, Canada, Japan, and Europe — with growing adoption driven by climate resilience requirements for coastal and industrial infrastructure.

USA / Canada

US

ACI 440 standard, decades of highway deployment

Japan

JP

First country to publish GFRP design guidelines (1996)

Europe

EU

Active Eurocode integration, coastal & bridge use

India

IN

BIS 18256:2023 + IRC 137:2022 now in force

Environmental Advantage

GFRP requires significantly less energy to produce than steel, generates no corrosion products, and extends structure service life from 30–40 years (steel) to 80+ years — dramatically reducing lifecycle carbon footprint of infrastructure.

80+

Year service
life

-75%

Weight vs
steel

0

Corrosion
products

Composite Tech Europe

RebarX

Pithampur, MP · India

Manufacturing + Sales + Testing



PARTNERS

COMPOSITE TECH

Europe

Pultrusion Technology

What Our European Partnership Delivers



FRP Institute USA Partnership

Composite Tech is the only GFRP rebar machine manufacturer globally that is officially partnered with FRP Institute USA — the world authority on composite materials. This partnership gives RebarX direct access to cutting-edge process science on resin formulation, cure optimization, and long-term performance.



Top Quality Production

Proprietary temperature control and resin impregnation protocols ensure optimal Tg and degree of cure — critical for long-term performance.



Technical Knowledge

Continuous knowledge transfer on formulation, maintenance, and quality protocols keeps our line operating at specification.



Product Development

Joint work on new profiles, diameters, and resin systems enables RebarX to expand its product range ahead of market demand.

CREDIFIC VENTURES PRIVATE LIMITED

"The Strength That Endures"



MANUFACTURING

Pithampur Industrial Area
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India



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CONNECT

IndiaMart Verified Trust Seal

Instagram: [@rebarx.sariya](https://www.instagram.com/rebarx.sariya)
BNI — Indore Chapter

APPROVED, CERTIFIED & COMPLIANT



"When you choose RebarX, you are not just buying rebar. You are choosing a technically credible partner with IIT-trained engineers, European process technology, and an unwavering commitment to making Indian construction corrosion-free — for generations to come."