SPECIALIST IN PRECISION RUBBER ENGINEERING





SHAKTI RUBBER INDUSTRIES

(An ISO:9001:2015 Certified Company)

Precision and High Performance is our Forte





COMPANY PROFILE

A small firm was established in the year 1991 to cater the needs of Rubber Printing Squeegee for Textile Dyeing and Printing industry. Today after more than 25 years' experience with our constant R&D and Quality Control, the company has achieved the expertise in the field of rubber products manufacturing to serve the needs of various industrial applications.

To keep pace with the modernization the company had undertaken expansion in the year 2006 by adding the most-modern fully-automatic and semi-automatic compression molding machines and extrusion units for precise and quality productions.

In the year 2008, the company had ventured into the manufacturing business of rubber rollers for various industrial applications.

The company gradually added newer production technology, in-house tool room, in-house quality control lab to manufacture the rubber molded parts, rubber extrusion profiles and rubber rollers under single roof. Our in-house Quality control lab equipped with the modern equipments to test all the required parameters at each and every stage of production.

The company had already adopted the LEAN manufacturing system and ISO:9001: 2015 system. We also offer the products with the international standard such as ASTM, BIS, Indian Standards etc.

The company is exporting its products to more than 25 countries.

VISION

We Shall constantly pursue to lead and follow the change with relentless focus on Creating Tomorrow, Today.

MISSION

Strengthen, through the effective utilization of man, material, machines & methods. Total Customer Satisfaction.

Our experts in R&D dept is continuously striving for new product development, improvement in existing products, Formulations for new rubber materials, cost reductions.



