

# BELTING 0

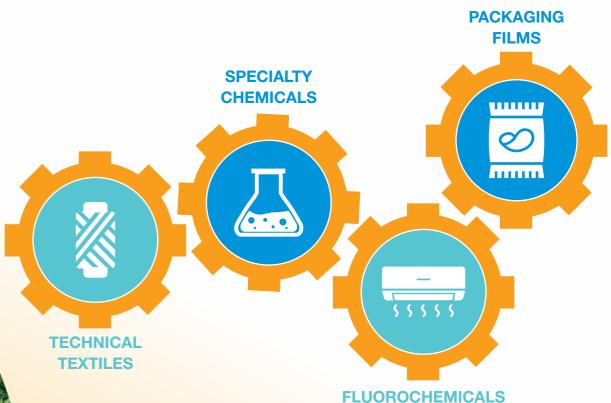
BROCHURE

### **SRF** Limited

SAF

With a turnover of ₹12,313 crore (US\$ 1.6 billion) in FY2021-22, SRF Limited is a multi-business chemicals conglomerate engaged in the manufacturing of industrial and specialty intermediates. The Company's business portfolio covers Specialty Chemicals, Fluorochemicals, Packaging Films, Technical Textiles, Coated and Laminated Fabrics. Anchored by a strong workforce of 7,000+ employees from different nationalities working across eleven manufacturing plants in India, one each in Thailand, South Africa, and Hungary, the Company exports to more than 90 countries. A winner of the prestigious Deming Prize for two of its businesses, Tyre Cord Business in 2004 and Chemicals business in 2012, SRF continues to redefine its work and corporate culture with TQM as its management way.

# SRF MANUFACTURING CAPABILITY



### **Management Systems**

Total Quality Management (TQM) principles form the basis of SRF's Management Systems. Woven together to form a management and control methodology called the 'SRF Management Way', this approach essentially aims at bringing about continual improvements in every facet of the organizational activity, be it manufacturing, marketing, design, engineering, project implementation, or any other function.



### Community Engagement

At SRF, we believe Companies should have a purpose, more engaging than profits, and that purpose should be intrinsic to the fabric of the organization. Building on this belief, SRF Foundation, the social wing of SRF Limited runs one of the largest community programs in the Country, imparting education and vocational training programs to underprivileged children and youth across the country by improving infrastructure facilities in Government schools, promoting computer-aided learning, and through the digital inclusion of communities. Apart from providing "Quality Education to All", the Foundation works in the areas of creating awareness about health, natural resource management and affirmative action on a sustainable basis.



### **Technical Textiles Business**

### A broad product portfolio covered by SRF Technical Textiles Business



### Finds application as a reinforcement material for Conveyor Belts



Nylon Tyre Cord Fabric: Used as Tyre reinforcements in bias tyres Polyester Tyre Cord Fabric: Used as Tyre reinforcements in radial tyres



Used in Seat Belts, Geo Textiles, Transmission Belts, Hoses, Ropes & Cordage, Industrial Sewing Threads, etc.

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SRF is the largest manufacturer of Technical Textiles in India. It also commands a leading market position globally as the second and third largest manufacturer of Nylon Tyre Cord and Belting Fabrics respectively. SRF is the only HMLS (High Modulus Low Shrinkage) and High Tenacity Polyester Yarn producer in India.

### **Global Presence**





### **Belting Fabrics** - An Overview

Belting Fabrics are used as reinforcement material in Conveyor belts and other mechanical rubber equipment for transmission of material or energy. Processed within multiple layers inside conveyor belts, Belting Fabrics are required to be resilient and offer requisite strength and durability to the end-product. SRF offers a wide range of Industrial belting fabrics for Mining, Infrastructure, Cement, Steel, Power transmission and Food industry.

Strategically located in Viralimalai, Tamil Nadu, the state-of-the-art plant manufacturing Belting Fabrics began commercial production in the year 1983. SRF uses world class equipment for twisting, warping, weaving and dipping with a production capacity of 13,200 tons per annum, making us the third largest manufacturer of Conveyor Belting Fabrics in the world.

### Competence and Experience

With more than 35 years of experience, a dedicated team working in reengineering fabric specifications and an ability to create a complete range of world-class products, SRF provides tailor-made and customized products to its customers globally.

### Individualized, customerspecific manufacturing

SRF's forte lies in customization of products as per the customer requirements, offering the widest range of designs and products for special applications. Our experts maintain close contact with the users in order to ensure the required product quality. All products undergo stringent quality inspection and testing before it leaves the plant.

