

Corporate Brochure



**RAJRATAN**  
*OUTPERFORM*

# The Bead Wire Company

Rajratan

# Determined to Outperform

Rajratan is one of the leading and most trusted bead wire manufacturers with a strong presence in India and Thailand. At Rajratan, we continue to strengthen our market leadership with innovative products and best-in-class products.

Over the years, we have earned a stellar reputation in the bead wire manufacturing industry, backed by our emphasis on quality, continuous innovation and exceptional customer service.

**Tyre bead wires or reinforcement wires that we make, hold the tyre to the rim of the wheel, while resisting the constant push of inflated pressure. The result is the safety, strength and durability of a wide range of tyres. Behind every good tyre, there is a great bead wire doing its job silently, relentlessly and responsibly.**

We have invested in best-in-class technology, implemented policies, and adopted sustainability methodologies that align with our focus on protecting the environment and preserving resources.







## VISION

To become the leading and most preferred bead wire manufacturer & supplier to tyre companies, globally.



## MISSION

To manufacture and supply superior quality products at competitive prices and support it with excellent customer service. To imbibe and constantly develop a culture of excellence and improvement in every aspect of the business we are in. To ensure and enhance safe working conditions for all concerned.



## VALUES

Ethical business built on mutual trust. Quality orientation and constant innovation. Continuous learning and personal growth. To care for and share with the society we live in.





## Our Exciting **Story of Evolution**

At Rajratan, our prudence and resilience have enabled us to proactively overcome hurdles and embark on a growth journey.



**India plant**



**Thailand plant**

The story of Rajratan, a global brand now, dates back to the early 1990s, when we transitioned from traditional iron and steel trading to manufacturing bead wire for tyres.

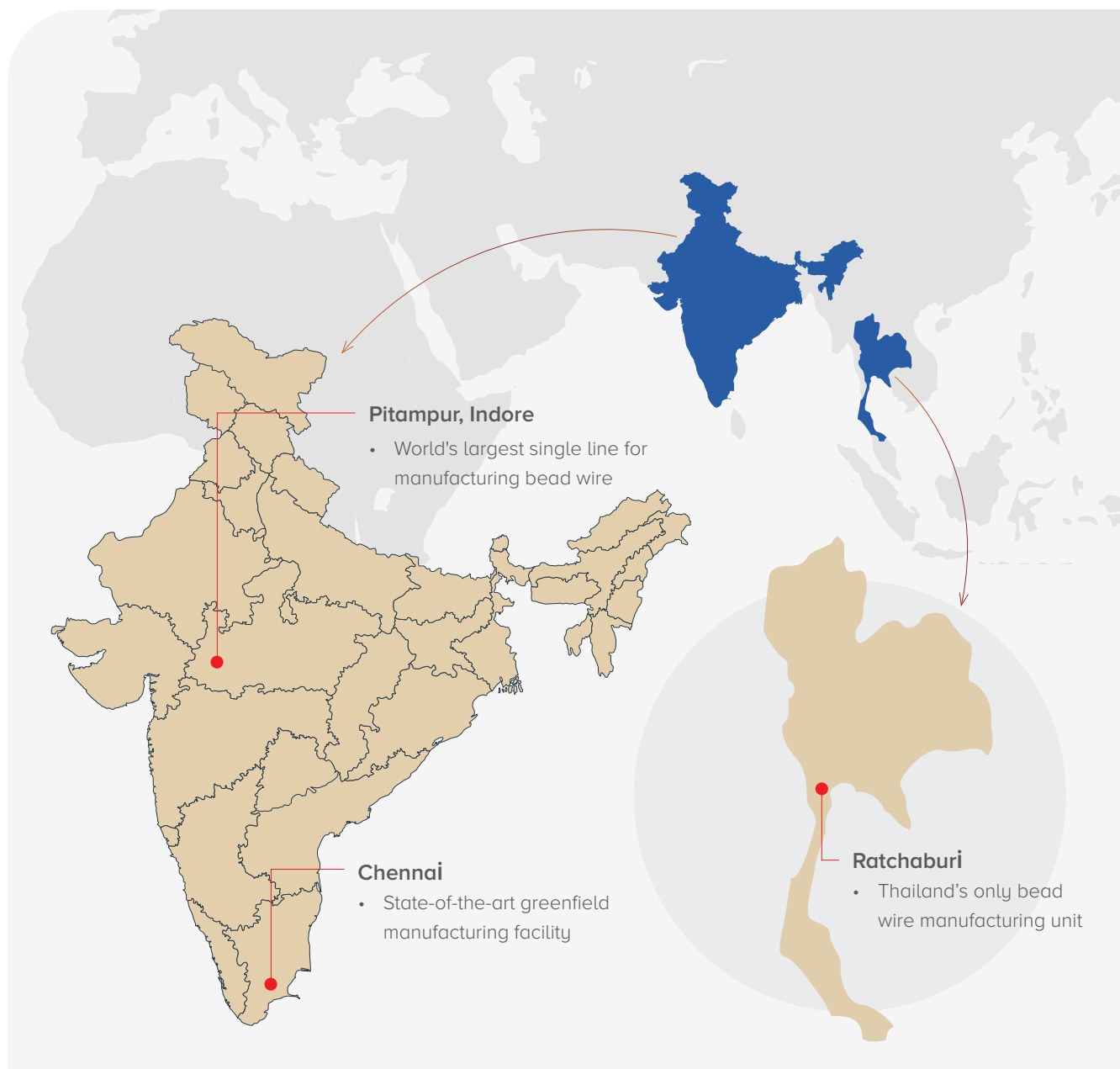
Fuelled by the booming automobile industry in India, we focused on leveraging indigenous technology and establishing top-notch manufacturing facilities in India and Thailand. A skilled workforce and a resolute commitment to quality, innovation and customer service have allowed Rajratan to grow from strength to strength, serving clients across geographies.

