TEST REPORT

EN 1303

Building hardware –

Cylinders for locks – Requirements and test methods

Report Reference No. ..... :	GZ08070265-4R2
	Supersede Report No. GZ08070265-4R1 dated July 21, 2009
Tested by (name and signature) ..... :	Happy Chen
Approved by (name and signature) . :	John Qiao
Date of issue ..... :	July 23, 2009
Contents ..... :	Total test report 8 pages including: Report text: 6 pages Appendix A for product photo(s) 1 page Appendix B for product drawing(s) 1 page
Testing Laboratory name ..... :	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Address ..... :	Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China
Testing location ..... :	Same as above
Applicant's name ..... :	BESTKO PRECISION LIMITED
Address ..... :	UNIT 303, BLOCK A, PO LUNG CENTRE, 11 WANG CHIU ROAD, KOWLOON BAY, HONG KONG
Test specification	
Standard ..... :	EN 1303: 2005/AC:2008
Non-standard test method ..... :	None
Test Report Form No. ..... :	TTRF EN 1303: 2005 B
TTRF Originator ..... :	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Master TTRF ..... :	Dated 2008-01
Test item description ..... :	EURO PROFILE CYLINDER
Trade Mark ..... :	BESTKO
Model and/or type reference ..... :	BK801
Manufacturer ..... :	BESTKO PRECISION HARDWARE (SHENZHEN) COMPANY LIMITED
Rating(s) ..... :	1 6 0 1 0 B 2 0

Copy of marking on packaging

BESTKO®

Model No.:	BK801							
EN1303:	1	6	0	1	0	B	2	0

Manufacture date:

Summary of testing

The submitted samples were tested and found to **COMPLY** with applicable requirements of EN 1303:2005.

TTRF EN 1303:2005 B
Originator: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Test item particulars

Classification of installation and use.....: For use by people with a high incentive to exercise care and with a small chance of misuse

Test case verdicts

Test case does not apply to the test object.....: N/A

Test item does meet the requirement .....: P (Pass)

Test item does not meet the requirement .....: F (Fail)

Testing

Date of receipt of test item .....: July 07, 2008

Date(s) of performance of test .....: July 07, 2008 to August 25, 2008

General remarks

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"(See remark #)" refers to a remark appended to the report.
"(See Appendix #)" refers to an appendix appended to the report.
Throughout this report a comma (point) is used as the decimal separator.

When determining the test result, measurement uncertainty has been considered.

General product information:

Meaning of classification:

1st digit (category of use): Grade 1--For use by people with a high incentive to exercise care and with a small chance of misuse

2nd digit (Durability): Grade 6 – 100 000 test cycles

3rd digit (Door mass): Grade 0 – No door mass requirement.

4th digit (Fire resistance): Grade1 – suitable for use on fire / smoke resisting door assemblies (Not evaluated in this report).

5th digit (Safety): Grade 0 – No safety requirement.

6th digit (Corrosion resistance and temperature) Grade B – no corrosion resistance; temperature requirement: from - 20 ℃ to + 80 ℃

7th digit (Key related security): Grade 2 – Refer to table 9 of EN 1303 for detail requirements.

8th digit (Attack resistance): Grade 0 – No resistance against drilling; No resistance against mechanical attack

See Appendix A and Appendix B for details.

Amendment:

1. The original Report No. GZ08070265-4 dated on November 20, 2008 was modified on July 9, 2009 to revise classification of "Fire resistance", the requirements about key related security to grade 2 and update Testing Laboratory's address.
2. The Report No. GZ08070265-4R1 dated on July 21, 2009 was modified on July 23, 2009 to revised typo mistake in clause 4.2.

