

Shakti Cords & GD Textiles

Manufacturers of Textile Reinforcements.

Dipped single end cords, Braiding yarns, Jacketing fabrics,
Chafer & other Specialty fabrics.

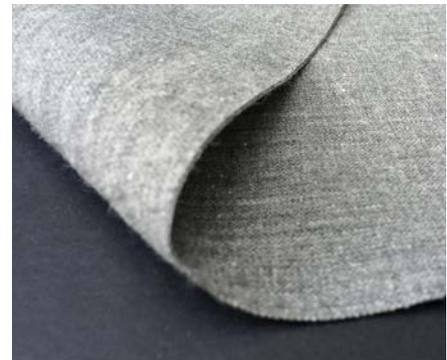
SHAKTI

Shakti Cords PVT. LTD.



GD Textiles

GD Textiles (Madurai) PVT. LTD.



Applications



Introduction

Established in 1987, the group companies Shakti Cords & GD textiles manufacture textile reinforcements for the rubber industry. At Shakti, we manufacture dipped braiding yarns and single end cords made of polyester, aramid, nylon, PVA and rayon for the reinforcement of power transmission belts, tyres and industrial hoses. The total capacity of the unit is 2400 tonnes per annum for dipped single end cords & 400 tonnes per annum for dipped braiding yarns. Our unit houses state of the art machinery that includes Saurer Allmas for twisting, Zell Benningers for dipping and Sahn winders for re-winding. .

Our group company GD Textiles manufacturers technical fabrics including plain woven and tubular jacketing fabrics for power transmission belts, meta-aramid fabrics, impression fabrics, nylon curing tapes for industrial hoses, and chafer fabric for the tyre industry.

GD Textiles is fully backward integrated and houses its own spinning unit that includes, state of the art spinning machinery such as Reiter, Trumac and Schlafhorst. The annual capacity of this unit is 8.8 million square meters of fabric, woven on projectile and airjet looms.

Shakti cords and GD textiles are ISO 9001: 2015 Certified and employ a workforce of more than 400 people. We are India's largest manufacturers of the above products with a domain expertise of over 30 years. We welcome all prospective customers to try out our products.



Shakti Cords - Manufacturing Plant



GD Textiles - Manufacturing Plant (Unit I & II)

History

The group began its activities in 1987 by setting up looms to manufacture fabric for the domestic apparel market. In 1991 we diversified into the manufacturing of technical textiles, primarily, jacketing fabrics for the reinforcement of power transmission belts. This setup was further enhanced by a backward integration involving the addition of a spinning unit in order to produce high tenacity poly-cotton yarns in 1997.

Shakti Cords Pvt. Ltd. was set up in 2003 to manufacture dipped single end cords by taking over the business of Madura Industrial textiles Limited. In 2010, Shakti cords started manufacturing high tenacity braiding yarns used in the reinforcement of industrial hoses. We started exporting our products from 2013 and established longstanding relations with leading multinational companies such as Gates corporation (India), Continental Contitech, JK Fenner, Pix Transmissions, Bando Belting (USA, Japan, Turkey), Parker Hannifin (India), Polyhose and others. In 2021 the group further expanded into the manufacturing chafer and coated fabrics with a capacity of 1200 tonnes per annum. We continue to seek new opportunities to establish robust relationships with all our customers by being a dependable supplier of high quality textile reinforcements .

What does 'Shakti' mean?

'SHAKTI' is an Indian synonym for Energy, Ability, Strength, Capability and Power. As per Indian mythology, Shakti represents the dynamic forces that are thought to move through the Universe.

Vision

To build an organisation of global presence by being a dependable supplier of high quality textile reinforcements at competitive prices to all our customers.

