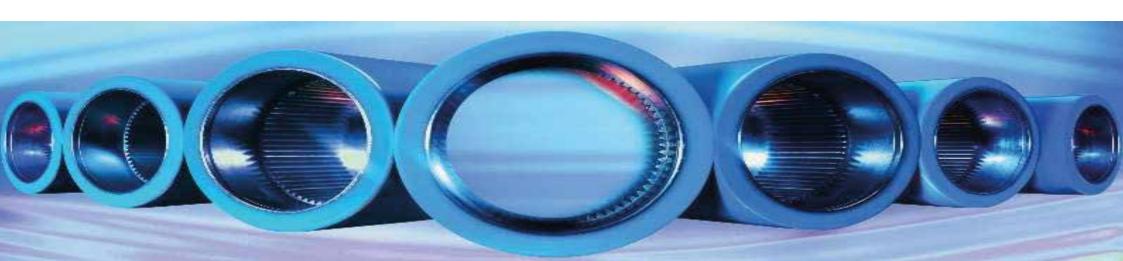


مصنع المتخصصة للصناعات المطاطية Specialized Factory For Rubber Industries



# **About Us**

SFR was established in Riyadh, Saudi Arabia 1990 by the exclusive efforts and personal experience of the Family Business

Throughout the years, SFR has gained the trust and confidence of its customers, both local and international, and grew to become one of the leaders in its field.

This joint venture allowed the company to expand even more in the rubber industry, and opened the door to other applications, such as rubber spare parts, pads, gaskets & seals and much more, in addition to the rubber rollers, & in addition to representative offices in Jordan and Kuwait





### Steel & Rubber Rollers - Products

Rollers are essentials spare parts for industrial machines to accomplish high quality final product.

Rubber rollers have what economists call "derived demand", that is, they are needed because they are used in the production process.

The producing of high quality rubber for any rollers' applications needs long experience, knowhow & updated technology & researches to enable produce different types of rubber; hardness, mechanical properties, heat, solvent, chemical, high speed, wear & abrasion resistance & electrical conductivity.

Rubber rollers durability & shelf life vary from application to other; normal running life for rubber rollers extends from one to two years under proper working conditions & maintenance. Our production program provides manufacturing of the steel cores or shells to be covered by rubber, plastic or chrome coatings. Used & consumed rollers can be applied for special steel refurbishing & Re-covered with rubber coating according to its specifications to be installed in the machine.

SFR is a leading firm in this field and its products are identical to European product quality and performance wise.

# The main factors influencing the market are:

### Quality:

High standard and long life of roller required for better performance of machinery and production capacity.

#### Price:

As the roller is considered to be a spare part, an economic price influences the decision of the buyer.

# **Delivery & Service:**

Prompt delivery and service is required to avoid any down time loss by our clients. This is why we now carry a stock of rollers for different type Of machines ready for immediate delivery.



# **Major applications for Rollers:**

- 1. Offset Printing Rollers for
  - a) books
  - b) magazines
  - c) newspaper
  - d) commercial publications
- 2. Letterpress Rollers for
  - a) School copybooks
  - b) Paper Packaging
- 3. Rotor Printing Rollers for
  - a) Film Packaging Industry
  - b) Food Packaging Industry
- 4. Gravure Printing Rollers for
  - a) Cigarette Packaging Industry
  - b) Flexible Packaging Industry (Tetra Pack containers for Food & BEverages)
- 5. Flexographic Rollers for
  - a) Film Industry (PE, PP, PS plastics)
  - b) Plastic Bags & containers
  - c) Paper sheets for packaging
- 6. IN Line Industries Rollers For
- a) Conveyer Chain Drive Rollers
- 7. Paper Mills Rollers for
  - a) Recycling of Papers
  - b) CONVERTING papers (carton boxes)
  - c) Printing
  - d) Slitting & Embossing

