Belting Fabrics
Established in 1970, SRF Limited with an annual turnover of ₹ 5100 crore (US$ 790 million) is a chemical based multi-business entity engaged in the manufacturing of industrial and specialty intermediates. Anchored by a strong workforce of close to 6,500 employees from different nationalities, working across 10 manufacturing locations in India, 2 in Thailand and 2 in South Africa, the company exports to more than 75 countries. Equipped with State-of-the-Art R&D facilities, SRF has filed more than 100 patents to date. 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.

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.

*FY 2016-17
COMMUNITY ENGAGEMENT

At SRF, we believe Companies should have a purpose, more engaging than profits alone 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

SRF Limited is the largest manufacturer of Technical Textiles in India and the second largest in the world in the Nylon Tyre Cord and Belting Fabrics segment. SRF is the only HMLS (High Modulus Low Shrinkage) and High Tenacity Polyester Yarn producer in India.

SRF Technical Textiles Business covers a broad product portfolio:

1. **BETING FABRICS**
   - Finds application as a reinforcement material for Conveyor Belts

2. **TYRE CORD FABRICS**
   - **Nylon Tyre Cord Fabric:**
     Used as Tyre reinforcements in bias tyres
   - **Polyester Tyre Cord Fabric:**
     Used as Tyre reinforcements in radial tyres

3. **INDUSTRIAL YARN**
   - Used in Fishnet Twine, Sewing Thread, Velcro, Narrow Webbing, etc.

**Applications**

- **BETING FABRICS**
- **TYRE CORD**
- **INDUSTRIAL YARN**
SRF Technical Textiles Business has a global manufacturing footprint, with four plants in India and two plants overseas.
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 8,500 tons per annum, making us the second largest manufacturer of Conveyor Belting Fabrics in the world.

Competence and Experience –
With more than 35 years of experience, a dedicated team working in re-engineering 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, Customer-Specific 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.

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 on a pilot scale.

BELTING FABRICS

PRODUCT CATEGORIES

REGULAR/STANDARD PRODUCTS

SPECIALITY PRODUCTS

SPECIALITY PRODUCTS: BELTING

SPECIALITY PRODUCTS: NON-BELTING
### Technical Specifications

#### Standard Range

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

#### Speciality Range-Belting

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Material</th>
<th>Weave</th>
<th>Warp Strength Class</th>
<th>Warp Breaking strength (KN/M)</th>
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<th>Weight (GSM)</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEH</td>
<td>Warp-High tenacity polyester Weft-High elongation polyester</td>
<td>Plain, Oxford Broken Twill Crowfoot</td>
<td>EEH 80 to EEH 800</td>
<td>100 – 920</td>
<td>15% to 35%</td>
<td>350 – 2500</td>
<td>Black/Brown</td>
</tr>
<tr>
<td>Straight Warp</td>
<td>Warp-Polyester Weft-Nylon 6,6</td>
<td>Straight Warp Weave</td>
<td>EP 315 SW to EPP 1000SW</td>
<td>350 – 1100</td>
<td>15% to 35%</td>
<td>1800 – 3000</td>
<td>Black/Brown</td>
</tr>
<tr>
<td>Mono filament Fabrics</td>
<td>Warp-Polyester Weft-Polyester Mono filament</td>
<td>Plain, Broken Twill</td>
<td>Up to EP 200</td>
<td>Customized</td>
<td>0.2 – 0.8mm Gauge</td>
<td>300 – 1000</td>
<td>Black/Brown</td>
</tr>
<tr>
<td>Basalt Fabric</td>
<td>Warp-Basalt Weft-Basalt</td>
<td>Plain</td>
<td>Customized</td>
<td>Customized</td>
<td>Customized</td>
<td>450 – 600</td>
<td>Brown</td>
</tr>
<tr>
<td>Pipe Conveyor Fabrics</td>
<td>Warp-Polyester Weft-Polyester/Nylon 6,6</td>
<td>Specialized Weaves</td>
<td>EE 125 – EE 500</td>
<td>150 – 700</td>
<td>Customized</td>
<td>700 – 1600</td>
<td>Brown</td>
</tr>
<tr>
<td>Breaker Fabric</td>
<td>Warp-Polyester/ Nylon 6,6</td>
<td>Plain/Broken Twill/Panama</td>
<td>Customized</td>
<td>70 – 100%</td>
<td>Customized (&gt;200 KN)</td>
<td>145 – 1300</td>
<td>Brown</td>
</tr>
<tr>
<td>RIP Check Breaker</td>
<td>Warp-Nylon 6,6 Weft-Nylon 6,6</td>
<td>Leno Weave</td>
<td>Customized</td>
<td>Customized</td>
<td>Customized (&gt;200 KN)</td>
<td>200 – 600</td>
<td>Brown</td>
</tr>
</tbody>
</table>

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Continued...
<table>
<thead>
<tr>
<th>Product Type</th>
<th>Material</th>
<th>Weave</th>
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<th>Weight (GSM)</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabric for Oil resistant application</td>
<td>Warp-Polyester/ Nylon66</td>
<td>All types</td>
<td>080 – 1000</td>
<td>Standard</td>
<td>Standard</td>
<td>Standard</td>
<td>Standard</td>
</tr>
<tr>
<td>High Weft Strength Fabric</td>
<td>Warp-Polyester/ Nylon66/ Polyester</td>
<td>Plain/Broken Twill/2X2 BT</td>
<td>EP 125 – EP 500</td>
<td>150 – 630</td>
<td>40% – 60%</td>
<td>500 – 2200</td>
<td>Brown/ Black</td>
</tr>
<tr>
<td>Steel Breaker Fabric</td>
<td>Warp-Polyester/ Steel cord</td>
<td>Leno/Plain</td>
<td>Customized</td>
<td>Customized</td>
<td>50 – 400 KN</td>
<td>200 – 600</td>
<td>Brown Dipped Warp cord</td>
</tr>
<tr>
<td>Impression Fabric</td>
<td>Warp-Polyester/ Polyester</td>
<td>Plain/Special weave</td>
<td>Customized</td>
<td>Customized</td>
<td>Customized</td>
<td>220 – 3500</td>
<td>Customized</td>
</tr>
<tr>
<td>Aramid Straight Warp Fabric</td>
<td>Warp-PET/Aramid/ Nylon66/ Aramid</td>
<td>Straight Warp</td>
<td>1600</td>
<td>1800</td>
<td>25 – 30%</td>
<td>2600 – 2700</td>
<td>Brown</td>
</tr>
</tbody>
</table>
### WIDEST RANGE OF SPECIALITY PRODUCTS

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

#### PIPE CONVEYOR BELT
- 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

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

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

#### FABRICS FOR UHR APPLICATION
- Improved ageing adhesion at higher temperatures
- Reduced belt failures due to ply separation
- Different dips for different HR grades
- 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
- Maximum strength-low growth
- Superior Troughability and load support
- Greater flexibility – over small diameter pulleys
- Very high strength for overland conveyors

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

#### 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

#### LOW SHRINKAGE FABRIC
- Fabric with superior RIP and impact resistance
- Customized for various strength requirements
- Manufactured in specialized looms with state-of-the-art technology

#### STEEL BREAKER FABRIC
- Steel Breaker Fabric with superior RIP and impact resistance
- Customized for various strength requirements
- Manufactured in specialized looms with state-of-the-art technology

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**Advanced Facilities**

Advanced Testing

Equipment