Values

- Fostering an entrepreneurial culture at every level of the organisation. One that continuously seeks to improve and develop, our products, processes, people and markets.
- Strong commitment to quality and consistency. Through the standardisation of best practises and constantly training and educating our workforce.
- Maintaining robust relationships with our customers. By proactively customising and developing new products as per their requirements.
- Respecting our environment. By taking measures to significantly reduce our carbon footprint and providing various welfare schemes to all our employees

Shakti Cords

Products

Single end dipped cords

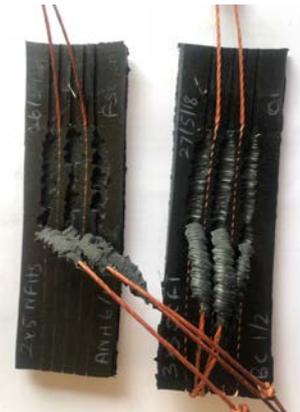
Single end dipped cords made of Polyester, Aramid, Nylon and Rayon can be manufactured in various constructions and finishes. Our cords are made of High Modulus & Low Shrinkage yarns to ensure dimensional stability and optimal product performance over prolonged periods of time. Our proprietary dip solutions provide an excellent adhesion of the cord to various kinds of rubber including EPDM, NR, CR, SBR, CSM etc. The cords can be wound on polypropylene, metal or cardboard bobbins with weight ranges between 8 to 13 Kgs, as per customer's requirement.



Single end dipped cords



Filament yarn



Peel Test for evaluating Adhesion

Applications



Power Transmission Belts



Air springs



Tyre Reinforcements

Shakti Cords

Technical Specifications

Dipped Polyester Cable Cords - STIFF

Construction 1100 Dtex	Breaking Strength (N)	Elongation @Break %	Elongation @Ref Load %	Free Heat Shrinkage %	Twist Per Meter Cable 'Z' n/m	PLY 'S' n/m
1 X 3	> 196	< 14.5	< 5.0 (100N)	2.2 ±0.3	100 ±10	190 ±10
2 x 3	> 392	< 14.0	< 3.8 (180N)	3.2 ±0.3	100 ±10	190 ±10
2 x 5	> 637	< 15.0	< 2.7 (200N)	3.2 ±0.3	100 ±10	190 ±10
3 x 3	> 539	< 13.0	< 3.8 (300N)	3.2 ±0.3	100 ±10	100 ±10
5 x 3	> 1029	< 15.0	< 3.5 (300N)	3.2 ±0.3	80 ±5	160 ±10
5 x 4	> 1250	6.0 - 12.0	1.6 - 2.6 (400N)	2.5 ±0.3	60 ±5	120 ±10
9 x 3	> 1450	6.0 - 12.0	2.0 - 3.0 (600N)	3.0 ±0.3	60 ±5	120 ±10

Dipped Polyester Cable Cords - SEMI STIFF

Construction 1100 Dtex	Breaking Strength (N)	Elongation @Break %	Elongation @Ref Load %	Free Heat Shrinkage %	Twist Per Meter Cable 'Z' n/m	PLY 'S' n/m
2 x 5	> 637	< 15.0	< 3.0 (200N)	1.5 ±0.3	100 ±10	190 ±10
3 x 3	> 600	< 13.0	1.8 ±0.5 (200N)	3.2 ±0.5	90 ±10	150 ±10
5 x 3	> 930	< 13.0	< 2.6 (300N)	3.2 ±0.5	90 ±10	130 ±10
6 x 3	> 1176	< 13.0	< 2.5 (300N)	2.2 ±0.3	70 ±10	100 ±10
9 x 3	> 1666	< 13.5	2.7 ± 0.5 (500N)	3.1 ±0.3	60 ± 5	120 ±10

*All specifications are customizable as per requirements for MOQs > 2 Tonnes per month.