- 8. Tissue Mills Rollers for
- a) Recycling of Tissues
- b) Converting tissues (hand, napkins, diapers, toilet tissues)
- c) Printing
- d) Embossing
- 9. Steel Mills Rollers for
  - a) Recycling of Steel
  - b) CONVERTING & Laminating Steel Sheets
  - C) Printing Metal & Aluminum Cans & Containers
- 10. Textile Rollers for
  - a) WEAVING Rubber Rollers & Pulleys
  - b) Dying, Squeezing, Pulling, Feeding, Embossing & Coating
  - C) Printing Rollers
  - d) Carpet Industry
- 11. Wood Processing Roller for
  - a) Deflecting, Feeding, Pulling & Sizing
  - b) Printing
- 12. Tanneries Rollers for
- a) Converting animal leather
- b) Dying, Deflecting, Stamping, Embossing
- c) Printing
- 13. Plastic Rollers for
  - a. Polyethylene, Polypropylene, Polystyrene & PVC Sheet lines
  - b. Printing, Coating, Laminating & Embossing



# Products & Services





# Molded, extruded & injected Rubber Items

After long experience SFR presents a line of products confirming the high design and production quality in the field of heavy duty spare parts.

Therefore we are specialized in a wide range of manufacturing rubber spare parts from simplest to most sophisticated industrial accessories for any specific demands of hardness, resilience, abrasion, temperature, chemical & solvent resistant etc...

Among years and the revolution of technology and especially in industry, constructions and vehicles, rubber & plastic items became a primary product, while we have focused on the very high added value products to avoid the mass production competition.

SFR has its own tooling shop to design & manufacture the molds for the rubber spare parts according to the item specs.







# **Major applications for high VALUE added spare parts:**

- 1. Industry
- a) Hydraulic seals, pads, joints, profiles, ANTI-VIBRATION pads etc...
- 2. Petroleum
- a) Seals, gaskets and joints
- 3. Construction
  - a) Neoprene bearings for foundations
  - b) Sliding Bearings for road bridges & fly OVERS
  - c) Water stop, water proofingetc....
- 4. Elevators and air conditioning systems
- 5. Gaskets & Seals
  - a) Circular concrete pipes
  - b) Plastic pipes
  - c) Steel & cast iron pipes
- 6. Extruded rubber profiles and pads
- 7. Anti-vibration Pads (wide range)
- 8. Sound Proofing
- 9. Rubber articles & accessories coming in contact with food,

# Pharmaceutical use and home appliances

Rubber Spare Parts Market

We recognize rubber spare parts as two major segments:

### a- Shelf item products

Tobe used for periodical maintenance such as vehicles, industrial machines and others; these

Products are semi-durable products
(1 to 2 years)

#### **b- Permanent Product**

Firmly established for all kind of constructions and specially designed for each project







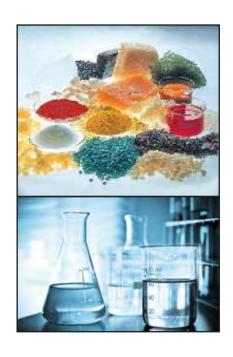


# Roller Technology – Technology

Roller Technology from SFR®, the foremost industry leader, where Engineering, development, and resources meet to provide targeted and specific solutions to each and every manufacturing challenge, old or new.

From solar panels, laminated floors, airplanes, RVs, computers, tablets, smartphones, and garbage bags, to tinted windshields in our cars, nearly every product in our lives has been manufactured to precise specifications. Rollers are almost universally used in nearly every manufacturing process in the world.

Every new idea. Every new product. Every new approach to streamlining operations. Every new cost containment innovation. Every new problem. All of these have a solution.



That solution is SFR, where roller technology is more than a manufacturing solution, but a precise, innovative approach to the most common production processes to the most complex. As early trailblazers in the rotating equipment market, SFR expertise provide OEM and aftermarket customers the tools for enhanced productivity, reduced costs, engineering efficiency, creative design solutions, and shortened times from research and development to market.