POLYMER PROPERTIES TABLE

POLYMER	NATURAL RUBBER	STYRENE BUTADIENE	BUTYL	ETHYLENE PROPYLENE	NEOPRENE	NITRILE	SILICONE	FLUROCARBON	FLUORO SILICONE	POLY- URETHANE
ASTM Abbreviation	NR	SBR	IIR	EPDM	CR	NBR	VMQ/Si	FKM/ Viton®	FVMQ	AU or EU
Physical Properties										
Hardness (Shore A)	20-90	40-90	30-80	35-100	15-95	20-95	Oct-85	50-95	40-80	35-95
Specific Gravity	0.93	0.94	0.92	0.86	1.23	0.98	1.1-1.6	1.85	1.3-1.8	1.06
Shelf Life- Shielded <90°F	5 Yrs.	5 Yrs.	10 Yrs.	10 Yrs.	10Yrs.	10 Yrs.	20 Yrs.	20 Yrs.	20 Yrs.	5 Yrs.
Colorability	P	G	G	G-E	F	E	E	E	G-E	G-E
Tensile Strength (Mpa)	3.4-34.5	3.4-24.1	13.8-20.7	2.1-24.1	3.4-27.6	6.9-27.6	1.4-10.3	3.4-20.7	3.4-9.7	6.9-69.0
Tensile Mod. @100% (Mpa)	0.5-0.8	2.1-10.3	0.3-3.4	0.7-20.7	0.7-20.7	2.0-15	6.2	1.4-13.8	3.1-3.4	0.2-34.5
Elongation %	300-900	450-600	300-850	100-700	100-800	350-650	100-900	100-500	100-480	250-900
Low Temp Range °F	-70 to -40	-75 to -55	-70 to -40	-75 to -40	-70 to -30	-70 to 0	-117 to -	-50 to 0	90	-65 to -4
Low Temp Range °C	-57 to -40	1000000000	-56 to -18	-46 to -18	-57 to -34	-57 to 18	400 to	-46 to -18	-80 to -68	
High Temp Range °F	220	250	121 to	220 to 300		250	204 to	400-500	450	220
High Temp Range °C	82 to 104	99 to 121	149	104 to 149	93 to 121	99 to 121	260	200-260	232	82 to 104
Cont. & Intermittent Max (F°)	175/210	175/225	200/250	250/325	200/300	200/300	400/500	450/600	350/450	210/250
Heat Aging @ 212° F (100°C)	F-G	G	E	G-E	G	G	E	E	E	F-G
Compression Set Rating	E	E	F	G-E	Р	G	G	G-E	F-G	F
Adhesion to Metals	E	E	G	G-E	E	E	E	G-E	G-E	E
Rebound								70		
Cold	E	E	P	G	VG	G	E	G	E	Р
Hot	E	G	VG	E	VG	G	E	E	G	G
Vibraton Dampening	G-E	F-G	Е	F-G	G-E	F-G	F-G	F-G	G	F-G
Dialectric Strength	Е	G	Е	Е	VG	Р	G	G	G	Е
Electrical Insulation	G-E	E	E	Е	F-G	Р	E	F	VG	F
Flame	F-G	F	Very Low	F-P	Low	F	F	Very Low	Low	F
Resistance (Solvents)										
Acids (Concentrated)	P-G	P-F	F-E	Е	P-F	P-F	P-F	G-E	G	Р
Acids (Dilute)	F-E	F-G	G-E	E	G-E	G	F-G	G-E	E	F-G
Ketones	Р	Р	G	Р	Р	Р	Р	G-E	Р	Р
Hydraulic Fluids	P-F	Р	G	G-E	Р	Р	G	Р	Р	Р
Swelling in Lubricating Oils	Р	Р	Р	Р	G	VG	F	Е	G	Е
Hydraulic Fluids - Silicates	Р	P-F	F	F-G	G	G	Р	G	G	
Brake Fluid DOT 3,4,5	G	P-G	G	G-E	F-G	F-G	G	P-F	Р	Р
Lacquer Solvents	Р	Р	Р	G	Р	F	Р	Р	Р	Р
LP Gas & Fuel Oils	F-G	Р	Р	Р	G	E	F	Е	E	F-G
Alkalies (Diluted)	F-E	F-G	G-E	Е	G	G	P-F	F-G	Е	P-E
Alkalies (Concentrated)	F-G	F-G	G-E	E	P	P-G	P-E	P	G	P
Synthetic Lubricants	P-F	Р	F	P-F	Р	F-G	P-F	F-G	F-G	Р
Oils & Gasolline	P	P	P	P	G	G-E	F	E	G	E
Alcohol (C1through C4)	G-E	G	G-E	G-E	E	F-G	F-G	F-E	F-E	G
Compound Resistance To			0.2	0.2		1.0		, .	1.5	
Weather	P-F	F-G	Е	Е	F-G	F-G	Е	Е	E	Е
Sunlight	P	P	E	E	P-G	P-G	E	G-E	E	G-E
Ozone	P	P	E	G-E	G-E	F-G	E	E E	E	E
DECEMBER OF A PARTY OF	F-G	P-G	P	11,022,03.01	7400000	Augusta Sa	P-G	F-G	F-E	G-E
Radiation			E	G-E	F-G	F-G				
Water	E	G-E		E	F-G	G-E	E P.C	E	E BC	P-G
Flex Cracking	E	G-E	G-E	G	G	F-G	P-G	G	P-G	G-E
Tears	G_E	F-E	G	F-G	G-E	G-E	P-G	F-G	P-E	E
Abrasion	G-E	G-E	G	G	G-E	G-E	P-G	G	P	E
Impact	E	E	G	G	G	F-G	P-F	P-G	P-G	E
Animal/Vegetable Oils	P-G	P-G	G-E	G	G-E	G-E	P-F	Е	E	F-E
Refrigerant Ammonia	Р	G	G	G	G	G	E	Р	E	P
Silicone Oils	E	Р	Р	E	G	G	P-F	E	E	E
Benzol, Toluol)	Р	P	F-G	F	G	Р	Р	E	E	P-F
Ethers	P	Р	P-F	F	Р	Р	P	P	F	F
300° F Steam	Р	Р	G-E	E	F-G	Р	G	P-G	G	Р
	P	Р	P	Р	G-E	P	F-E	G-E	E	P-G

Customization ... Meet the challenges !!!

RUBBER MOULDING

We offer wide range of customized industrial rubber products as per the design drawing and application.

With our years of reach experience, we offer customized solution to your specific requirements and application under single roof from design development, die and mould making, prototyping of samples and final production.

Innovation and development is a continuous process - we have wide range of rubber polymers for each and every application as well as also propose our specially developed rubber compounds for the unique application and requirements.

We provide in-house Material Test Certificate and external certifications from IRMRA.

SALIENT FEATURES

- Hardness range: 10 to 90 Shore A
- Job size: 1 mm to 1200 mm
- Precise dimensional accuracy
- Various color options as per your requirements
- Oil, Gas, Petroleum resistance
- Ozone-Weather resistance
- High & Low temperature resistance
- Steam and vapour resistance
- Chemical, Alkali, Acid, Solvent Resistance
- High abrasion Resistance
- High tear and tensile strength
- High compression strength
- In-house Lab Test Certification
- ASTM, BIS & Indian Standards



"Whatever the Quality & Application, We have the Solution"