Technical Specifications

Dipped Polyester Cable Cords - SOFT

Construction 1100 Dtex	Breaking Strength	Elongation @Break	Elongation @Ref Load	Free Heat Shrinkage	Twist Per Meter	
	(N)	%	%	%	Cable 'Z'	PLY 'S'
2 x 3	> 400	7.0 - 13.0	1.2 - 2.6 (120N)	3.0 ± 0.3	120 ± 10	220 ± 10
2 x 5	> 620	7.0 - 13.0	1.2 - 2.6 (200N)	3.0 ± 0.3	100 ± 10	190 ± 10
3 x 3	> 600	< 13.0	1.7 ± 0.5 (200N)	2.5 ± 0.3	100 ± 10	166 ± 10
3 x 5	> 930	7.0 - 13.0	1.6 - 2.6 (300N)	3.5 ± 0.5	80 ± 5	160 ± 10
5 x 4	> 1240	7.0 - 13.0	1.6 - 2.6 (400N)	3.3 ± 0.5	60 ± 5	120 ± 10
6 x 3	> 1200	< 13.0	1.8 ± 0.5 (300N)	2.7 ± 0.3	70 ± 10	100 ± 10
9 x 3	> 1800	< 15.0	2.5 ± 0.5 (500N)	2.2 ± 0.3	60 ± 5	120 ± 10
9 x 6	> 3200	< 15.0	< 2.6 (650N)	3.3 ± 0.5	40 ± 5	80 ± 10
3 x 4 x 3	> 1911	< 16.5	< 3.0 (500N)	1.9 ± 0.3	70 ± 10	110 ± 10 70 ± 10

Dipped Aramid Cable Cords - SOFT

Construction 1670 Dtex	Breaking Strength	Elongation @Break	Elongation @Ref Load	Twist Per Meter	
	(N)	%	%	Cable 'Z'	PLY 'S'
2 x 3	> 1323	< 6.0	< 2.0 (450N)	200 ± 10	200 ± 10
3 x 4	> 2450	< 7.0	< 2.5 (900N)	140 ± 10	150 ± 10

Dipped Nylon Single end tire cord

Construction 1400 Dtex	Breaking Strength	Elongation @Break	Free Heat Shrinkage	Twist Per Meter	
	(N)	%	%	Cable 'Z'	PLY 'S'
1 x 2	> 210	< 25.0	4.0 ± 1	260 ± 20	260 ± 20
1 x 3	> 315	< 25.0	4.5 ± 1	260 ± 20	260 ± 20

*All specifications are customizable as per requirements for MOQs > 2 Tonnes per month.

Shakti Cords

Products

Braiding Yarns

We manufacture dipped & undipped braiding Yarns of Polyester, Rayon, Aramid, PVA and Nylon for the reinforcement of Industrial hoses. Filament yarns of high tenacity are used in our production in order to further enhance the operating and burst pressure of the hoses. Textile reinforcements ensure better flexibility, ease of processing and a better strength to weight ratio as compared to steel wire reinforced hoses. Our proprietary dip solutions provide an excellent adhesion of the yarn to various kinds of rubber substrates including NR, CR, SBR, CSM, EPDM etc. Yarns can be parallel wound on flat or conical tubes, with package weights ranging from 200gms to 12kgs, as required.



Applications



Industrial Hoses



Technical Specifications

Dipped Polyester Braiding Yarn

Construction Denier	Linear Density (mts/kg)	Breaking Strength (N)	Elongation @Break %	Elongation @Ref.load %	Free Heat Shrinkage %	Twist Per Inch PLY 'S'
1000/2	>3903	> 125	14±2	4.0 ±1.0	< 3.0	2.5 ±0.5
1000/3	>2635	> 201	14±2	2.0 ±1.0	< 3.0	2.5 ±0.5
1300/2	>3096	>186	14±2	>1.5	< 3.0	2.5 ±0.5

Dipped Rayon Braiding yarns

Construction Denier	Linear Density (mts/kg)	Breaking Strength (N)	Elongation @Break %	Twist Per Inch PLY 'Z'
1650/2	> 2273	>121	12.0 ±2	4.0 ±0.5

Dipped Aramid Braiding yarns

Construction Denier	Linear Density (mts/kg)	Breaking Strength (N)	Elongation @Break %	Twist Per Inch PLY 'Z'
1500/1	> 5400	> 235	2.3 ±0.5	2.5 ±0.5

*All specifications are customizable as per requirements for MOQs > 2 Tonnes per month.

Shakti Cords

Products

Spun Polyester Yarns

Spun polyester yarns are created by spinning together polyester fibers of lengths between 38mm – 44mm. Yarns of counts between 6's and 10's can be manufactured in white, blue or black colours. These yarns can be doubled if required. Our spun polyester yarn is tested for strength, shrinkage, colour fastness, thickness, adhesion and elongation. We also manufacture poly-cotton yarn for jacketing fabrics under our group company GD textiles Pvt. Ltd.