### **Quality First**

SRF is committed to provide the highest quality products and in addition to being ISO 9001:2008 certified, the plant in Viralimalai is also accredited with ISO 14001:2004 for international environmental management standards, and BS OHSAS 18001:2007 for occupational health and safety management systems.

### Why SRF?



Global player exporting to more than 25 countries



State-of-the-art equipment for twisting, warping and weaving



Dedicated design team



In-house yarn capacity for polyester and nylon 6 fabric



Wide range of designs and products for special and customised applications - like straight warp, monofilament woven fabrics, black RFL dipping, and other special weaves

on a pilot scale.





**Belting Fabrics Manufacturing Process** 











### **Innovation is our DNA**

Innovation at SRF is a collaborative process for fabrics that help create efficient, differentiated, safer and sustainable designs in the future. Our technology driven credentials, globally harmonised quality systems and in-house yarn manufacturing which allows upstream modifications work together to create new, innovative solutions. We have a dedicated R&D infrastructure, which is fully equipped to simulate customer processes

# **Technical Specifications**

### Standard Range

Product Type	Material	Weave	Warp Strength Class	Warp Break- ing strength (KN/M)	Weft Strength as % of Warp Strength	Weight (GSM)	Treatment
NN	Warp- Nylon 6 Weft-Nylon 6	Plain, Broken Twill, Oxford	NN 80 to NN 630	100 – 785	15% to 35%	260 – 1800	Black/ Brown/ Special RFL
РР	Warp- Nylon 6,6 Weft-Nylon 6,6	Plain Broken Twill Oxford	PP 80 to PP 500	100 – 625	15% to 35%	260 – 1450	Black/ Brown/ Special RFL
EP	Warp- Polyester Weft- Nylon 6,6	Plain Broken Twill Crowfoot & Special Weaves	EP 80 to EP 800	100 – 914	15% to 35%	350 – 2500	Black/ Brown/ Special RFL
EE	Warp- Polyester Weft- Polyester	Plain Broken Twill Crowfoot	EE 80 to EE 450	100 – 580	15% to 35%	350 – 1350	Black/ Brown/ Special RFL
EN	Warp- Polyester Weft-Nylon 6	Plain Broken Twill Crowfoot	EN 80 to EN 450	100 – 580	15% to 35%	350 – 1350	Black/ Brown/ Special RFL



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### Specialty Range-Belting

Product Type	Material	Weave	Warp Strength Class	Warp Breaking strength (KN/M)	Weft Strength as % of Warp Strength	Weight (GSM)	Treatment
EEH (Replaces costlier EP Fabric)	Warp-High tenacity polyester Weft-High elongation polyester	Plain, Oxford Broken Twill, Crowfoot	EEH 80 to EEH 800	100 – 920	15% to 35%	350 – 2500	Black/ Brown
Straight Warp	Warp-Polyester Weft-Nylon 6,6	Straight Warp Weave	EPP 315 SW to EPP 1000SW	350 – 1100	15% to 35%	1800 – 3000	Black/ Brown
Monofilament Fabrics	Warp-Polyester Weft-Polyester Monofilament	Plain, Broken Twill	Up to EP 200	Customized	0.2 – 0.8mm Gauge	300 – 1000	Black/ Brown
Basalt Fabric	Warp-Basalt Weft-Basalt	Plain	Customized	Customized	Customized	450 - 600	Brown
Pipe Conveyor Fabrics	Warp-Polyester Weft-Polyester, Nylon 6,6	Specialized Weaves	EE 125 – EE 500	150 – 700	Customized	700 – 1600	Brown
Breaker Fabric	Warp-Polyester/ Nylon 6 Weft-Polyester/ Nylon 6	Plain/Broken Twill/Pan- ama	Customized	Customized	70 – 100%	145 – 1300	Brown
RIP Check Breaker	Warp-Nylon 6,6 Weft-Nylon 6,6	Leno Weave	Customized	Customized	Customized (>200 KN)	200 – 600	Brown
Fabrics for UHR application	Warp-Polyester/ Nylon66 Weft-Nylon 6, 6	All types	EP 080 – EP 630	Standard	Standard	Standard	Special RFL dip



