

REPORT NUMBER: GZ11080428-4R1

Superseded the report No. GZ11080428-2 dated on November 8, 2011

ISSUE DATE: November 8, 2011

EVALUATION CENTER

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Block E, No.7-2 Guang Dong Software Science Park, Caipin Road,
Guangzhou Science City, GETDD, Guangzhou, China

RENDERED TO

ANGEL METAL CO., LTD.

#1099, WORAM-DONG, DALSEO-GU, DAEGU, SOUTH KOREA

PRODUCT EVALUATED: Hinge model 'AHG2-S5040-stainless steel (A5112)'

EVALUATION PROPERTY: Grade 2

**Engineering Evaluation of Steel Hinge and Stainless Steel Hinge
All Function for compliance with the applicable requirements of
the following criteria: ANSI/BHMA A156.1: 2006 American
National Standard for Butts and Hinges.**

1 Introduction

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch has conducted an engineering evaluation for ANGEL METAL CO., LTD. on Stainless Steel Hinge, to evaluate cycle test, hinge pin rise test, vertical and lateral wear test and overload test. The evaluation was conducted to determine if all Functions would maintain compliance with ANSI/BHMA A156.1: 2006 American National Standard for Butts and Hinges.

2 Sample and Assembly Description

Samples were submitted to Intertek directly from the manufacturer: ANGEL METAL CO., LTD., Samples were received at the Evaluation Center on July 13, 2011.

Model No.	Specification	Construction	Material	BHMA Number
AHG2-5040-steel	5.0"×4.0"×3.7MM	2 bearing	steel	A8112
AHG2-S5040-stainless steel	5.0"×4.0"×3.7MM	2 bearing	stainless steel	A5112

Refer ATTACHMENTS for photos and assembly drawings

3 Reference Documents

The model 'AHG2-5040-steel (A8112)' was previously tested by Intertek in accordance with standard ANSI/BHMA A156.1-2006, and found to be compliant to Grade 2. Results were found in Intertek Test Report GZ11080428-3R1, dated August 31, 2012.

In order to assess potential performance differences between four models, technical drawings, bill of material and samples of all models were collected.

4 Evaluation Method

Documents and samples of all models listed above were checked, and found to have the same in structure, width, height, thickness and bearings except for difference in the material.

5 Conclusion

It was determined that the model AHG2-S5040-stainless steel was similar, with minor variations, to the previously tested model AHG2-5040-steel. These variations would not significantly affect the performance.

INTERTEK TESTING SERVICES SHENZHEN LTD. GUANGZHOU BRANCH

Reported by: Credy Chen
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Engineer
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Reviewed by: Blusea Dong
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ATTACHMENTS

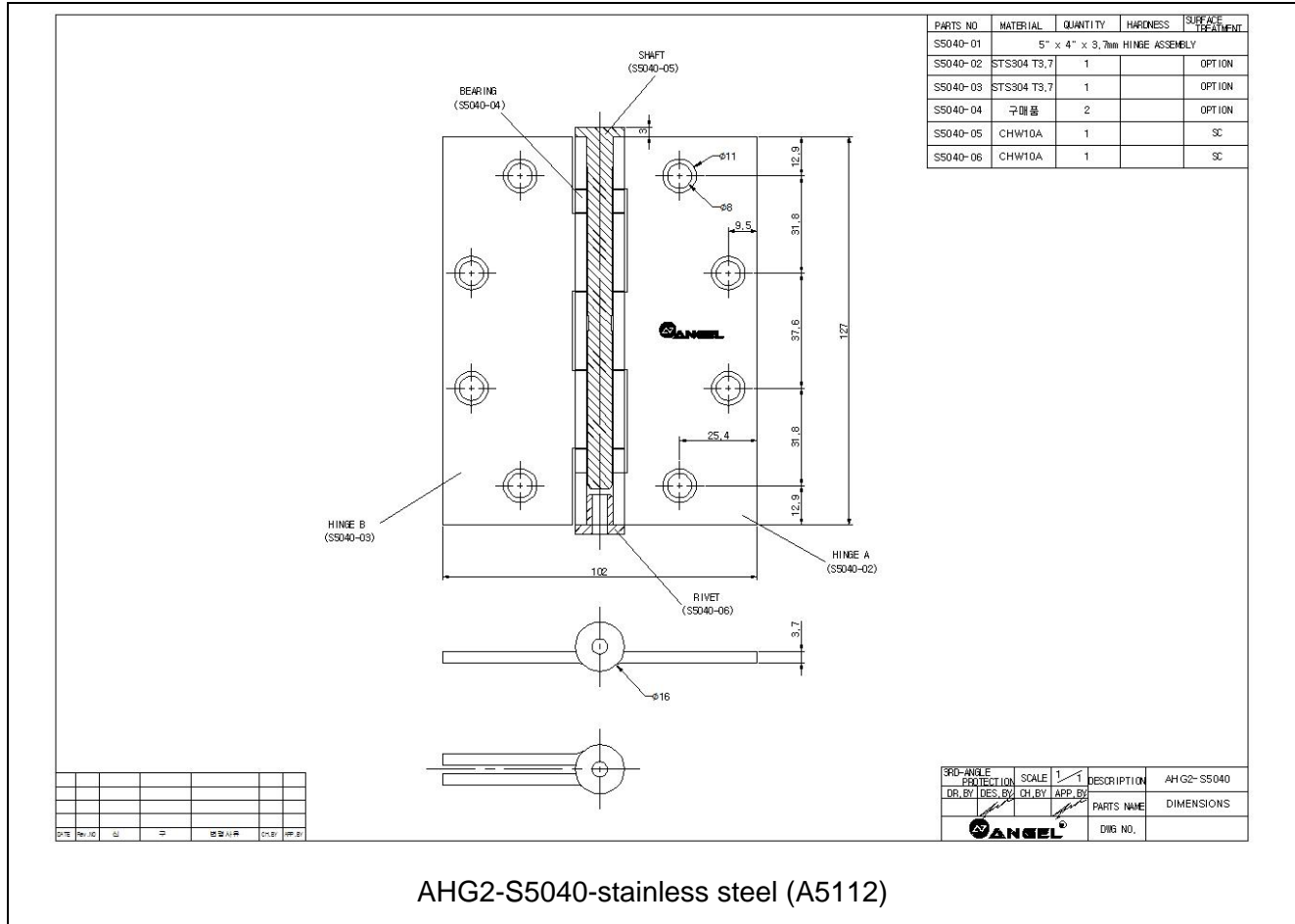
A. Sample photos



AHG2-5040-steel (A8112)



AHG2-S5040-stainless steel (A5112)



REVISION SUMMARY

DATE	SECTION		SUMMARY	INTERTEK INITIALS	
				ENGINEER	REVIEWER
November 8, 2011	/	/	Initial release	Blusea Dong	Happy Chen
August 31, 2012	/	/	Added BHMA Numbers	Credy Chen	Blusea Dong