

FRICITION MATERIAL - MOLDED BLOCK WITH METALLIC FRICTION PARTICLES**1.0 SCOPE**

- 1.1 This specification covers the characteristics of a friction material used on clutch shoes and brake bands for use on dry contact with friction drums.
- 1.2 It is recommended for high duty cycle applications.

2.0 PHYSICAL PROPERTIES

- 2.1 This material is an asbestos/organic containing product with metal chips.
- 2.2 It exhibits a medium to high coefficient of friction with good elevated temperature stability.

3.0 MECHANICAL PROPERTIES

- 3.1 The mechanical properties shall be as specified under Paragraph 7.0 for each product furnished under this Specification.
- 3.2 These properties are not a complete description of the product required and are stated only as reference material for descriptive purposes. Conformance shall not constitute the sole basis of acceptance. The material must be judged further on its ability to perform satisfactory in the field on P&H equipment.

4.0 MANUFACTURING PRACTICES

- 4.1 The products furnished shall be produced to Harnischfeger Corporation detailed drawings. Identification or marking shall be as indicated on the detailed drawing or in accordance with the section on part identification in the Harnischfeger Quality Control Standard.
- 4.2 All tolerances as they apply shall be specified under Paragraph 7.0 for each vendor.
- 4.3 It is expected that the manufacturer will exercise inspection procedures to assure that the material is controlled within acceptable limits of quality control.

5.0 IDENTIFICATION

- 5.1 In addition to the Harnischfeger Corporation part number, the name and brand of the manufacturer shall legibly appear on each piece in such a way as to be readily identified.
- 5.2 Each package, container, bundle or lift shall be tagged or marked with the following information:
 - 5.2.1 Harnischfeger Name or Trademark and Purchase Order Number
 - 5.2.2 Suppliers Name
 - 5.2.3 Grade or Specification Number
 - 5.2.4 Harnischfeger Part Number

6.0 INSPECTION AT PURCHASER'S WORKS

- 6.1 Acceptance of material furnished under this specification shall be subject to confirmation by Harnischfeger Materials Engineering and Quality Control Departments.
- 6.2 The purchaser shall have the option of accepting or rejecting material that fails to meet any of the requirements of this specification.
- 6.3 In the event of rejection, the supplier will be granted a hearing at his request.

7.0 APPROVED SOURCES, MECHANICAL AND PHYSICAL PROPERTIES, SIZE RANGE AND TOLERANCES**7.1 National Friction Products Corporation - Material NF-802****7.1.1 Mechanical and Physical Properties**

Kinetic Coefficient of Friction	.41
Maximum Recommended Pressure	2,000 P.S.I.
Maximum Recommended Rubbing Speed	3,000 F.P.M.
Maximum Constant Operating Temperature	500°F
Wear Rate (Cu. In./Hp. Hr.)	.0079
Specific Gravity	1.77 ± .07
Tensile Strength	2,800 P.S.I.

7.1.2 Size Range

National Friction Products will quote sizes on specific parts.

7.1.3 Standard Tolerances

National Friction Products will set tolerances on specific parts.