SIRIM QAS International Sdn. Bhd.
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TEST REPORT

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THIS TEST REPORT IS ISSUED IN SECURED PDF SOFTCOPY

Applicant	: LOCTRADE SDN. BHD. No 3 & 5, Jalan Keluli AL7/AL, Pusat Perniagaan Bukit Raja, Seksyen 7, 40000 Shah Alam, Selangor, Malaysia. File No.: P5-017828 (Requested by Mr.Khairul Annuar Mohamed Azhari, ICCS 1, SIRIM QAS International Sdn. Bhd.)
Manufacturer	: ZHONGSHAN HYDI ARROW LOCK CO.,LTD. No.18, Fu'an Road, Xiaolan Town, 528415 Zhongshan, Guangdong, CHINA.
Product	: Cylinder Bored Door Lock
Reference Standard / Method of Test	: ANSI/BHMA A156.5:2014 - American National Standard for Cylinder and Input Devices For Locks
Description of sample	: Brand : Refer page 3 Model : Refer Page 3 Grade : Refer Page 3 No. of sample : 15 pieces each model
Date Received of Complete Application	: 15 June 2023
Job No.	: J20231390547
Description of Test Results	: The submitted test sample as described in this test report complied with the requirement of the above Reference Standard.
Issued Date	: 29 September 2023

Approved Signatory;

(MOHD FAUZELY BIN MUSTAPA BAKARI)	(MOHD FAIZAR BIN MUSTAFA)
Senior Testing Engineer	Head Mechanical & Automotive Section Testing Services Department

SIRIM QAS International Sdn. Bhd. MECHANICAL & AUTOMOTIVE SECTION

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TEST DESCRIPTION

1. Test sample identified as Cylinder for Tubular Leverset (GF400-619 SN) and Cylinder for Cylindrical Knobset (GY100-630 SS) were submitted for the 'ANSI/BHMA A156.5:2014 - American National Standard for Bored and Preassembled Locks and Latches'.

2. The test was conducted at Block 25, Mechanical & Automotive Section, Testing Services Department, SIRIM QAS INTERNATIONAL SDN. BHD. 1, Persiaran Dato' Menteri, Section 2, P.O. Box 7035, 40700 Shah Alam, MALAYSIA. The test was conducted from 27th July 2023 to 20th September 2023.

3. All type of tests was conducted by personnel from the Mechanical & Automotive Section (MAST), Testing Service Department, SIRIM QAS International Sdn. Bhd.

4. Simple Acceptance Rule is used for the conformity statement. The level of risk regarding the Probability of False Accept is up to 50% according to ILAC G8:09.

5. The abbreviation used in this test report denotes as follows;

   PASS: Complied with the requirement — **N/A:** Not applicable with the requirement

   FAIL: Did not comply with the requirement — **N/C:** Not conducted

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TEST RESULT

Product: Mechanical cylinder used together with Bored Door Lock ANSI/BHMA A156.2: 2017 (Cylindrical Knobset, GY100-630 SS & Tubular Leverset, GF400-619 SN)
Brand: LOCGUARD
Grade: 3
Test Method: ANSI/BHMA A156.5: 2014

CLAUSE	TEST	REQUIREMENT	RESULT / OBSERVATION		
			Sample 1	Sample 2	Sample 3
6.3	OPERATIONAL TEST				
6.3.1	Force to insert key into keyway	13 N (maximum)	5 N PASS	4 N PASS	5.5 N PASS
6.3.2	Force to extract key from keyway	13 N (maximum)	8 N PASS	4.5 N PASS	7 N PASS
6.3.3	Torque to rotate cylinder plug	0.25 Nm Grade 3 (maximum)	0.24 Nm PASS	0.20 Nm PASS	0.23 Nm PASS
6.4.5	CYCLE TEST	Grade 3 (10,000 cycles)	All three (3) samples have been sent for cycle test accordance to Grade 3.		
6.5	OPERATIONAL TESTS AFTER CYCLE TEST				
6.5.1	Force to insert key into keyway	26 N (maximum)	4 N PASS	3.5 N PASS	5 N PASS
6.5.2	Force to extract key from keyway	26 N (maximum)	3 N PASS	4 N PASS	5 N PASS
6.5.3	Torque to rotate cylinder plug	1.46 Nm Grade 3 (maximum)	0.50 Nm PASS	0.70 Nm PASS	1.00 Nm PASS