SFR roller technology is backed by a full team of experts in roll coverings, molded products, decorative technology, precision machining and its own rubber and urethane manufacturing plants that bring products, custom-designed in SFR R&D division, into play to solve any engineering or manufacturing challenge.



### **CORE MANUFACTORING – DESIGNING & FABRICATION**

Core Manufacturing for the Industrial Roller Market by SFR combines unparalleled experience with roller technology and expert manufacturing techniques — making SFR the top choice for OEM and after-market customers looking for the highest quality products that will hold up over time despite continual wear and tear, returning a capital investment over and over again.

SFR offers customized core sizing as needed to fit the job.

The Company's expert design and fabrication team and rigorous Quality assurance inspections ensure that SFR cores and bases exceed expectations resisting vibration, noise, stress on bearings and gears, maintaining static and dynamic balance. This combined with SFR expert core repair and maintenance team assure customers that rollers manufactured by SFR are an excellent investment.



SFR core roller manufacturing is both an art and a science and is founded in the Company's vast understanding of rollers and the pivotal role they play in the manufacturing process. This understanding of the roller's function and how best to achieve the customer's manufacturing goals is one of SFR greatest strengths, and comes from decades of roller core manufacturing. Combine this with a perfectly engineered roll coating and a SFR roller will flawlessly and efficiently perform any manufacturing operation.

SFR rollers can be manufactured up to 1250mm in diameter, 6 meters in length, and weighing up to 6 tons, offering rollers suited to nearly every manufacturing environment, with new products constantly being researched and developed for the next generation of manufacturing SFR core manufacturing spans numerous materials that offer a solution to every production challenge.



- Carbon Steel Industry Standard. Hard and malleable.
- **Alloy Steel** Harder and more durable. Increased corrosion and wear resistance, and offers hardness and strength at high temperatures.
- **Stainless Steel** Highest corrosion resistance, these rollers are ideal in wash down and caustic environments.
- Aluminum Precision, lightweight rollers offer low inertia and high speeds.
- Carbon Fiber Lighter than aluminum. High strength with rigidity comparable to steel. Very low inertia offers faster speeds, less vibration, and reduced bearing loads.
- **Composites** Lightweight, stiff and stable, these durable rollers lengthen the life of the equipment.
- **Specialty Metals** these include brass and metal alloys, each offering unique properties to match specific production goals.
- Design and fabrication executed by SFR team offers superb engineer-ng and fabrication skills that result in rollers manufactured with precise dimensional specifications which will reliably perform in the most challenging production environments. Harsh heat and chemical conditions are no match for SFR perfectly engineered rollers.
- Turnkey engineering of Rollers, including Precision Machining, even the perfect Rubber or Urethane all fall within the exceptional competencies of the SFR team.
- SFR customers always have at their fingertips a wide range of roller sizes and materials readily available from SFR vast inventory supply list. As well, customized roller design and production is always an option.
- Whether it's an existing roller strip and recovery to a complete design, fabrication, and assembly, SFR has you covered, with equal attention to every detail whether it be a groove, crown, taper, or finish.

### Repair & Maintenance – QUAILITY WORK

SFR design and fabrication department combines practical and experienced hands-on "know how" product knowledge from years of field work, with the most sophisticated engineering analysis tools in the industry.

### **Reverse Engineering:**

Our engineering technology can provide expert external roller reverse engineering without any destructive testing.

### Modeling:

Our auto cad modeling can not only provide traditional drawings for review but can demonstrate how the new engineered product will potentially impact machine performance.

### **Analysis:**

Production issues using FEA analysis are crucial to roller production. Core Repair and Maintenance to sustain peak performance in hard working Industrial Rollers is another expertise enjoyed by the customers of SFR. Regardless of the original manufacturer of an Industrial roller, they all re- quire periodic maintenance and repair. When that happens, SFR expert team is ready with state-of-the-art repair technologies.