Spun Polyester Yarns Specifications

Construction	Linear Density	Breaking Strength	Elongation @Break	Free Heat Shrinkage	Twist Per Inch PLY'S'
Count	(mts/kg)	(Kgs)	%	%	n
6s - 10s	2650 - 2850	>7.2	14.0-18.0	4.0 - 7.0	3.6 - 4.2

*All specifications are customizable as per requirements for MOQs > 2 Tonnes per month.

Applications

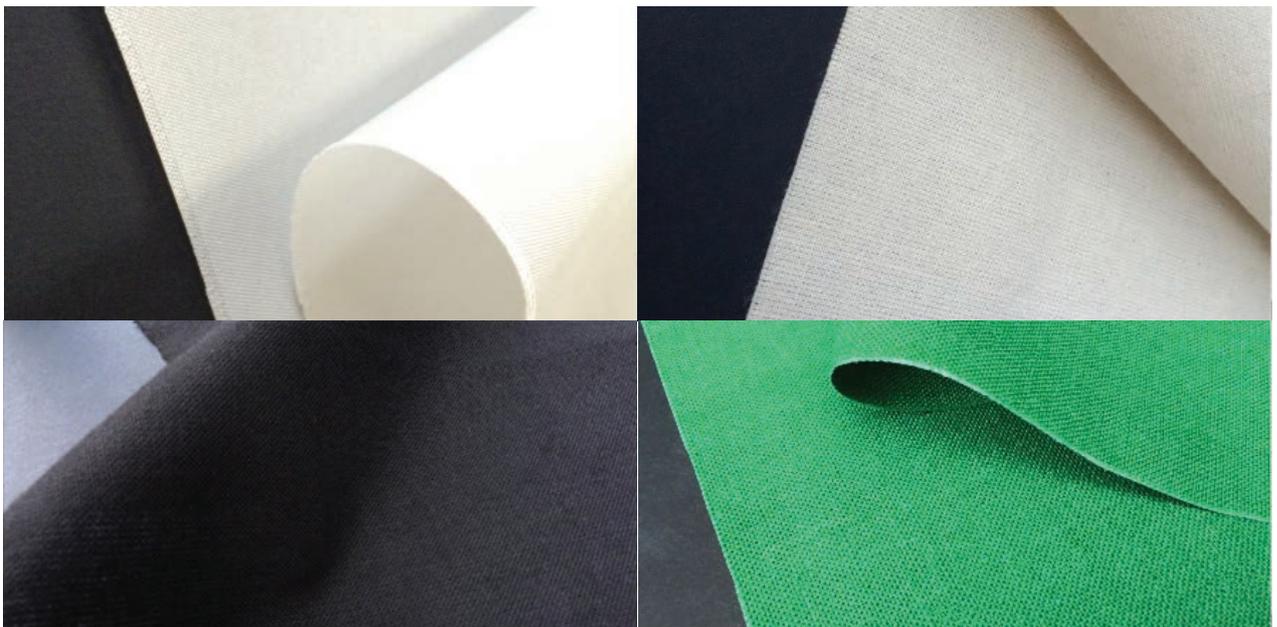


Jacketing Fabrics

Jacketing fabrics are primarily used in the manufacturing of power transmission belts. The fabric is calendared with a suitable polychloroprene based material. When applied to the surface of the belt, they improve the belt's wear resistance and enhance its frictional characteristics. The fabrics are plain woven in square construction, and are made from high tenacity polyester cotton yarns of counts between 6's and 20's.

To promote the flexion of belts over the pulleys the fabric must be applied to the belt in a biased manner, at an angle of 45 degrees

- We can produce 150 – 470 GSM fabrics in widths between 27 inches to 135 inches.
- Our fabrics are 'selvedge-less', which reduces additional processing costs for our customers.
- We can also manufacture semi-dyed melange (grey) or fully black fabrics which reduce/ eliminate the dyeing operation of the belts at the customer's factory and provide superior finish to the belt.
- Starch free sizing of our fabrics ensures that they have an excellent bonding to rubber.