SIRIM QAS International Sdn. Bhd.
MECHANICAL & AUTOMOTIVE SECTION

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CLAUSE	TEST	REQUIREMENT	RESULT/OBSERVATION (S)		
			Sample 1	Sample 2	Sample 3
`	STRENGTH TEST				
6.6.1	Cylinder body or housing tension test	4400 N (minimum)	Not Applicable	Not Applicable	Not Applicable
6.6.2	Cylinder body or housing torque test	50 Nm (minimum)	Not Applicable	Not Applicable	Not Applicable
6.6.3	Cylinder plug pulling test	1100 N Grade 3 (minimum)	PASS No sign of cylinder's plug was removed from body or fixture when applied with the specified load for all samples.		
6.6.4	Cylinder plug torque test	14 Nm (minimum) 45° (maximum of rotation)	15 Nm PASS 19° PASS	15 Nm PASS 21° PASS	17 Nm PASS 23° PASS
6.6.5	Key strength test	2.6 Nm (maximum) 1.3 Nm (max torque operate cylinder)	2.3 Nm PASS 0.9 Nm PASS	2.1 Nm PASS 0.7 Nm PASS	2.2 Nm PASS 0.8 Nm PASS
6.6.6	Cylinder drilling and picking test		NA	NA	NA

SIRIM QAS International Sdn. Bhd. MECHANICAL & AUTOMOTIVE SECTION

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CONDITIONS RELATING TO THE USE OF SIRIM QAS INTERNATIONAL TEST REPORT

1. A Test Report will be issued in respect of Testing Services conducted and shall relate only to the sample actually tested. SIRIM QAS International makes no warranty whatsoever and the Applicant shall not represent in any manner that any duplication or mass production of the Product is same as the sample actually tested or that SIRIM QAS International has tested any of the duplicated or mass-produced Product. Measurement uncertainty shall be included in the Test Report when there is no statement of conformity required. When a statement of conformity to a specification or standard is applied, the Simple Acceptance Rule is used. Unless otherwise stated, the Acceptance Rule with Guard Band is used.

2. The Test Report shall not be misused, amended, changed, varied or modified in any manner whatsoever by the Applicant or otherwise.

3. If the Test Report is to be furnished to any third party or to the public, each such Test Report shall be furnished in full, legible and in its entirety.

4. The Test Report shall not be reproduced and shall not in any event be used for any advertising purposes or whatsoever without written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International of No 1, Persiaran Dato' Menteri, Building 8, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan.

5. Customer (Applicant/Manufacture/Factory,etc.) is not permitted to use any SIRIM QAS International, SIRIM or other SIRIM's subsidiaries logo or words on packaging, sample's manual, technical specification, items and products.

6. Subject to consent and written approval from the Head of Quality, Occupational Safety and Health & Environment (QOSHE) of SIRIM QAS International, the customer (Applicant/Manufacture/Factory,etc.) may use SIRIM QAS International logo or word on the promotional materials and the Applicant shall only include the phrase, "A sample of this product has been tested by SIRIM QAS International ...(Test Report No) ...(dated) ...(for what test) ...(to which standard)" or such similar words which stress that only the sample was actually tested. This phrase shall only be used for the purpose of product advertisement or product promotion (eg; brochures/flyers/official website). For avoidance of doubt, the statement shall not be used on the sample, packaging of the sample, items and products.

7. In the event there is an investigation from a Government Regulatory Agency concerning the Applicant's Test Report, SIRIM QAS International may disclose the information pertaining to the Test Report for purposes of such investigation.

8. In the event the Applicant is found in breach of this provision, SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries without prejudice to any other rights and remedies may take whatever action necessary including but not limited to:
   a) Informing and placing a notice in the media;
   b) Obtaining an injunction from Court (cost on a solicitor-client basis to be borne by the Applicant);
   c) Refusing to accept any further Product for Testing Services from the Applicant or whosoever related to the Applicant, whether subsidiary or otherwise;
   d) Instructing the Applicant to withdraw and recall the advertisement, statement or document in question and advertise a clarification and apology to SIRIM QAS International, SIRIM and/or other SIRIM's subsidiaries twice in a national publication of SIRIM QAS International's choice at the Applicant's sole cost; and
   e) Informing or lodging a report pertaining the Applicant's Test Report with the relevant authorities.

9. SIRIM QAS International is committed in supporting an environmentally-friendly business practices by reducing paper consumption, therefore we do not issue any hard copy of Test Report to the Applicant. However, additional certified true copy(ies) or softcopy of the Test Report may be issued upon request by the Applicant upon payment of the relevant fee. The certified true copy(ies) or softcopy of test report shall only be given for test report issued not more than three (3) years from the date of issuance.

10. Issuance of Amendment Report due to the following reasons are chargeable to the Applicant :
    a) Changes in details of the Applicant name and/or address;
    b) Changes in details of the Manufacturer's name and/or address;
    c) Changes in details of the Factory location name and/or address;
    d) Changes in details of the model and/or type designation

11. However, issuance of Supplementary Report due to the following reasons are FOC :
    a) Misprints and typo errors;
    b) Missing technical information as agreed in PP1 form;
    c) Test data not reported;
    d) Mistake in reporting of test data

12. Corrections to report shall only be allowed if the date of issuance of the original report has not exceeded 6 months and shall be limited to a maximum 3 times, after either case whichever occurs earlier, an Amendment or a Supplementary Report shall not be issued.