Engineering Rubber Products
**INTRODUCTION**

*Doshin Rubber*, established in 1978, is the pioneer in manufacturing laminated bridge bearing pad in Malaysia. With over 30 years of experience in providing rubber solution for the civil engineering & construction industries, Doshin Rubber is today a subsidiary of KOSSAN group of companies, a public listed company at the Kuala Lumpur Stock Exchange (KLSE).

Over the years, Doshin Rubber has widened its products range that includes:

- Marine Fenders
- High Damping Rubber Bearings (Seismic Bearings)
- Elastomeric Laminated Bridge Bearings / Bearings Strip
- Mechanical Steel Pot Bearings
- Bridge Expansion Joints, Finger Type Expansion Joints
- Rubber Panels / Lifter Bars for Mining
- Floating Slab Track Bearings / Rubber Wedge
- Neoprene Compression Seals / Strip Seal / Waterstop

**Quality**

To aid in our quality management system, Kossan, the mother company of Doshin Rubber, has set up a quality assurance department and a well-equipped quality control laboratory with state-of-the-art and physical testing equipments. The production process is controlled by our comprehensive online database system.

Our persistent efforts have resulted in numerous certifications and awards for Doshin Rubber. Here is our list of accomplishments to date.

**Certifications**

- Quality System Management
  ISO 9001:2008
- Doshin Lab Award
- Innovative Award
- MS ISO/IEC 17025
  TESTING
  SAMM NO. 372
OUR PRODUCTS

- MARINE DOCK FENDERS
  - Super Circle Fender
  - Cell Fender
  - Cylindrical Fender
  - V-Fender
  - D Fender
  - Ball Fender
  - Fender Bar
  - Shear Fender

- High Damping Rubber Bearings (Seismic Bearings)

- EXPANSION JOINT SYSTEM
  - Expansion Joint
  - Finger Type Expansion Joint
  - Asphalthic Plug Joint
  - Compression Seal Joint
  - Combo Joint

- LAMINATED BEARING AND BEARING STRIPS
  - Laminated Bearing
  - Bearing Strips with Metal
  - PTFE Bearing

- GENERAL
  - Cushion Bearing
  - Diving Brick
  - Anti Vibration Bearings
OUR PRODUCTS

MINING RUBBER PRODUCTS

- Bolt Down Deck Panel
- Discharge Cone
- Heavy Duty Trommel Panel with Rolling
- Rubber Crusher
- Impact Panel
- Luddeck Panel
- Mill Lining
- Panel Bolt Down
- Impact Liner
- Scrubber Feed End Heat Plate
- Lifter Bar
- Discharge Head Liner Plate
- Shell Liner
- Scrubber Discharge End Head plate
- Panel BRU/Bolt Down
- Trommel Panel
- Trommel Panel
- Spiral Trommel
- Shell Lifter
- Screen Panel

FST BEARINGS FOR RAIL INDUSTRY

Floating Slab Track (FST) Bearings, Lateral Bearings, Rubber Wedge for noise & vibration isolation.

STRUCTURAL POT BEARING

Structural Pot Bearing for Bridges and Buildings
• 2000 Tons Hydraulic Press – 3500 x 3500mm x 3000mm Opening Daylight
• 1500 Tons Hydraulic Press in Autoclave - 3000mm diameter
• Injection of Rubber Compound using Gear Pump Technology- 1200 kg/hr at High Pressure (5000psi)
• Molding Presses for High Damping Rubber Bearing and Laminated Bearing Pads
• One complete set each of 80-Litres and 160-Litres Farrel-Chronos Richardan mixing line with ST rotor variable speed, temperature control, Chronos auto material feeding system and a batch-off machine for efficient cooling system
• Plasma cutting machine
• Compression machines from 480mmX 480mm to 3.5 mX3.5meter
• Gear Pump Extruded speed at 1400 kg compound/hour
• 3m X 3m Hydraulic Press
PRODUCT TESTING FACILITIES

Durability testing machine
Compression Stiffness Testing
Dynamic Viscous Damping Testing
Fender Compression Testing
Fender Compression Testing at 75%
Energy and Reaction Force Testing

HDRB Under Compression and Shear Testing
LAB FACILITIES

RUBBER MATERIAL TESTING

- Tensile Properties Test
- Hardness Test (ASTM Shore A, JIS Shore A, IRHD)
- Hot Air Heat Aging Test (up to 300°C)
- Compression Set Test
- Ozone Resistance Test (up to 400 pphm)
- Moisture Content Test (Chemicals, Fillers & Compounded Rubbers)
- Imaging Analysis (For dirt particles/contamination detection)

- Density/SG Test
- Rheology Test
- Flame Retardant Test
- Fluid/Oil Immersion Test
- Quadruple Shear Test
- ISO/DIN Abrasion Resistance Test
- Low Temperature Brittleness Test (up to -70°C)