Technical Specifications

Jacketing fabrics

Tensile Strength		Width	Elongation		Weight of fabric
Warp	Weft		Warp	Weft	
kgs/inch	kgs/inch	cms	%	%	GSM
35 Min	45 Min	130	23±5	14±3	260 ±10
45 Min	45 Min	153	20±6	17±6	320 ±15
32 Min	30 Min	108	14±4	14±4	165 ±10
45 Min	45 Min	153	17±5	17±5	265 ±10
50 Min	55 Min	153	20±5	20±5	330±10

Black Dyed jacketing fabrics

Tensile Strength		Width	Elongation		Weight of fabric
Warp	Weft		Warp	Weft	
Kgs/2-Inch	Kgs/2-Inch	cms	%	%	GSM
70 Min	75 Min	153	16 Min	15 Min	200 ±10
70 Min	75 Min	112	16 Min	15 Min	200 ±10

Colour Dyed jacketing fabrics

Tensile Strength		Width	Elongation		Weight of fabric
Warp	Weft		Warp	Weft	
Kgs/2-Inch	Kgs/2-Inch	cms	%	%	GSM
50 Min	50 Min	153	15±4	15±4	315±10

*All specifications are customizable as per requirements for MOQs > 10,000 meters per month.

Impression Fabrics

Impression fabrics are used in the manufacturing of products such as rubber sheets, conveyer belting, rubber blankets etc. The fabric is pressed on the surface of the rubber substrate by means of a hot pressure roller to impart the fabric's profile as per the desired surface finish.

We can manufacture impression fabrics made of Nylon and Polyester in constructions as required by the customer. Our fabrics are highly durable over multiple use cycles as they are made from high tenacity industrial yarns. A special non-stick coating can be given to our impression fabrics in-order to facilitate its ease of release from the rubber substrate.

Impression Fabrics Specifications

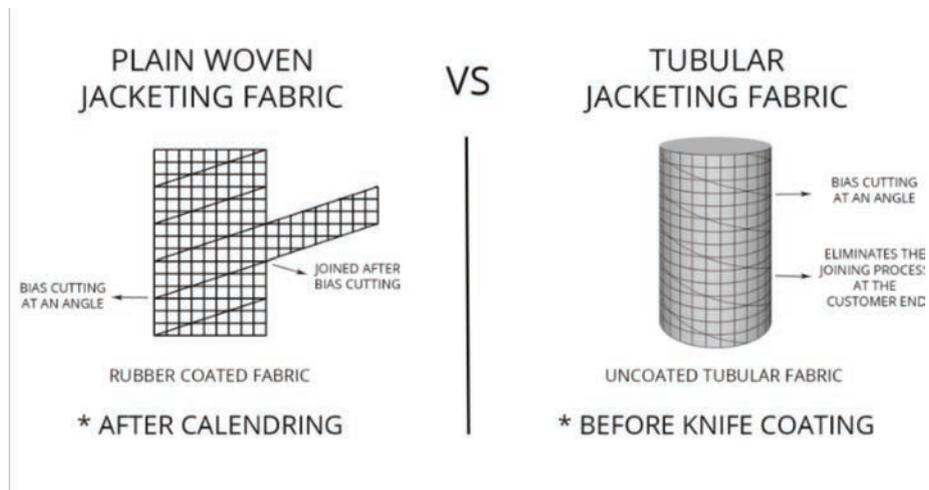
Tensile Strength		Width	Density		Weight of fabric
Warp	Weft		Warp	Weft	
Kgs/5 cm	Kgs/5cm	cms	EPI	PPI	GSM
105 min	70 min	108 ±1	94 ±5	64 ±5	115 ±5

*All specifications are customizable as per requirements for MOQs > 10,000 meters per month.