Product Type	Material	Weave	Warp Strength Class	Warp Break- ing strength (KN/M)	Weft Strength as % of Warp Strength	Weight (GSM)	Treatment
Fabric for Oil resistant application	Warp-Polyester/ Nylon66 Weft-Polyester/ Nylon66	All types	080 – 1000	Standard	Standard	Standard	Special RFL Dip
High Twist Fabric	Warp-Polyester Weft-Nylon66	Plain	EP 80 – EP 125	100 – 175	40% - 60%	350 – 530	Brown/ Black
High Weft Strength Fabric	Warp-Polyester Weft-Nylon66/ Polyester	Plain/Broken Twill/2X2 BT	EP 125 – EP 500	150 – 630	40% - 60%	500 – 2200	Brown/ Black
Steel Breaker Fabric	Warp-Polyester Weft-Steel cord	Leno/Plain	Customized	Customized	50 – 400 KN	200 - 600	Brown Dipped Warp cord
Impression Fabric	Warp-Polyester Weft-Polyester	Plain/Special weave	Customized	Customized	Customized	220 - 3500	Special Treatment
High Crimp Fabric	Warp-Polyester Weft-Polyester/ Nylon66	Plain	EP 100 – EP 315	Customized	Customized	360 – 1300	Brown
Low Shrink- age Fabric	Warp-Polyester Weft-Polyester/ Nylon66	Plain/Oxford Plain	EP 100 – EP 350	Customized	Customized	360 – 1400	Brown
Non bleed Fabric	Warp-Polyester Weft-Polyester/ Nylon66	Plain/Oxford Plain	EP 100 – EP 350	Customized	40 - 60%	360 – 1400	Brown/ Black
Aramid Straight Warp Fabric	Warp-PET/Aramid Weft-Aramid	Straight Warp	1600	1800	25 - 30%	2600 - 2700	Brown

### Specialty Range-Non Belting

Product Type	Material	Weave	Warp Strength Class	Warp Break- ing strength (KN/M)	Weft Strength as % of Warp Strength	Weight (GSM)	Treatment
Aramid Hose Fabric	Warp-Aramid Weft-Aramid	Plain	Customized	Customized	Customized	80 – 110	Greige fabric
Liner Fabric	Warp-PET/N6 Weft-PET/N6	Plain	Customized	Customized	Customized	220 – 360	Only Heat set
Diaphragm Fabric	Warp-Nylon 6 Weft-Nylon 6	Plain	Customized	Customized	Customized	250 – 350	Brown/ Black



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# Widest Range of Specialty Products

### STRAIGHT WARP

- O Maximum strength-low growth
- Superior Troughability and load support
- O Maximum impact and RIP resistance
- O Greater flexibility over small diameter pulleys
- Very high strength for overland conveyors

### NON BLEED FABRIC

O Development for bare back belt application:

- Cover factor fabric to prevent rubber strike through from the fabric surface of the belt
- Higher belt flexibility for lower pulley diameter

### FABRICS FOR UHR APPLICATION

- Improved ageing adhesion at higher temperatures
- Reduced belt failures due to ply separation
- O Different dips for different HR grades

### IMPRESSION FABRIC

- To imprint a specific pattern onto the surface of the belting
- For transportation of light weight goods in inclined plane upto a maximum of 35 degree
- Different textures and pattern customization available

### STEEL BREAKER FABRIC

- Fabric with superior rip and impact resistance
- O Customized for various strength requirements
- Manufactured in specialized looms with state-of-the-art technology



### PIPE CONVEYOR BELT

- O Higher lateral flexibility for easy curling of the belt
- Higher lateral stiffness to bring the belt back to flat position
- Good rip resistance and reduces troughability
- Pipe Conveyor belt transporting powder form materials
- Fabric available for both Textile/Steel pipe application

### **RIP CHECK BREAKER FABRIC**

- O High impact resistance
- To stop longitudinal cuts from propagation
- High tear strength and superior impact resistance
- O Customization of pitch to suit various applications
- O Cost effective than sensor installations

### CROSS RIGID MONOFILAMENT FABRIC

- For the development of Vertical Bucket Elevator belt with cleats and side walls with the following belt properties
  - Rigid belt with higher lateral stiffness
  - Low troughability
  - Customized variants to suit different applications

### LOW SHRINKAGE FABRIC

- LS Fabrics For Rubber moulds, where shrinkage is critical to maintain mould shape even after repeated usages
- O ULS Fabrics For Rotocure moulds



### **SRF Limited**

We always find a better way

### CORPORATE OFFICE

Technical Textiles Business, Block C, Sector 45, Gurugram-122003. Haryana Phone: 91-124-4354400 | E-mail: enquires.beltingfabrics@srf.com



### PLANT SITE

Viralimalai district-Pudukottai, Tamil Nadu - 621316. India Phone: +91-4339-220808