With our three production units in India and Thailand, we are geared to cater to the evolving needs of our valued clientele globally.

Fortifying Our

# Foothold Across Global Markets

We continue to expand our footprint in India and Thailand with a relentless commitment to adapt to evolving market dynamics, prioritise quality and innovation and implement competitive pricing strategies.



# Tyre Bead Wire

Our high-quality tyre bead wire stands as a testament to precision and excellence in manufacturing. Crafted from premium high-carbon steel, our bead wire undergoes meticulous drawing processes before being bronze-coated. This ensures optimal adhesion with the rubber employed in tire construction. What sets us apart is our specialisation in tailoring bead wires to custom tensile grades, meticulously meeting the unique and exacting requirements of our clients. We also offer bead wire manufactured through recycled steel.



### Bead Wire Product Offerings:

- Recycled Steel Bead Wire
- Super Tensile Bead Wire

### Applications



Aircraft tyres



Automobile tyres



Bus tyres



Earth moving equipment tyres



Truck tyres



Two-wheeler tyres

### Technical Information

#### Product Range

Diameter	Normal Tensile		High Tensile	
	Kgf	Newton	Kgf	Newton
0.78 mm	118	1158	130	1275
0.89 mm	122	1197	137	1344
0.96 mm	137	1344	155	1520
1.20 mm	200	1962	230	2256
1.26 mm	240	2354	260	2551
1.30 mm	280	2747	300	2943
1.55 mm	360	3532	400	3924
1.60 mm	390	3826	426	4179
1.65 mm	400	3924	435	4267
1.83 mm	484	4748	550	5396
2.00 mm	561	5503	595	5837
2.20 mm	625	6131	660	6475
2.40 mm	750	7358	790	7750
5.00 mm	1864	18286	2000	19620