Tubular Fabrics

Tubular fabrics are the next generation alternative to plain woven jacketing fabrics. They eliminate the wastage associated with the bias cutting and joining process as in the case of plain-woven jacketing fabrics. They are seamless and are of uniform thickness to ensure an even coating of the polychloroprene material. The fabrics have to be knife coated to prevent the yarns from separating. We can manufacture tubular fabrics in various constructions as required by the customer.



Density		Tensile Strength		Elongation		Weight	Thickness
Warp	Weft	Warp	Weft	Warp	Weft		
EPI	PPI	N/30 mm	N/30 mm	%	%	GSM	mm
33 ± 1	35 ± 1	343 min	441 min	20 ± 3	14 ± 3	260 ± 10	0.58 ± 0.02

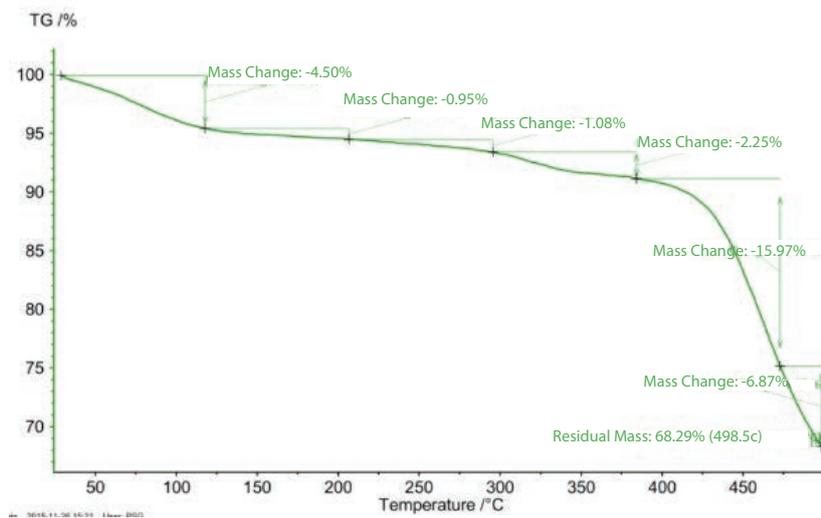
*All specifications are customizable as per requirements for MOQs > 10,000 meters per month.



Meta - Aramid Fabrics

Meta Aramid fabrics are Known for their high temperature resistance and enhanced strength, these fabrics are highly sought after for various industrial and fire-fighting applications. We primarily manufacture Meta-Aramid fabrics for the reinforcement of heater, radiator and silicone hoses.

The graph below depicts the thermal properties of our fabric. It can be seen that our Meta-Aramid fabrics retain over 90% of their original mass at temperatures of 400°C, further more they do not melt but decompose at higher temperatures over 500°C. The Fabric’s construction is customizable as per the customer’s requirement. The fabric can also be primed with a bonding agent to ensure excellent adhesion to the rubber substrate.



Density		Tensile Strength		Elongation		Weight	Thickness
Warp	Weft	Warp	Weft	Warp	Weft		
EPI	PPI	kgs/5 cm	kgs/5 cm	%	%	GSM	mm
33	32	>100	>100	23±4	23±4	164 ±10	0.40±0.2

*All specifications are customizable as per requirements for MOQs > 5,000 meters per month.

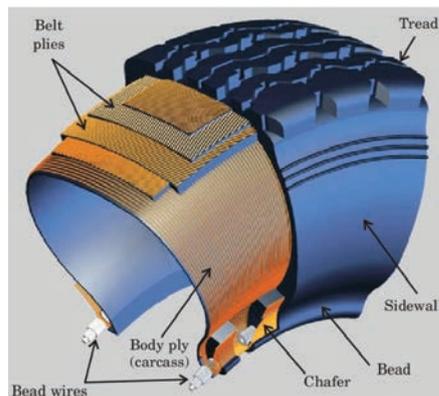


Chafer Fabrics

Chafer Fabrics are specialty fabrics primarily made of RFL dipped Nylon 6 or Nylon 66. They are used in the manufacturing of tyres to protect the side walls of the tyre from the chaffing effect caused by the bead wires and the tyre rim. We can produce both wicking and non-wicking, multi and mono filament chafer fabrics with yarns of 420, 840 and 1260 deniers. Our fabric weight ranges from 85 GSM to 400 GSM and fabric width ranges from 100 cms to 160 cms, depending upon the customer’s requirement. The chafer fabric can be produced with both a fringe selvage or a cut and heat sealed selvage as required. Our proprietary Resorcinol Formaldehyde Latex (RFL) dip ensures an ensures excellent adhesion with the rubber substrate.

