

No. RW/NH-34057(1)/95-S&amp;R

Dated, the 2nd November, 2000

To

The Chief Engineers of all State PWDs/Union Territory (dealing with the National Highways and other centrally sponsored schemes); Chairman, National Highways Authority of India; Director General Border Roads

Subject: Pre-qualification of manufacturers of Bearings for Bridges on National Highways and under other centrally sponsored schemes

The Ministry had earlier pre-qualified some manufacturers of elastomeric bearings in August, 1997 which was valid upto 31.3.1999. The validity period was subsequently extended upto 31st March, 2000. Meanwhile, a Committee for empanelment of manufacturers/suppliers for all types of bridge bearings was constituted by the Ministry in December, 1999. Since the process of inviting applications for fresh empanelment, scrutinizing the same, carrying out inspection of factories and finally evaluation of the data obtained by the Committee was expected to involve sometime, the validity period of the existing pre-qualification for elastomeric bearings was further extended in stages upto 30th June, 2000 and finally upto 31st December, 2000.

2. With a view to making a fresh pre-qualification of manufacturers/suppliers of elastomeric bearings, POT-cum-PTFE bearings, Steel Roller/Rocker bearings, Spherical and Pin bearings, the Ministry on the recommendation of the Committee, had invited applications for empanelment from the interested manufacturers/suppliers of these types of bearings through an open advertisement put in the leading newspapers in January, 2000.

3. The applications for pre-qualification/empanelment of the manufacturers/suppliers of the various types of bridge bearings, received from the different firms, have been examined by the Committee in the light of report/recommendations of the various inspection teams constituted for this purpose. Based on the recommendations of the Committee the eligible applicant firms have been approved for empanelment under the following three categories:

- (i) Elastomeric bearings (12 Firms)
- (ii) POT-cum-PTFE bearings (10 Firms)
- (iii) Steel Rocker and Roller/Pin bearings (8 Firms)

As per list at Annexure-I  
-do- Annexure-II  
-do- Annexure-III

4. The above empanelment shall be subject to the following conditions:

#### 4.1. General

4.1.1. The pre-qualified manufacturers of bearings are required to be in possession of all documents regarding procurement of raw material, i.e., steel, cast/forged steel, PTFE and neoprene.

4.1.2. The manufacturers of bearings are required to have in-house capacity for designing the bearings based on the data supplied by the clients regarding the forces, movements, rotation, etc.

4.1.3. The personnel of the agencies (viz. States/UT PWDs, NHAI, BRO, etc.) who are concerned with the acceptance of the bearings shall ensure that all acceptance tests for materials and finished bearings selected randomly as per prescribed procedure are carried out in their presence in an independent reputed testing laboratory.

4.1.4. It is essential that strict enforcement of codal stipulations for process and acceptance control tests as per IRC:83-(Part-I & Part-II) and Ministry's Specifications for Road and Bridge Works is exercised while accepting the supply of bearings. To achieve this objective, the agencies shall get the personnel concerned with acceptance of bearings adequately trained for making them fully conversant with the relevant IRC codes and specifications.

#### 4.2. Neoprene Bearings

4.2.1. Neoprene WRT, Bayprene 110, Skyprene B-5 and Denka S-40 V grade may be used as raw elastomer for the manufacture of elastomeric bearings. No other chloroprene should be accepted as equivalent of Neoprene WRT until further orders.

4.2.2. The pre-qualified manufacturers of elastomeric bearings shall be in possession of the required documents to establish that they are direct importers of chloroprene or purchasers from authorized representatives of the foreign

firms and they should be in a position to produce these documents and also records showing total year-wise import as well as the details regarding the bearings produced year-wise on demand to the clients or any of the inspecting authorities. All the representatives of States/Union Territory PWDs concerned with the acceptance of elastomeric bearings shall ask for the above documents from the pre-qualified manufacturers so as to ensure that imported chloroprene has been used as raw elastomer in the production of elastomeric bearings, by the pre-qualified manufacturers.

