



Manufacturer of Elastomeric Bridge Bearing Pads.



N-Flex Bearing Pads:

Characteristics:

The elastomeric Bearing is a reinforced elastomeric bearing manufactured from synthetic chloroprene rubber (CR) or natural rubber (NR). By using well-proven production processes and only high-quality raw materials, we can guarantee a long life span without the need for maintenance.



Main Features:

The elastomeric Bearings consist of vulcanized elastomeric blocks, sheets. The vulcanized strength steel sheeting are used to ensure absolute corrosion maintenance. The rubber aging and weathering UV radiation.



consist of vulcanized reinforced by two or more steel reinforcing layers of high-strength steel sheeting are used to ensure absolute corrosion maintenance. The rubber aging and weathering UV radiation.

Fields of Application:

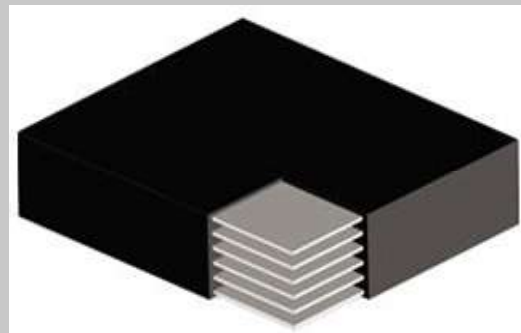


Elastomeric Bearings are used mainly for bridges and Buildings and can be used at a temperature of between -40 and $+50$ degree Celsius. Brief temperature increases up to $+70$ can be withstood without problems.

They can absorb horizontal movements in every direction and rotational movements around every axis through elastic deformation, thereby allowing forces to be transferred safely from one structural component to another.

Structure:

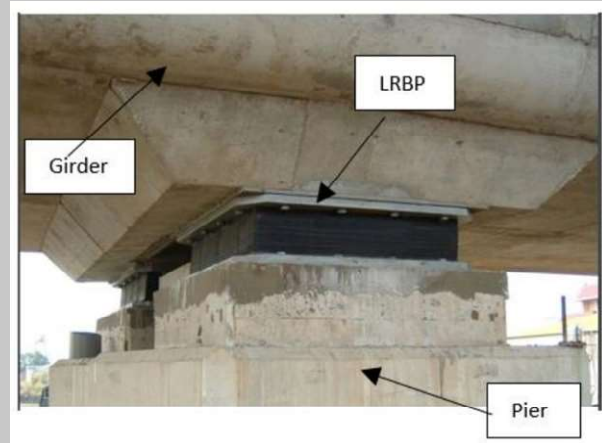
The following elastomeric bearings are constructed in layers. This means that they consist of alternating layers of elastomer and steel plates. These alternating materials are chemically fused through a process of vulcanization, during which the rubber adheres to the reinforcement sheets in such a way as to make the unit resistant to shear and pressure.



Functioning Principles:

It primarily functions as an elastic, load-transmitting link between construction elements that need to be connected in such a way as to allow a degree of movement. Vertical loads from the structure itself and traffic loads are transmitted without constraint into the bearing seat. Acceleration and deceleration forces from traffic load, and wind forces arising from skewed movements of adjacent structural elements.

The materials used and the structural composition of the bearings mean that they are able to accommodate movements resulting from temperature differences between construction elements. Rotational forces from the skewed arrangement of structural components are absorbed by elastic deformation around horizontal axes.



Materials & Loads:

The elastomer is macro-molecular material which demonstrates considerable deformation at low load and which returns to its initial size and shape when this load is removed.

Steel plates are vulcanized (chemically joined) into the elastomer in order to strengthen it. The ozone level in both CR and NR is zero in accordance with EN-1337.

Elastomeric Bearings Types:

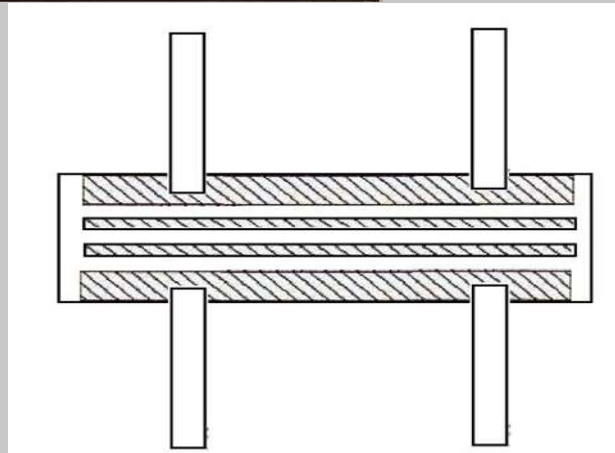
1. Type B:

Type B elastomeric bearings are enclosed on all sides with rubber (NR/CR). And are used between concrete or steel construction components. This type of bearing can simply be positioned between the structural components.