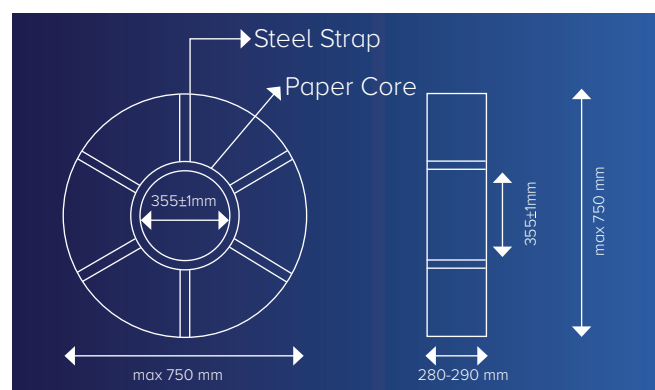
## Packaging

### Pre-loaded Steel Spools

Item	Option-1	Option-2
Spool Diameter / Flange	760 mm	760 mm
Inner Traverse Width	305 mm	305 mm
Outer Spool Width	348 mm	350 mm
Bore / Center	33 mm	33 & 54 mm
Drive Pin Slot 1	20 mm	21 mm
Drive Pin Slot 2	35 mm	35 mm
Winding Capacity	480 +/- 20 Kgs	460 +/- 20 Kgs
Spool Weight	73 Kgs	36 Kgs

### Reel-Less Coils

Item	Specification
Coil Diameter	725 mm
Core Diameter	355 mm
Coil Width	290 +/- 5 mm
Net Weight	460 +/- 10 Kgs





# High Carbon Steel Wire

At Rajratan, we produce superior-quality high-carbon steel wire of two distinguished grades. Our Spring/Rope grade adheres to the rigorous standards of Grades I, II, and III, ensuring resilience and reliability. Meanwhile, our Rolling Quality/Flattening Quality grade exemplifies precision and versatility.



## Applications



Bedding and seating



Wire rope and cable



Outer and inner automotive cable



Mechanical springs



Cut wire shot for shot blasting and pinning



High performance spring



Steel fibre



ACS





## Technical Information

### Product Range

#### Standards followed for different product range:

- Spring – IS 4454
- Wire Rope – IS 1835
- Wire Rope & Conveyor Belt – BS EN 10264-2

#### Mechanical and Physical Properties

- Wire Diameter
- Casting
- Residual Torsion
- Bend
- Torsion
- Tensile Strength
- Breaking Load
- Elongation

### Packaging

Raw Material	Conforming to SAE, ASTM, JIS & BIS international standards
Diameter of Wire	0.40 - 2.40 mm
Tensile Strength	1370 - 2500 N/mm <sup>2</sup>
Weight of Coil	20 - 250 Kgs (depending on nature of Packing)
Size - Coil ID / Direction / Weight	1) 0.40-0.70 mm - (160-180 mm ID) /Anti-clockwise/ 20-25 Kgs
	2) 0.80-1.20 mm - (250-350 mm ID) /Anti-clockwise/ 50-60 Kgs
	3) 1.21-1.80 mm - (360-450 mm ID) /Anti-clockwise/ 80-100 Kgs
	4) 1.81-2.40 mm- (500-550 mm ID) /Anti-clockwise/100-150 Kgs
Packing	Oiled / Uncoiled coils wrapped in HDPE sheets
	Z2 packing

We can also supply these wires in intermediate condition (Heat Treated/Patented) to be used for further drawing. The size ranges from 1.40 mm to 4.50 mm in any carbon grade

### ACSR PAT Wire

We developed Patented wires for ACSR base wires (Aluminium conductor steel-reinforced).

Various size from 3.0 mm to 6.0mm.

Tensile Strength, Elongation & Conductivity is the critical quality parameters in these products.

Wire Size	Tensile Strength(NT)	Tensile Strength(HT)	Elongation	Electrical Conductivity
3.0 to 4.50mm	1200-1300mpa	1300-1400mpa	7.5%	7.5%
4.60 to 6.0mm	1150-1250mpa	1300-1400mpa	7.0%	7.5%

Teams that

# Deliver Outperformance

At Rajratan, our teams drive our pursuit of excellence. We empower our people and recognise their valuable contributions.