4.2.3. It shall be clearly specified in the contract documents that the suppliers of elastomeric bearings shall provide with their quotations, the details of break-up of quoted rates including the prevailing price of imported raw elastomer used by them in the manufacture of elastomeric bearings to arrive at the quoted rate of the finished bearings per cubic centimeter.

4.2.4. Notwithstanding, the provision of Clause 918.3.2 of IRC:83-(Part-II), it is specified that for smaller lots (i.e. less than 24 nos.) of bearings, an extra bearing shall be manufactured. Out of the lot, one bearing is to be selected at random for carrying out material tests. This bearing shall be excluded from the lot accepted.

4.2.5. It is necessary that all the manufacturers of all elastomeric bearings shall have in house facilities for identification of polymer of the neoprene including testing facilities for carrying out infrared spectro-photometry as per ASTM D-3677. This may be verified before placement of order.

4.2.6. The periodical test for ozone resistance of the elastomer shall be got done by the supplier in accordance with the Clause 915.2.3 of the code IRC:83(Part-II). A record of test results for bearings (for both in house and that of outside agencies) shall be systematically maintained in the manufacturing unit and shall be produced to the accepting authority on demand.

4.2.7. The following undertaking shall be taken from all the intending suppliers for any job:-

- (a) "We undertake to use \_\_\_\_\_ (Name of chloroprene) in the manufacturing of the bearings and that the same shall be imported by us directly from \_\_\_\_\_ (Name of manufacturer)/ purchased from \_\_\_\_\_ (Name of agent) who is the authorized Indian Agent of M/s \_\_\_\_\_ (Name of manufacturer)
- (b) "We hereby guarantee against defective materials manufacture, workmanship as well as certify quality assurance at every step of manufacturer of \_\_\_\_\_ (Nos). Elastomeric bearings that may be supplied by us as per this office and which shall be installed at the \_\_\_\_\_ (name of the bridge) for a period of 15 years, under normal loading, normal traffic and routine maintenance. We also stand guarantee for the free repair and replacement (including the cost of placing the new bearings in position) in part or full, if any defect is found in the bearings or part thereof within the period of 36 months from the date of supply or 24 months from the date of installation, whichever is earlier, except for defects arising out of theft, pilferage, flood, earthquake or any other natural calamity etc., over which we have no control".
- (c) "We also give an undertaking that the entire manufacturing and testing process shall be open to inspection by the agents of the State/UT PWDs/NHAI or their authorized representatives and that all possible help shall be extended in conducting the relevant tests required as per IRC:83 (Part-II)-1987 and other instructions issued by the Ministry of Surface Transport from time-to-time".

Note:- This clause is applicable for elastomeric bearings and Pot-cum-PTFE bearings only.

#### 4.3. Pot-cum-PTFE Bearing

The pot being the most important component of the Pot-cum-PTFE bearing, the client should ensure themselves, the proper quality of casting of the pot in the firm's respective casting unit. This pre-qualification of the bearing manufacturers does not include their associates for casting of the pot and supplying these to the pre-qualified firms.

5. The proposed pre-qualification of the firms for manufacture/supply of various types of bridge bearings shall be valid upto 31st December, 2002.

6. A report on the performance of bearings supplied, (particularly with reference to any adverse behaviour, like, bulging, flattening, splitting, etc. for the neoprene bearings) may be maintained and sent to the Ministry on a yearly basis by 30th April every year.

7. The contents of this letter may be brought to the notice of officers of your Department dealing with works on National Highways and other Centrally Sponsored Schemes.