Density		Tensile Strength		Adhesion	Weight	Thickness
Warp	Weft	Warp	Weft			
EPI	PPI	kgf/inch	kgf/inch	kgf/inch	GSM	mm
25±1	25±1	>55	>55	>20	105 ±15	0.52±0.05
*Mono Chafer - Non Wicking						
16±1	16±1	>90	>90	>20	148 ±15	0.52 ±0.05
*Multi Chafer - Wicking						
18±1	18±1	>100	>100	>25	175 ±15	0.52±0.05
*Multi Chafer - Non Wicking						
20±1	20±1	>227	>227	>10	285 ±10	0.60±0.05
*Diaphragm fabric						

*All specifications are customizable as per requirements for MOQs > 5 Tonnes per month.

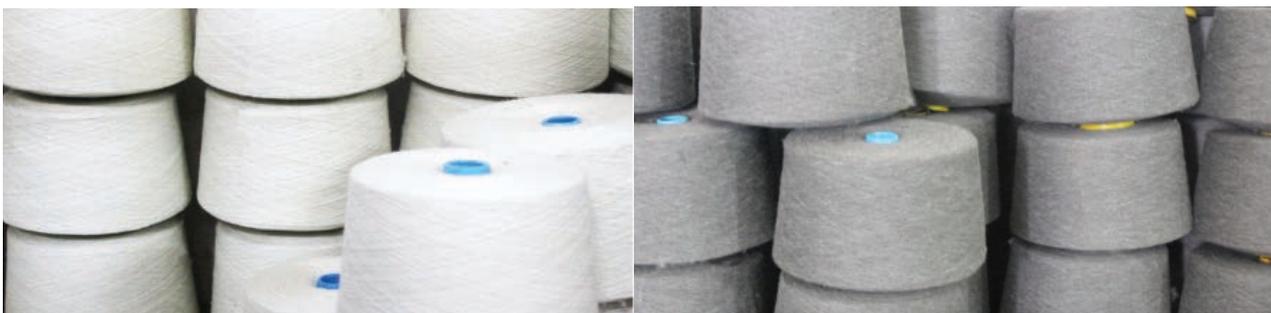


Poly Cotton Yarns

We manufacture high tenacity ring-spun and open end Polyester Cotton yarns of coarse counts between 6's and 20's. Spun on state of the art machinery (Reiter, Trumac, Schlafhorst, Trüetzschler) our yarns are highly even and consistent. Our raw materials are sourced sustainably from reliable suppliers all over India. Our Yarns can also be doubled to achieve particular counts as required by our customers. Our quality is well established for over 35 years and we captively consume about 1800 tonnes of our own yarns per annum for the manufacturing of technical fabrics.

Technical Specifications

Particulars	Count	CSP	Blend ratio	TPI
	%	± 3%		± 2%
6s CP	6.10±3.0%	2600	P36/C64	10.90
7.5s PC	7.10±3.0%	3400	P52/C48	10.50
10s PC (BK)	10.30±3.0%	3200	P52/C48	14.03
14s PC	13.80±3.0%	3200	P52/C48	14.03
3/20s	6.75±3.0%	4000	P52/C48	7.5
3/20s	6.75±3.0%	3100	P0/C100	12.1



Curing Tapes

PVA or Nylon curing tapes are frequently used in the manufacturing of industrial hoses. The curing tapes are wrapped around the hoses to help them achieve their final shape. The surface finish obtained by the hose depends upon the material used to construct the tape. In the case of nylon a 'matte' finish may be achieved, or in the case of PVA a glossy finish is observable.