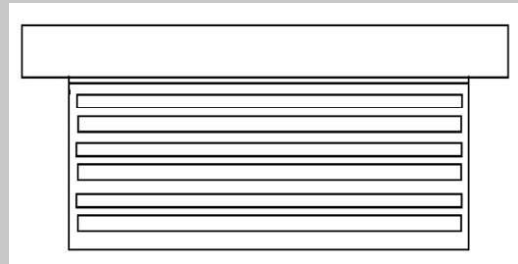
2. Type C:

Laminated elastomeric bearings with their upper and lower sides anchored to the structure. This is to avoid displacement of the bearing and the structure.



3. Type D:

D-type Bearings are laminated elastomeric bearings with PTFE vulcanized and E-type bearings have PTFE located in steel box recessed. Its dimension is determined according to the movements.



4. Type F:

Only manufacture with elastomer the admissible working load goes from 1.5 to 5 N/mm².



Quality Assurance:

N-flex Rubber can manufacture Elastomeric Bearings according to BS-5400, AASHTO, SETRA, UNI-100B, DIN 4141, and EN-1337.

NATURAL RUBBER(NR),CHLOROPRENE RUBBER(CR) EN-1337-3 STANDARD					
TESTS		UNITS	SPECIFICATION	STANDARD	
HARDNESS		°ShA	65±5	UNE53130	
TENSILE STRENGTH		N/mm ²	≥16	UNE53510	
ELONGATION AT BREAK		%	≥425	UNE53510	
NR-OZONE RESISTANCE 25pphm 30% 96h a 40°C +/-2°C			No crack	53558/1	
CR-OZONE RESISTANCE 100pphm 30% 96h a 40°C +/-2°C			No crack	53558/1	
			NR	CR	
COMPRESSION SET (24h at 70°C)		%	≤30	≤15	UNE53511
TEAR STRENGTH		N/mm	≥6	≥10	UNE53516
THERMAL	HARDNESS V	°ShA	-5/+10	5	UNE 53548
AGEING NR(168h at 70°C) CR(72h at 100°C)	TENSILE STRENGTH V	N/mm ²	±15	±15	
	ELONGATION AT BREAK V	%	+25	+25	
STEEL S235 JR SJN EN-10025-2-2006					
TESTS		UNITS	SPECIFICATION	STANDARD	
Yield Strength		N/mm ²	≥235	UNE 36080	
Tensile Strength		N/mm ²	≥26	UNE 36080	
Elongation		%	340-470	UNE 36080	
VIRGIN PTFE EN-1337-2 STANDARD					
TESTS		UNITS	SPECIFICATION	STANDARD	
Tensile Strength		N/mm ²	20-30	UNE 53510	
Elongation		%	200-300	UNE 53510	

Completed Project list in Pakistan:

- 1 Bridge lifting and Rectification of Bearing pads at Lahore Sialkot Motorway.
2018 NHA ZEERUK FWO**
- 2 Supply of Wire Mesh fence at Peshawar-Karachi Motorway (PKM)
Sukkur-Multan Section 5 & 6
2018 NHA SMEC China State Construction Engineering Corporation Ltd.**
- 3 Replacement of old Bearing pads with new at Bridge No. 04 overlay and
Extension of Super Highway to motorway (M-9) Project.
2020 NHA NESPAK FWO**
- 4 Replacement of old Bearing pads Timergara Khar Mohmand Ghat Road
Project Brg. No. 1,2,3,4 & 5 TKMG Road.
2021 PKHA Pavron FWO 121 QCB**
- 5 Supply of Nflex Bearing pads at Derya Khan Bridge on River Indus.
2023 PKHA NESPAK Haji Raees & Sons Construction Pvt. Ltd.**
- 6 Replacement of Bearing pads at Derya Khan Bridge on River Indus.
2023 PKHA NESPAK Haji Raees & Sons Construction Pvt. Ltd.**
- 7 Supply of Nflex Bearing pads on Lillah Jhelum Road Project.
2023 C&W NESPAK Skor Construction**
- 8 Supply of Nflex Bearing pads on Shahdara Multilevel Flyover Project Lahore.
2023 LDA NESPAK MAAKSONS**





Distributor:

SAVIOUR IMPEX: 225-J, Phase I, DHA. Lahore. 03334754751

Factory Address:

Behind Aziz Machinery Store,
Salamat Pura More, G.T.
Road, Lahore.