INDUSTRIES WE ARE SERVING

- ✓ OIL & GAS
- ✓ PETROLEUM
- ✓ NUCLEAR POWER PLANTS
- ✓ RENEWABLE ENERGY
- ✓ STEEL MILLS
- ✓ FOOD & BEVERAGES
- ✓ PHARMACEUTICALS
- ✓ DAIRY PLANT
- ✓ CEMENT & FERTILIZERS
- ✓ QUARRY & MINING
- ✓ HEAVY ENGINEERING
- ✓ TECHNICAL TEXTILES
- ✓ GLASS INDUSTRY
- ✓ WATER TREATMENT PLANT



Temp. Range from -100°C to Mechnical +350°C



Properties

Hardness: 10 Shore A to 80 Shore D



Resist to Solvent Excellent Ozone Alkali, Chemical, Acid and Water



& Weather

Resistence

High Tensile, Tear & Compression Set



DIAPHRAGM



METAL TO RUBBER BONDED



PRODUCT RANGE

GASKETS	U SEAL			
DIAPHRAGMS	O RINGS			
BUSHES	RUBBER CORDS			
PLUGS	RUBBER TO METAL BONDED PARTS			
CAPS	ANTI-VIBRATION PADS			
GROMMETS	DAMPERS			
PACKING	WASHERS			
SEAL	AUTOCLAVE GASKETS			
V SEAL	FABRICS REINFORCED PARTS			

VITON & AFLAS MOULDED



RANGE OF POLYMERS

- NATURAL
- NITRILE
- XNBR
- SBR
- PVR
- PVC NITRILE
- HYPALON
- EPDM
- VITON

- NEOPRENE
- SILICONE
- EBONITE
- POLYURETHANE
- FLUOROSILICONE
- KALREZ®
- FFKM
- AFLAS
- HNBR

SILICONE MOULDED



Quality, Precision & Perfection ... We deliver the best

RUBBER EXTRUSION PROFILES (SILICONE)

Silicone extrusions are available in various Solid & Sponge profile to suit your individual requirements. We are able to manufacture most profiles from samples or drawings, silicone extrusions are commonly used in high temperature sealing, door sealing, gaskets, dispensers and oven seals.

Temperature: -60°C to 300°C (Higher temperature grades are available upon request.)

Applications: High temperature sealing, door seals, gaskets, heat sealing and oven seals.

FEATURES

- Hardness Range: 10 to 90 Shore A
- Suitable for continuous operation
- Temp. range: -60° C to 300° C. (-110°F to 480° F)
- No harmful toxic or physiological effects
- Resistance to Ozone, Oxidation, UV, Corona discharge, Cosmic Radiation
- Electrically insulating with dielectric strength 500 V/mil.
- Do not break or crack due to pressure / tension
- Size: From 1mm to any size as per customer requirement.

RANGE

- Transparent Tubes
- Cords
- Profiles
- Corona Treated Sleeve
- Silicone Braided Hose

APPLICATION

- Flexible electrical insulation sleeves and cable harnessing.
- Corona Treating Machine.
- BOPP film plants.
- Extruded sealing profile for high & low temperature application.





Provider of State-of-the-art Services & Material



RUBBER EXTRUSION PROFILES (EPDM)

Majority of EPDM rubber is extruded in solid and sponge profiles which are being used in Aluminium Facade and Structural Facades. EPDM being an excellent ozone resistant, anti aging characteristics, highly elastic, having good compression set and good thermal insulating properties which has proven to be in effective sealing against water, wind and dust.

EPDM profiles are produces in various shapes & designs depending upon application and sealing condition requirement. These are mainly in black colours and rarely used in natural colours as per specific requirement.

FEATURES

- Hardness Range: 10 to 90 Shore A
- Wide range of application
- Low temperature flexibility
- High tear and wear resistance
- UV and Ozone resistance
- Weatherproof
- Waterproof
- Temperature range -50° C to +130° C
- Good Corrosion Resistance

RANGE

- Extrusion Solid Profiles
- Extrusion Sponge Profiles
- Tubes
- Cords
- Strips
- Section

APPLICATION

- Edge Protection
- Sealing
- Insulation





Rubber Rollers with Quality, Precision, Accuracy and Operational Excellence

RUBBER ROLLERS

SHAKTI is the well-established name for RUBBER ROLLERS with its uniform coating and best quality of raw materials which can withstand abrasion, pressure and temperature. We manufacture rollers on the state-of-the-art modern machinery under stringent quality control standard.

With our years of rich experience and in-house design and R&D facility, we also offer custom rollers as per customers' application and design.