- We can manufacture PVA or Nylon curing tapes of widths between 20mm – 100mm.
- Our tapes can be given a special non-stick coating that prevents its adhesion to the rubber hose and prolongs its re-usability.
- Nylon6 or Nylon66 can be used as per the maximum curing temperature requirement of the customer.
- Our tapes are heat-set which gives them uniform shrinkage and high evenness even after repetitive use.
- We match our customer's requirements in terms of the construction, breaking strength, elongation, heat shrinkage, linear density and thickness.

Breaking Stength	Warp	Linear Density @ 0.4 %	Width	Thickness
Kg/cm		Mt/Kg	Cm	mm
21.4 min		16.84±1.74	7.52±0.3	0.39±0.06



Certifications

We give paramount importance to consistently manufacturing high quality products that exceed our customer's requirements.

All our units and their Quality Management Systems (QMS) are ISO 9001:2015 certified, since the year 2007.

We also take a proactive approach to learning about and obtaining new quality certifications that may be required by our customers in order to remain compliant.



intertek
Total Quality. Assured.

CERTIFICATE OF REGISTRATION

This is to certify that the management system of:

Shakti Cords Private Limited

Main Site: Shed No. CS 17-18, SIDCO Industrial Estate,
Kappalur, Madurai - 625 008, Tamilnadu, India
has been registered by Intertek as conforming to the requirements of:

ISO 9001:2015

The management system is applicable to:

Manufacture of Synthetic Grey and Dipped Cords.

Certificate Number:
ICH-0275.12

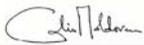
Initial Certification Date:
21 December 2007

Date of Certification Decision:
26 September 2019

Issuing Date:
26 September 2019

Valid Until:
30 November 2022


Intertek
014


Calin Moldovean
President, Business Assurance

Intertek Certification Limited, 10A Victory
Park, Victory Road, Derby DE24 8ZJ, United
Kingdom

Intertek Certification Limited is a
UKAS accredited body under
schedule of accreditation no. 014.





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Total Quality. Assured.

CERTIFICATE OF REGISTRATION

This is to certify that the management system of:

GD Textiles (Madurai) Pvt. Ltd.

Main Site: Shed No. 81 & 82, SIDCO Industrial Estate, Kappalur,
Madurai-625008, Tamil Nadu, India
has been registered by Intertek as conforming to the requirements of:

ISO 9001:2015

The management system is applicable to:

Manufacture of Grey Cotton Yarn, Polyester/Cotton Blended Yarn and
Grey Cotton Fabrics, Polyester/Cotton Blended Fabrics

Certificate Number:
ICH-0295.12

Initial Certification Date:
31 August 2005

Date of Certification Decision:
24 August 2020

Issuing Date:
24 August 2020

Valid Until:
30 October 2023


Intertek
014


Calin Moldovean
President, Business Assurance

Intertek Certification Limited, 10A Victory Park,
Victory Road, Derby DE24 8ZJ, United Kingdom

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Ethics and Fair Practises

We believe that sustainable growth is only achievable by being accountable for the triple bottom line – People, Planet and Profits. We proactively take measures to preserve the environment, and ensure the welfare of our employees.



Shakti Cords and GD Textiles are backed by renewable energy, from windmills and solar panels owned by the company. The windmills are located in the districts of Tirupur in Tamil Nadu, India.



The company grows and maintains about 1000 fruit and non-fruit bearing trees, over 225,000 sq.meters of land, located in the districts of Madurai, in Tamil Nadu.



Our emission levels are assesd by the Tamil Nadu Pollution Control Board (TNPCB), to be well below the designated emission limits.



To reduce our carbon footprint, we also use carbon neutral sources of fuel, such as 'biomass' to power the company's boilers, every year. The company uses about 600metric tons of biomass per annum.



Our employees are enrolled in the Employees State Insurance Scheme and are eligible to avail welfare benefits such as,free medical treatment for their families, wage compensation during sick leave, maternity benefits etc.



The company is also registered with the Employee Provident Fund Organisation (EPFO) and contributes towards maintaining its employee's PF accounts every month. The employees enjoy a tax-free return upon maturity and are eligible to avail the Employees Pension Scheme (EPS).

Contact Us

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