

ELASTOMERIC BRIDGE BEARINGS

D. S. Brown Company	N. Baltimore, OH	(419) 257-3561
Dynamic Rubber Company	Athens, TX	(903) 677-2871
Metal Products, Inc.	Jefferson City, MO	(573) 635-8556
Scougal Rubber Corp.	Seattle, WA.	(206) 763-2650
Seismic Energy Products	Athens, TX	(903) 675-8571
Tobi Engineering	Glenview, IL	(847) 724-7880

METHOD OF DOCUMENTATION OF ACCEPTANCE: By manufacturer's Certificate of Compliance, certified laboratory test reports, and mill test reports approved by the Materials Division. These certifications and test reports shall be approved prior to shipment. Each bearing shall be marked in accordance with the requirements of Section 808 of the Standard Specifications and any supplemental specifications or special provisions.

METHOD OF APPROVAL FOR MANUFACTURERS TO BE ADDED TO THE QUALIFIED PRODUCTS LIST: Listed manufacturers must agree to the requirements for certification as listed in the following pages. Failure to follow the certification agreement and/or failing test results of random samples will be cause for removing a manufacturer from this QPL.

**AGREEMENT FOR THE ACCEPTANCE
Of
ELASTOMERIC BRIDGE BEARINGS**

This procedure is applicable to Plain or Steel Laminated Elastomeric Bridge Bearings or to Sliding Elastomeric Bearings. Elastomeric Bridge Bearings will be accepted by the Arkansas Highway and Transportation Department based on the following requirements for manufacturing, inspection, and certification:

- All iron and steel materials used on Department projects must be in compliance with "Buy America" requirements and the Department's "Standard Specifications for Highway Construction", Subsection 106.01. This means all manufacturing processes on the iron or steel in a product (i.e., smelting/remelting, and any subsequent process which alters the steel material's physical form or shape or changes its chemical composition) must occur within the United States to be considered of domestic origin. This includes processes such as rolling, extruding, machining, bending, grinding, drilling, or applying coatings. The use of pig iron or processed, pelletized, and reduced iron ore manufactured outside of the United States is permitted in the domestic manufacturing process for steel and/or iron materials. All steel mill test reports will contain a statement certifying that all manufacturing processes for the steel occurred in the United States. Each supplier/fabricator of an intermediate product will also certify that the product complies with "Buy America" requirements.
- Manufacturers must be approved by the Arkansas Highway and Transportation Department (AHTD) prior to fabrication of any elastomeric bridge bearings for an AHTD project.
- A representative of the Materials Division will review the plant facilities, its operations, testing facilities, and the requirements of this procedure with the Manufacturer.
- The bearing manufacturer shall furnish a Certification for each shipment containing a statement that each bearing meets the Specifications (indicate the year of the Standard Specification and any supplemental specifications or special provisions).
- A minimum of one copy of the Certification, laboratory test reports, and mill test reports shall be furnished to the Resident Engineer for subsequent submittal to the Materials Division for review and approval. Approval shall be obtained prior to shipment.
- The bearing manufacturer shall perform Quality Control inspection and Acceptance Testing in accordance with the minimum requirements detailed below.

Quality Control by the Manufacturer

The Bearing Manufacturer shall submit a Quality Control Plan for the manufacture of elastomeric bearings to the Materials Division for review and approval. The Plan shall detail the inspection and testing proposed to insure the elastomeric bearings comply with the Standard Specifications and other referenced specifications. The Quality Control Plan shall be submitted sufficiently in advance to allow a complete review by the Engineer.

The Manufacturer shall be responsible for the costs involved in the development and execution of this Quality Control Plan, including testing specified in the Standard Specifications, plans, and in other referenced specifications. Further, the Manufacturer shall be responsible for the cost of the necessary correction of all deficiencies.

Quality control inspection during manufacturing and prior to any repairs shall be performed to assure that bearings meet the referenced specifications. Non-complying bearings shall be rejected and shall be segregated from those conforming to specifications. Those, which are considered repairable, may be repaired and included with the conforming bearings. Test reports submitted for approval shall include a report on bearings which were repaired or rejected.

The Manufacturer shall be responsible for, as a minimum, the following Quality Control items:

1. Maintenance of records for steel used in the manufacture of bearings and maintaining the heat traceability. The Manufacturer shall review mill test reports for compliance with the referenced specification, including the "Buy America" provisions. Records shall be maintained for a minimum of three (3) years.
2. Testing of the elastomer used or obtaining and reviewing test reports from the elastomer manufacturer or acceptable third party to assure the elastomer complies with specifications. The bearing manufacturer shall maintain the lot identity of elastomer used in the manufacture of bearings.
3. Dimensional inspection of finished bearings - individual layer dimensions and placement as well as overall dimensions.
4. The Manufacturer shall maintain records of inspections and shall furnish such records upon request. Inspection records shall be signed and dated.
5. The Manufacturer may perform any additional quality control testing the Manufacturer deems necessary.

Acceptance Testing by the Manufacturer

For acceptance purposes, bearings shall be individually proof loaded and inspected in accordance with the specifications. Records of the proof load tests shall be maintained. Proof loads shall be maintained within 10% of that designated for the prescribed period. For long duration proof tests, loads shall be monitored and recorded at least every ten minutes or, if controlled by automatic equipment, a record shall be maintained. Test reports shall be signed and dated.

For short duration proof tests and long duration proof tests (as appropriate), a certification shall be submitted showing the number of bearings represented, bearing lot number, bearing identification (or appropriate description), number of bearings tested, test dates, and actual proof loads. The certification shall indicate the number of bearings accepted and shall also report any failing bearings.

The Department reserves the right to witness the manufacturer's Quality Control operations and/or acceptance tests at the point of manufacture, and/or inspect all records of the manufacturer relative to the Quality Control operations and inspection of any bearing. At a frequency determined by the Department, random inspection and testing may be performed by an authorized AHTD inspector. The manufacturer shall notify the Department of manufacturing operations sufficiently in advance to provide an opportunity for inspection.

The Department reserves the right to reject any bearing which fails to conform to the referenced specifications, either in the manufacturing plant or at the project site.

Please acknowledge agreement to the above requirements by signing and returning a copy of the letter for our producer files.

Company Name - Plant Location

Signature

Typed/Printed Name

Date

Telephone No.: _____ Fax No.: _____ Email Address: _____