**Enclosure to Ministries letter No. RW/NH-34057(1)/95-S&R**  
**Dated : the 2nd November, 2000**

**Annex-I**

**List of prequalified manufacturers of elastomeric bearings for supply to bridges on National Highways and other centrally sponsored schemes**

Sl. No.	Name of the Firm
1.	Elastomet Bearing Pvt. Ltd. 42-B, Motilal Basak Gardens, Calcutta (India)-700 054
2.	Exjornet & Allied Products Pvt. Ltd. 42-B, Motilal Basak Gardens, Calcutta (India)-700 054
3.	Atur Rubber Products, Atur Chambers, 2-A, Moledina Road, Pune-411 001
4.	Construction Equipment Company, C-6, Shastri Nagar, Meerut - U.P.
5.	J.K. Steel & Polymer (India), 506, Model Town, Yamuna Nagar - 135 001, Haryana
6.	Hevea Rubber Technologies Pvt. Ltd., 21, Development Plot, Y.M.A. Road, Poovanthuruthu P.O. Kottayam-686012, Kerala
7.	The Freyssinet Prestressed Concrete Co. Ltd., 2nd Floor, Alankar Cinema Building, Lajpat Nagar-III, New Delhi-110 024
8.	J. Sons Engineering Corporation Ltd. E-341, Mayur Vihar Phase-II, Delhi-110 091
9.	Steel Auto Industries, 506, Model Town, Yamuna Nagar, Haryana-135001
10.	Kanta Rubbers Pvt. Ltd. 5-5-156, Lala Temple Street, Ranigunji, Secunderabad-500003(AP)
11.	Sanfield (India) Ltd. 62, Zone-II, M.P. Nagar, Bhopal-462011 (India), M.P.
12.	Killick Nixon Limited, Killick House, Killick Estate, Baji Pasalkar Marg, Chandivli, Bombay-400072

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**Annex-II**

**List of prequalified manufacturers of Pot-cum-PTEE Bearings for supply to bridges on  
National Highways and other centrally sponsored schemes**

Sl. No.	Name of the Firm	Sl. No.
1.	Metco Group Engineers Pvt. Ltd. 42-B, Motilal Basak Gardens, Calcutta (India)-700 054	1.
2.	Steelmet Bridge Bearing Pvt. Ltd. 42-B, Motilal Basak Gardens, Calcutta (India)-700 054	2.
3.	Metal Engineering & Treatment Co. Ltd. 42-B, Motilal Basak Gardens, Calcutta (India)-700 054	3.
4.	Atur Rubber Products, Atur Chambers, 2-A, Moledina Road, Pune-411 001	4.
5.	J. Sons Engineering Corporation Ltd. B-341, Mayur Vihar Phase-II, Delhi-110 091	5.
6.	J. Sons Engineering Corporation (India) J. Sons House, Garth Road, Meerut-250002 (UP)	6.
7.	Steel Auto Industries, 506, Model Town, Yamuna Nagar, Haryana-135001	7.
8.	Sanfield (India) Ltd. 62, Zone-II, M.P. Nagar, Bhopal-462011 (India), M.P.	8.
9.	Tefcon Bearing Pvt. Ltd. 24, Padma Darshan Society, Behind Rawat Show Room, Satara Road, Pune-411 009	
10.	Killick Nixon Limited, Killick House, Killick Estate, Baji Pasalkar Marg, Chandivli, Bombay-400072	

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**Annex-III**

**List of prequalified manufacturers of Steel Rocker & Roller/Pin Bearing for supply to bridges on  
National Highways and other centrally sponsored schemes**

Sl. No.	Name of the Firm
1.	Metco Group Engineers Pvt. Ltd. 42-B, Motilal Basak Gardens, Calcutta (India)-700 054
2.	Metal Engineering & Treatment Co. Ltd. 42-B, Motilal Basak Gardens, Calcutta (India)-700 054
3.	Steelmet Bridge Bearing Pvt. Ltd. 42-B, Motilal Basak Gardens, Calcutta (India)-700 054
4.	Yantrique Construction Pvt. Ltd. 23-A, Netaji Subhas Road, 6th Floor, Room No. 18, Calcutta-700001
5.	J. Sons Engineering Corporation Ltd. E-341, Mayur Vihar Phase-II, Delhi-110 091
6.	J K Heavy Engineers 506, Model Town, Yamuna Nagar, Haryana-135001
7.	J. Sons Engineering Corporation (India) J. Sons House, Garth Road, Meerut-250002 (UP)
8.	Steel Auto Industries, 506, Model Town, Yamuna Nagar, Haryana-135001