# Factory & Workshop



# Products & Services



# Services



# Services



# Services









### **Acid Flushing:**

Keeping the equipment clean by periodically flushing the residual build-up of fluid deposits maintains the flow of hot and cold liquids, conductivity, prevents equipment malfunction, and will extend equipment life.

### **Analysis:**

SFR team offers comprehensive on-site — and remote — maintenance and trouble-shooting analysis. When a problem occurs, the SFR service staff can usually pinpoint if the problem stems from insufficient maintenance, equipment mishandling, or inadequate lubrication. Other problems like slow roller performance, abrasive wear, stress, vibrational is- sues, excessive whip, off-balance, residual chemical building, or the need for a replacement roller cover can be expertly and quickly determined, with the proper maintenance plan formulated and implemented.

### **Balancing:**

All of SFR rollers can be carefully inspected by our quality assurance team and properly balanced before leaving our plant. Over time rollers need to be checked and rebalanced, since unbalanced rollers cause poor performance and can potentially damage production equipment. In addition, ma- chine vibrations can affect the finished product. SFR offers dynamic and static balancing, as well as whip analysis designed to keep your equipment in tip-top shape.

### Finishing & Replanting:

Keeping on top of pitted or worn rollers through periodic precision grinding and polishing will ensure that your jobs keep running smoothly.

Grinding: Worn, damaged, abraded, or chipped rollers will seriously affect your finished product. SFR team can expertly handle in-house re-grinding to meet the original manufacturing specifications of your rollers — saving down production time, extending roller life, and maintaining high quality production standards Journal Repair:

No matter how bad a damaged journal looks (seized bearing spun on journal etc) many rolls can be saved by repair instead of replacement. SFR can build up a damaged journal by welding, then machine it to a like-new condition. Cracked or damaged welds can be removed and repaired also.

### **Non-Destructive Testing:**

In addition to visual inspections and comparative analysis, ultrasound, magnetic particle testing, and dye penetrant testing are offered for checking for microscopic cracks and flaws in the roller.

### **Reverse Engineering:**

SFR design and fabrication teams have expert skills in reverse engineering your rollers when it's time for a replacement. This manufacturing convenience allows for analysis of your already installed equipment, and enables the SFR team to manufacture an exact replica ready to be put into service in place of the older equipment.



### RUBBER MANUFACTURING – BASIC POLYMER TYPES

Basic Polymer Types and extensive related technical knowledge are part of SFR vast experience of rubber manufacturing. It spans the whole gamut of elastomeric formulations. A brief overview of the Company's family of compounds includes:

**EPDM** provides good resilience and high heat resistance. **Epichlorohydrin** offer solvent, fuel, oil and zone resistance. **Fluorinated** offers superior resistance to oxidation, ozone, and heat aging. **Hypalon** good general overall covering material.

**Natural Rubber and Polyisoprene** compounds have good physical properties. **Neoprene** resists many oils and solvents with resistance to air, ozone, and oil deterioration. **Nitrile** is highly resistant to solvents, fats, petroleum and other oils. **Silicone** offers excellence release, heat resistance and maintenance.

# **Rubber Manufacturing – FORMULATION & QUAILITY PRODUCTION**

**UV** offers excellent solvent resistance. Rubber Formulations and the extensive catalog SFR possesses are a source of pride and readily available for quick manufacture and delivery. Some of SFR top product formulations are:

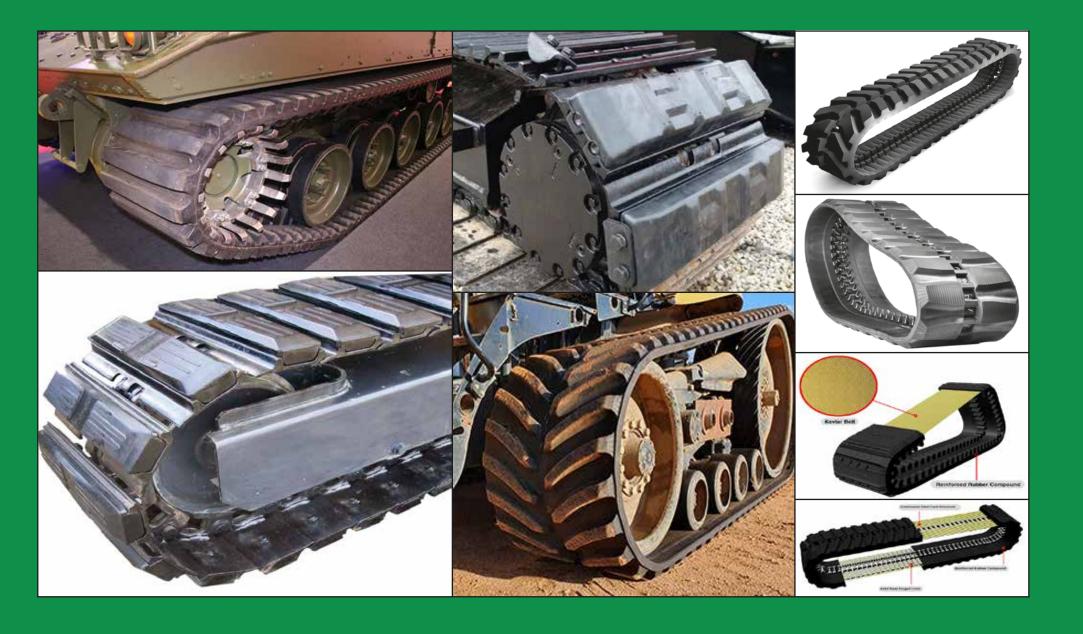
- **BR** Polybutadiene
- CR Neoprene-Polychloroprene
- CSM Chlorinated Polyethylene
- **ECO** Epichlorohydrin
- **EPDM** Ethylene-Propylene Diene Terpolymer
- FCM Flurocarbon
- HNBR Nitrile Hydrogenated Butadiene Acrylonitrile
- **IR** Polyisoprene
- MQ, VQM, PUMQ Silicone
- MV Nitrile/PVC
- NBR Nitrile-ButadieneAcrylonitrile
- NR NaturalRubber
- SBR StyreneButadiene
- T Polysulfide-Thiokol
- XNBR Nitrile-Carboxylic AcidModified

With thousands of customized variations, SFR is certain to have the product to meet your manufacturing needs. Quality Production is built into every step of SFR rubber manufacturing.

The Company's total quality control program includes data collection and traceability from raw materials to finished product, ensuring our customers are in strict regulatory compliance.

During manufacturing, key emphasis is placed on compound cleanliness and flow characteristics. Throughout the entire production process RU- PLAK's quality team is checking batches to verify consistency.

As well the company's up-to-date quality assurance team is constantly working to make sure all products meet or exceed the very latest in environmental find workplace safety standards. From start to finish — SFR guarantees the highest quality rubber product found on the market.





# **OUR MAJOR CLIENTS AND OUR REPRESENTATIVE OFFICES**

By 2016, our client base reached around 1,200 clients spread over more than 10 countries mainly around the Middle East and Africa. Below are some of our major clients:

#### Saudi Arabia:

- Napco Group
- Obeikan Group
- The Printers
- Najd
- IPC
- Jeddah Graphics Center
- Middle East Printing Press
- Al Oula Printing Press
- · GEPCOM for Security Printing
- Al Ebtikar Factories

# **Kuwait (Representative office):**

- Al Khat Printing Press
- Al Assriya Printing Press
- Al Qabas for Newspaper
- Al Rissala for Printing & Packaging
- Four Films for Printing & Packaging
- Dar Al Siyasa for Newspaper
- Plastic Industries
- Al Hosr for Industries
- Al Ratka for Printing
- Al Ahram for Printing
- British Printing Press
- Al Anbaa for Printing & Publishing