We encourage both professional and personal growth, providing numerous opportunities for learning and development. Our people-centric policies are deeply embedded in our culture, maximising each individual's potential to grow, while fostering a sense of community and shared purpose.

Appropriate policies have been put in place to enhance critical safety and health standards for our people.





Advanced Technology

# Powers Our Operations

As a future-focused Company, we realise the value of leveraging advanced technology to improve operational efficiency. Through strategic investments in research and development, product innovation and technological upgrades, we have developed superior-quality wires that not only enhance vehicle performance but also prioritise safety.

This enables us to continuously offer innovative and technologically advanced products that are aligned with evolving customer preferences and market trends. It has also helped to integrate digital tools into day-to-day operations and implement real-time performance monitoring dashboards that facilitate seamless collaboration across the organisation. Additionally, our commitment to on-time delivery, exceptional after-sales service, and effective communication with customers further strengthens our ability to meet evolving preferences and market trends.

State-of-the-art digital operating system for Shopfloor organisation	Digitisation of workflow	Streamlined meetings	Data consolidation	Real-time Performance Monitoring	Reduced manual work
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Improved performances and enhanced operational efficiency

# Growing Responsibly

At Rajratan, our sustainability vision is to co-create a sustainable value for our stakeholders. We acknowledge our role and responsibility in helping protect the environment. To minimise environmental impact, we implement robust sustainability practices across all facets of operations and ensure responsible resource utilisation.

As a sustainability-focused business and to achieve a circular economy, **we also manufacture a wide range of bead wire, using recycled steel (EAF route) as raw material. We can make all ranges of bead wire spanning from 0.89mm to 2.20mm in both normal tensile and high tensile variants using recycled steel.**

With continuous efforts along with our Raw Material supplier, we have steadily increased the recycled steel share content from an initial ~60% to as high as ~85% over the past few years.

It reduces our carbon footprint as carbon intensity of steel production or carbon dioxide emission generated **by Blast Furnace route is 2.0 tCO<sub>2</sub>/tcs but in case of EAF route, it is 0.6 tCO<sub>2</sub>/tcs. So Overall reduction in Carbon emission by 1.4 tCO<sub>2</sub>/tcs.**

This will help our customers to achieve their sustainability goals.







Our Approach to

# Sustainability

By systematically reducing energy consumption and integrating sustainable practices into our daily operations, we constantly work towards a greener future. We also prioritise recycling and reuse of water and chemicals, while also promoting the enhanced use of renewable energy sources. We manufacture a wide range of bead wire, using recycled steel as raw material. This product is in line with circular economy principles and helps in reducing our carbon footprint.

## Net Zero Targets

**We periodically review our carbon footprint reduction goals and have set a strategic focus on attaining net zero emissions in alignment with industry-leading standards. We also exemplify our commitment to circular economy principles and reducing our ecological footprint.**

# Our Quest for Quality Excellence

Our state-of-the-art Rajratan Technical Centre is focused on continuous Research and Development, ensuring the maintenance and enhancement of product quality. Through the utilisation of top-tier Quality Management Tools, we optimise our processes and deliveries, earning recognition as a preferred bead wire manufacturer and supplier among esteemed clients, both locally and internationally.



Rajratan India was honoured with the **'TPM Significant Award'** by the Confederation of Indian Industry (CII).



Rajratan Thailand received the **'Green Star Award'** from the Industrial State Authority of Thailand (IEAT) for exemplary governance, safety practices, and social initiatives.





# Our Esteemed Clientele

Over the years, we have continued to foster healthy and mutually rewarding relationships with numerous clients across global markets. With continued emphasis on quality, innovation and best-in-class services we meet and exceed client expectations.



# Corporate Information



## INDIA

### RAJRATAN GLOBAL WIRE LIMITED

#### Regd. Office:

Rajratan House, 11/2, Meera Path, Dhenu Market,  
Indore-452003, Madhya Pradesh, India.

**Tel.:** +91-731-2546401

#### Factory:

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##### Chennai

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## THAILAND

### RAJRATAN THAI WIRE CO., LTD.

#### Regd. Office & Factory:

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