

Rolling Element Bearing Test Methods

1. SCOPE:

This SAE Aerospace Recommended Practice establishes methods for testing airframe Rolling Element bearings. The purpose of ARP5483 and its associated slash sheets is to document test methods commonly used to evaluate airframe bearings. These test methods may be referenced in standards, purchase orders, etc. when the test is deemed appropriate to the intended use of the bearing by the end user of the bearing. These test methods are not intended to encompass every conceivable requirement for an airframe bearing. The end user of the bearing must exercise engineering judgment to determine the most appropriate standard and/or nonstandard tests for the application.

2. APPLICABLE DOCUMENTS:

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

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SAE ARP5483

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

ARP5483/1	Rolling Element Bearing No-Load Torque Test
ARP5483/2	Rolling Element Bearing Hardness Test
ARP5483/3	Rolling Element Bearing Axial and Radial Internal Clearance Test
ARP5483/4	Rolling Element Bearing Axial Limit Load Test
ARP5483/5	Rolling Element Bearing Radial Limit Load Test
ARP5483/6	Rolling Element Bearing Thermal Stabilization Test
ARP5483/7	Dynamic Radial Load Test, Track Roller Bearings
ARP5483/8	Rolling Element Bearing Dynamic Radial Load Test

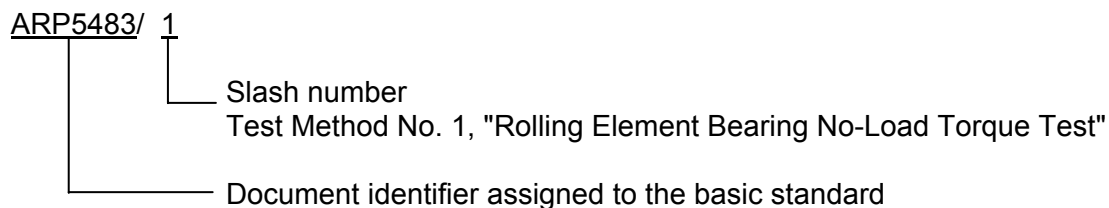
3. GENERAL REQUIREMENTS:

3.1 Test Method-Numbering System:

This standard consists of a general basic document and supporting slash sheet documents. Each slash sheet document addresses a specific test method, which is designated by a slash number commencing with number 1. A different slash number is assigned to each test method.

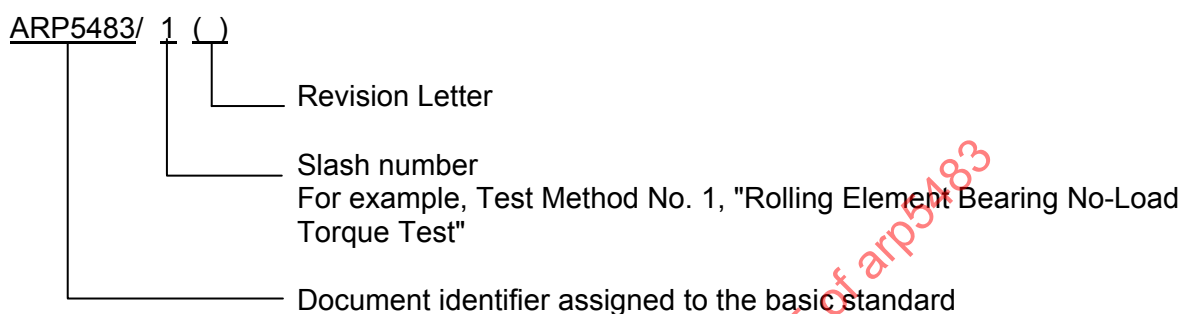
3.2 Document Format:

Each test method is prepared as an individual document in the format of an Aerospace Recommended Practice. The basic document identifier, ARP5483, followed by a sequential slash number identifies the individual test method. The slash number is identical to the number of the test method. Example:



3.3 Method of Revision:

The individual test method is revised and issued independent of the other parts. Revisions are identified by a capital letter immediately following the document identifier dash number. Example:



3.4 Selection of Tests:

Both the application requirements and the bearing characteristics that affect its performance in the application should be considered when selecting tests. After these essential properties have been determined, the appropriate test should be selected and specified for each property. Care should be taken to specify only those tests that are needed.

3.5 Method of Reference:

Test methods shall be referenced by specifying:

- The test method number with the applicable slash sheet number. For example: "The bearing shall be tested in accordance with ARP5483/1" to specify the current version.
- Test criteria or property values required.