# Jordan (Representative Office):

- Feras Printing Press
- Economic Printing Press
- Al Shourook for Printing & Packaging
- Al Ikbal for Printing & Packaging
- Al Zahra Printing Press
- Fast Printing Press
- Issam Printing Press
- Jordan Aluminum Tubes MFG
- Al Ghad Newspaper
- Malek Factory for Labels

### Egypt:

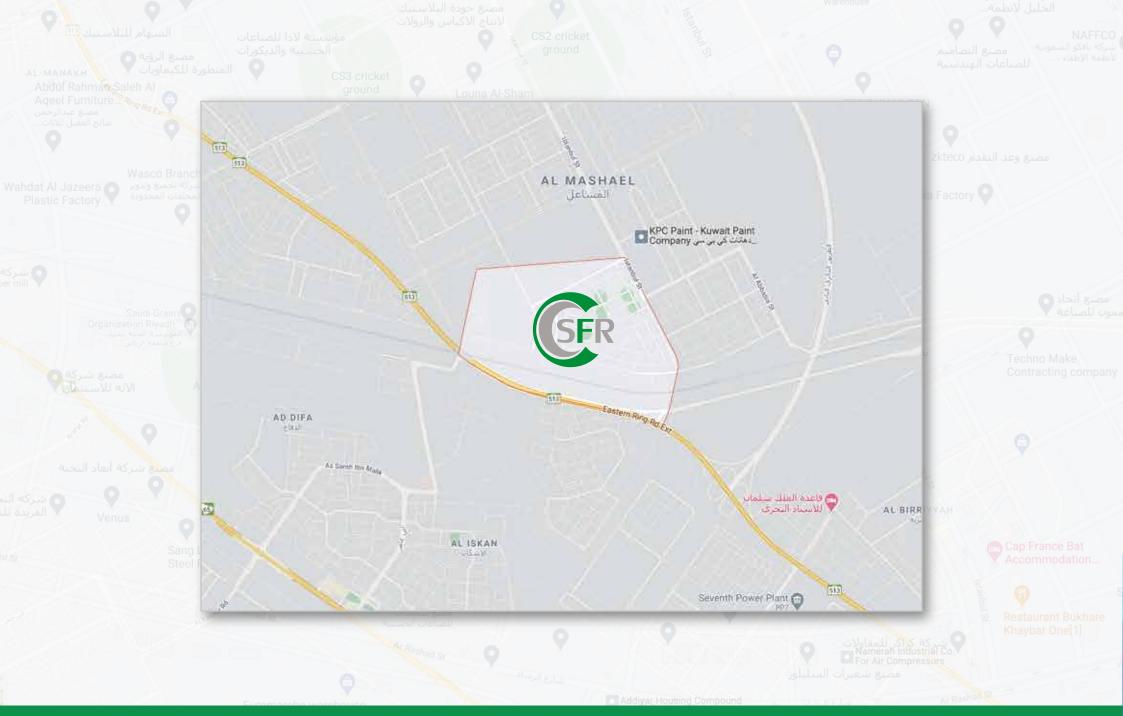
- Al Ahram Newspaper
- Akhbar Al Yawm
- Unipak Nile
- Unipak Tissue Mill

### Lebanon

- Indevco Group
- Solicar
- Sikomo
- Mimosa
- Gemayel Freres
- Reaidy Printing Group
- Al Assriya Press
- Bassil Freres
- O.P.P.
- RotoFlexo Press
- Express International
- Inkript
- Dynagraph Lebanon
- Heidelberg Lebanon

### Qatar:

- Ali Bin Ali Printing Press
- Renoda Printing Press
- Middle East Printing Press
- New Printing Press
- Dar Al Sharq for Printing & Packaging
- Doha Printing Press



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