Transport Roads & Maritime Services

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T920
Test Method

Test method T920

Test for rotation of pot type bearings

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Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary Added	D. Dash	Jun 2001
Ed 2/ Rev 0	All	Reformatted RMS template	J Friedrich	November 2012

Note that Roads and Maritime Services is hereafter referred to as 'RMS'.

The most recent revision to Test method T920 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T920

Test for rotation of pot type bearings

1. Scope

This method sets out the procedures for the rotation testing of pot type bearings.

2. Apparatus

(a) A compression testing machine with upper and lower platens whose dimensions are greater than the bearings to be tested.

(b) The force ranges of the machine i.e. both vertical and horizontal must be calibrated to AS2193 - Grade A.

(c) Chart recorder.

3. Procedure

(a) Place the tapered plate in the centre of the loading table with the taper parallel to the axis of the side arm. The value of the taper should be that stated in the drawings rounded upwards to the nearest .005 radiens.

(b) Place the bearing centrally on the tapered plate with the guide restraints (if guided bearing) at 90 to the side ram axis.

(c) Place the shear plate centrally on the top of the bearing.

(d) On top of this plate and in the centre is placed either:

(i) a free floating bearing, or
(ii) a guided bearing with guides parallel to the side ram axis or;
(iii) a calibrated sliding surface.

Note: If bearings are used they must be back to back with the lower bearing.

(e) The facility is now switched on and the test assembly is pulled back into the test frame (if this is an option in the design of the machine).

(f) Insert the shear bar, if applicable, adjust the side ram to take up any free movement and tighten the nuts.

(g) Apply the maximum vertical V max as indicated in the drawings.

(h) Fit spacers between the bearing guides and the fixed retaining plates on the shear plate and the bottom platen.

(i) Apply the lateral load to the guides by means of the side ram.

(j) Maintain the loads for 3 minutes.

(k) Reduce the side load to zero, and remove the spacers.

(l) Reduce vertical load to zero and lower bottom platen to zero position. Remove shear bar if used.

(m) Draw the assembly out of the test frame.

(n) Dismantle and examine the bearing(s).

4. Reporting

Report if the bearings conform to the rotation test requirements of the relevant specification.