

To: Gary Chivers
From: Paul Moreland
Ref: swm/lab/235
Date: 26th October 2016

Manufacturer: Takumi Precision Engineering
Description: Bearing Installation Qualification – Tooling
Specification: BAPS 175-004 Rev A
Bearing Spec: MS 14103-10 and MS 14103-12

Physical Laboratory Findings

Operator:	Kevin McCarthy	
MS 14103-10	Bearing visually inspected at 10x.	Satisfactory.
1 off Test Plate	Bearing proof load. (2,600 lbs)	Satisfactory.
Swaging Tool Ident	Bearing Torque Rotation. (1.0-1.5 in.lbs)	Satisfactory
CMDST-MS14103-10	Movement of bearing within housing.	Satisfactory.
	Bearing Alignment:	Satisfactory.

Operator:	Kevin McCarthy	
MS14103-12	Bearing visually inspected at 10x	Satisfactory
1 off Test Plate	Bearing proof load. (3,400 lbs)	Satisfactory
Swaging Tool Ident	Bearing Torque Rotation. (10.0-11.0 in.lbs)	Satisfactory
CMDST-MS14103-12	Movement of bearing within housing	Satisfactory
	Bearing Alignment	Satisfactory

Approval has been granted to Takumi Precision Engineering for the installation, test and inspection of the above listed bearings to the requirements of BAPS 175-004.

Qualification of a process is site and line specific and is not transferable under any circumstances. Once the process is qualified, no change shall be made to any of the processing conditions used to perform and control the process, without written agreement of BAMPE.

Qualification of a swaging tool for any bearing of a particular size and material, qualifies the tool for swaging all bearings of all part numbers in that size and material, in all housing materials.

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