

Illinois Department of Transportation
Bureau of Bridges and Structures

**Prequalified Structural System (PQSS) List
HIGH LOAD MULTI-ROTATIONAL BEARINGS**

February 16, 2024

This list supersedes the **November 9, 2023** list.
For Guide Bridge Special Provision **GBSP13**

For information regarding new system submittals, see pages 2 and 3

<p>Con-Serv, Inc. 685 Aviation Blvd. Georgetown, SC 29440 Producer Number: 6221-01 Date Expires: 07/17/2025 (Pot) Date Expires: 07/17/2025 (Disc) Contact Name: David Drummond Phone Number: (843) 546-1044 Material Code: 70308 (Pot) Material Code: 70322 (Disc)</p>	<p>R. J. Watson 11035 Walden Avenue Alden, NY 14004 Producer Number: 5330-01 Date Expires: 07/25/2025 (Disc) Contact Name: Marc D. Stafford Phone Number: (716) 901-7020 ext. 15 Material Code: 70322 (Disc)</p>
<p>TOBI Engineering, Inc. 27709 West Concrete Drive Ingleside, IL 60041 Producer Number: 1400-01 Date Expires: 09/07/2027 (Pot) Date Expires: 09/07/2027 (Disc) Contact Name: Tom Korshak Phone Number: (847) 724-7880 Material Code: 70308 (Pot) Material Code: 70322 (Disc)</p>	<p>Cosmec, Inc. 1501 Rocky Ridge Road P.O. Box 2159 Athens, TX 75751 Producer Number: 5522-02 Date Expires: 10/09/2024 (Disc) Contact Name: Kerry Marchand Phone Number: (508) 455-3290 Material Code: 70322 (Disc)</p>
<p>D.S. Brown Company 300 East Cherry Street North Baltimore, OH 45872 Producer Number: 256-01 Date Expires: 1/28/2026 (Disc) Contact Name: Adam Wellington Phone Number: (419) 257-3561 Material Code: 70322 (Disc)</p>	<p>Mageba USA, LLC 191 South Kiem Street, 2C-1 & 2C-2 Pottstown, PA 19465 Producer Number: 7230-01 Date Expires: 01/10/2024 (Disc) Contact Name: Tiago Destefani Phone Number: (508) 250-2656 Material Code: 70322 (Disc)</p>
<p>RBC Lubron Bearing Systems, Inc. 13141 Molette St. Santa Fe Springs, CA 90670 Producer Number: 7336-01 Date Expires: 06/15/2027 (Disc) Contact Name: Nancy Garcia Phone Number: (714) 841-3007 Material Code: 70322 (Disc)</p>	

Note: Expiration date is four years from when the long-term deterioration test was successfully performed.

Domestic Steel Act Applies:

All iron and steel products, which are to be incorporated into state projects shall be domestically manufactured or produced and fabricated. The Contractor shall obtain from the iron or steel producer and/or fabricator, in addition to the mill analysis, a certification that all iron or steel materials meet these domestic source requirements. The application of all coatings, epoxy, galvanizing, painting, etc., to metal products shall be domestically applied.

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Submittal Requirements for Evaluation and Prequalification

A. Scope

Before materials can be used for a Department project, the manufacturer/supplier must have a producer/supplier number assigned to their facility (see approval procedures at <https://idot.illinois.gov/doing-business/material-approvals/producer-and-supplier-approval.html>). The following guidelines are provided to clarify the submittal requirements and expedite the process.

B. Procedure

Companies interested in being considered for prequalification to fabricate HLMR bearings as specified in the Guide Bridge Special Provision (**GBSP 13**) for HLMR Bearings shall provide an electronic copy of a system approval package to the Department at [DOT.Bridge.ProductEvaluations](#) for review and evaluation. As a minimum, the system approval package should contain the following:

1. Acknowledgement by Company Form [BMPR 101](#) (locate the form [here](#), right-click and "Save link as..." to download a working copy and open in a separate PDF editor). If your company does not already have a product included on an IDOT **PQSS**, please submit a signed copy of the company acknowledgement form with your product submittal.
2. Bearing manufacturer's company name to be listed on the web site and other contact/address information.
3. Contact Person's Name, title, address, email address and phone number.
4. Any supporting research if available.
5. A brief list of recent past projects where your company's bearings have been used including owner's name and phone number.
6. Show typical shop drawings, notes, and plan details including installation instructions.
7. All materials specifications.
8. Any literature, case histories, and brochures providing insight into the bearing use and applications.
9. To complete your pre-qualification process, the material code you propose to utilize at the fabrication plant(s) supplying your product needs to be approved by the Bureau of Materials and Physical Research.

The material code for pot bearings is 70308.
The material code for disc bearings is 70322.

Please see the following link:

<https://idot.illinois.gov/doing-business/material-approvals/producer-and-supplier-approval/obtain-approval.html>

10. Prequalification Long-Term Deterioration Test package.

- a. This test shall be performed on one expansion bearing with a rated capacity of 300 kips (1335 KN) or higher. The bearing shall be loaded to the rated capacity, and then subjected to the plus and minus .02 radians rotational displacement amplitude for 5000 cycles. The bearing shall also be displaced through at least 1000 cycles with a plus and minus amplitude equal to 1 inch (25 mm). The maximum sliding speed for this test shall be 10 inches (500 mm) per minute. Damage visible to the naked eye upon disassembly of the bearing such as, cracks, or splits in the material, or a coefficient of friction which exceeds the value allowed for the material used, shall be grounds for rejecting the test. A successful, accepted test will result in prequalification good for no more than four years.
- b. Provide video of last 2 minutes of each of the two tests described above.

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- c. Photographs of the complete bearing assembly and of each of the primary components before and after testing.
- d. Certified copies of any test reports on the physical properties of the applicable component materials (Elastomer, PTFE, Stainless steel sheet, and Polyether urethan disc) for the bearing tested . Submittals with insufficient test data and supporting certifications will not be accepted.
- e. Submit a third-party witness verification statement to the testing.

If you have any questions concerning the specification or the requested information, please contact the Policies, Standards and Final Plan Control Unit at DOT.Bridge.ProductEvaluations@Illinois.gov.

C. Renewal of Prequalification

Companies are required to recertify their HLMR bearing systems on a four-year cycle in order to remain on the prequalified product list. It is the responsibility of the HLMR bearing producer to monitor when their HLMR bearing system prequalification expires and to resubmit for approval 3 months prior to the expiration date. Each HLMR bearing system submitted for recertification shall have some sort of version tracking included in the name (e.g. ver. 12-2022). This is applicable for the standard four-year recertification and any recertification required due to HLMR bearing detail or code modifications. This will allow the Department to easily verify that the HLMR bearings shown in shop drawings are the currently approved version. The Department reserves the right to remove any bearing system based on past performance. In addition, it is the responsibility of the manufacturer/supplier to inform the Department of any changes in design or component information, contact information, etc. If it is discovered that changes have been made without informing the Department, the Department reserves the right, depending on the severity of the omission, to remove that system from the pre-qualified list.

Presence on this list does not exempt the manufacturer/supplier from meeting all the job specific submittal requirements and all the material requirements specified including component testing and/or material certifications as applicable.