SALIENT FEATURES

- Hardness range: 20 Shore A to 90 Shore D
- Uniform hardness across the surface of roller
- Temperature range: 80° C to + 350° C
- Excellent metal to rubber bonding
- Free from pin holes and surface defects
- Dynamically balanced
- CNC cylindrical grinding of roller surface to maintain accuracy
- Excellent surface finish across the roller
- Proper selection of polymers as per application i.e. abrasion, temperature, chemicals, oil, pressure resistence etc.
- Custom built to suit the different running speed of the machines & local atmospheric conditions
- Ra value maintain as per specific application upto 0.25 μ

PRODUCT RANGE

- Nip Roller
- Squeeze Roller
- Mangle Roller
- Lamination Roller
- Roto Gravure Printing Roller
- Guide Roller
- Foil Stamping Roller
- Heat Transfer Roller
- Hot Stamping Roller
- Coating Roller
- Smog Roller
- Grooved Roller
- Driving Roller
- Slitting Roller
- Thermal Conductive Roller
- Ebonite Roller
- Roller For Technical Textile





RUBBER ROLLERS



No job is small or big for us - we have manufacturing capacity to produce rollers from 50 mm length to 6500 mm length and $50\,\text{mm}$ dia to $500\,\text{mm}$ dia.

With our specially developed rubber compounds, we offer better solution for your specific need and application.

We also undertake the job of recoating, grinding and repairing services of your old rollers.



AREA OF APPLICATION

- Printing & Packaging
- Solventless Printing
- Lamination Plant
- Coating Industries
- Rotogravure Machines
- Hot Foil Stamping Machines
- Smog Machine
- Sanitaryware Plants
- Electro-Conductive
- Thermal Conductive
- Textile Washing Plant
- Textile Fusing Plant
- PSF & CP Plants
- Conveyor & Material Handling
- Plywood Industry
- Steel Plant
- Paper Mill
- Polyester Film Plant
- Food Processing
- Glass Industry
- Non-Woven Textile Plants



We offer custom designed rollers as per the design drawing/application.

Texcellence ... Solution for textile machinery parts

TEXTILE RUBBER PRODUCTS

SHAKTI is well-known for manufacturing the rubber products for textile industries. We are catering to more than 250+textile mills in Surat and across India.

We offer the following standard textile rubber products:

- Textile Printing Squeegee
- Padding Squeegee
- Scrapper
- Drum Packing
- Door Ring
- Jet Main Packing
- Filter Ring
- Glass Ring

- Drum Washer Door Ring
- Rubber Cords
- Drum Washer Main Flange Packing
- E Type Rubber Section
- P Type Rubber Section
- Rubber Sheets
- Anti-vibration pads for High Speed Weaving Machinery
- Textile Dyeing Printing Rubber Rollers

We undertake the customized development of any textile rubber parts.

SHAPE & CODE NO. OF SQUEEZES

TYPE	NO	SHORE A HARDNESS	TYPE	NO	SHORE A HARDNESS	
Ì	11 11A 18	70 60 50		17B 17A 17	70 60 50	
Î	12 16A 16	70 60 50		19 19B 19A	70 60 50	
į	14A 14B 14	70 60 50	1	20 20A 20B	70 60 50	
į	15 15B 15A	70 60 50		21 21A 21B	70 60 50	NPT.

SILENT FEATURES

- Suitable for printing on Thin Mull, Terrene, Nylon, Free from Air-bubble Silk, Polyester, Viscose, Cotton etc.
- Can be used on screen having 100 to 500 mesh
 Long lasting performance
- Uniform color application on fabrics
- Precise and sharp printing

- Resistant to acid, alkali, solvent and water
- Perfect straight edge not get wavy or swollen



PU PRODUCTS

We manufacture polyurethane products using a specific chemical composition depending on the application requirement and service environment of the end components.

Our processing equipment has the capability of varying the hardness of our materials anywhere within the range of 50 Shore A to 80 Shore D and colors can be specified to suit the customer requirements with commonly specified colors such as Black, Red, Yellow, Green, Orange and Blue.

The polyurethane materials we use in our casting and moulding processes are sourced from the industry's leading suppliers and are supplied to us duly tested and approved to the highest standards.

OUR RANGE

- Bonded Polyurethane Molding
- Small and Large Polyurethane Moldings
- Multiple Hardness Polyurethane Molding
- Load & Impact Polyurethane Pads & Dampers
- Polyurethane Wear Linings and Slides
- Heavy Duty Industrial Wheels
- Polyurethane Rollers

AREA OF APPLICATION

- Energy (Oil, Gas, Petroleum, Nuclear and Renewable)
- Steel Mills
- Chemical and Pharmaceuticals
- Textile
- Quarries and Mining
- Cement & Fertilizers
- Pump and Valves
- Marine and Off-shore







THE NAME OF STRENGTH AND RELIABILITY FOR RUBBER PRODUCTS













DRAWING, TO PROTOTYPE, TO MANUFACTURER.