EN 1303			
Clause	Requirement – Test	Result - Remark	Verdict
6	**CLASSIFICATION**		
6.1	Category of use:	1	—
6.2	Test cycles – Durability	6	—
6.3	Door mass	0	—
6.4	Fire resistance	1 (Not evaluated in this report)	—
6.5	Safety	0	—
6.6	Corrosion resistance	B	—
6.7	Key related security	2	—
6.8	Attack resistance	0	—
4	**REQUIREMENTS**		
4.1	General		—
4.2	Key strength The key shall not break under the applied maximum torque of 2,5 Nm After the test, the key shall be re-used to operate the same cylinder with a torque not exceeding 1,5 Nm.	No broken was found, Operation torque after test: Maximum: 1,2 Nm	P
4.3	Durability After 100 000 cycles for grade 6, it shall operate the cylinders with a new original key with a torque not exceeding 1,5 Nm	100 000 cycles Operation torque after test: 0,8 Nm	P
4.4	Door Mass: No requirement		—
4.5	Fire resistance	Not evaluated in this report	—
4.6	Safety: No requirement		—
4.7	Corrosion resistance		—
4.7.1	General Cylinders for corrosion resistance grade A or C (high) shall conform to the corrosion resistance requirements of grade 3 of EN 1670 as minimum. The corrosion test shall apply to functionality only.	No corrosion requirement for grade B.	N/A

TTRF EN 1303:2005 B
Originator: Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

EN 1303			
Clause	Requirement – Test	Result - Remark	Verdict
4.7.2	Operation at extremes of temperature Shall be possible to operate a cylinder with the proper key using 1,5Nm maximum torque at both -20°C and +80°C	No obvious changes Operation torque after test: Maximum 0,7 Nm	P
4.8	Key related security		—
4.8.1	General		—
4.8.2	Minimum number of effective differs Minimum 300 effective differs for Key related security grade 2	13 000 effective differs	P
4.8.3	Minimum number of movable detainers Minimum 3 movable detainers for Key related security grade 2	6 movable detainers	P
4.8.4	Maximum number of identical steps Maximum number of identical steps 70%, maximum 2 adjacent for Key related security grade 2	Maximum number of identical steps 50% maximum 2 adjacent	P
4.8.5	Direct coding on key Direct coding shall not be permitted on keys for Key related security grade 3, 4, 5 and 6	No direct coding on key	P
4.8.6	Operation of security mechanism	Could not operate the cylinder with the next closest key after the cycle test.	P
4.8.7	Torque resistance of plug/cylinder relevant to key related security The plug and/or cylinder shall not rotate using the 5 Nm torque for Key related security grade 2	Not rotated after applied 5 Nm torque.	P
4.9	Attack resistance		—
4.9.1	Resistance to attack by drilling After drilling test, the lock driving element of the cylinder shall not rotate without the correct key, using a maximum torque of 5 Nm.	No requirement for grade 0.	N/A
4.9.2	Resistance to attack by chisel After test, the lock driving element of the cylinder shall not rotate without the correct key, using a maximum torque of 5 Nm.	No requirement for grade 0.	N/A

EN 1303			
Clause	Requirement – Test	Result - Remark	Verdict
4.9.3	Resistance to attack by twisting After test, the lock driving element of the cylinder shall not rotate without the correct key, using a maximum torque of 5 Nm.	No requirement for grade 0.	N/A
4.9.4	Resistance to attack by plug/cylinder extraction After test, the lock driving element of the cylinder shall not rotate without the correct key, using a maximum torque of 5 Nm through 360° or in the case of cylinders with restricted plug movement, to the maximum permitted by design	No requirement for grade 0.	N/A
4.9.5	Torque resistance of plug/cylinder relevant to attack resistance The plug and /or cylinder in attack resistance 1 shall not rotate using the 30 Nm torque.	No requirement for grade 0.	N/A
7	**MARKING**		P
	The classification in clause 6 shall be quoted in the accompanying documents relevant to the cylinder, on its labelling or packaging and/or by marking the product itself or by more than one of these methods	See marking on packaging	P

**********End of page**********

Appendix A

Product Photo

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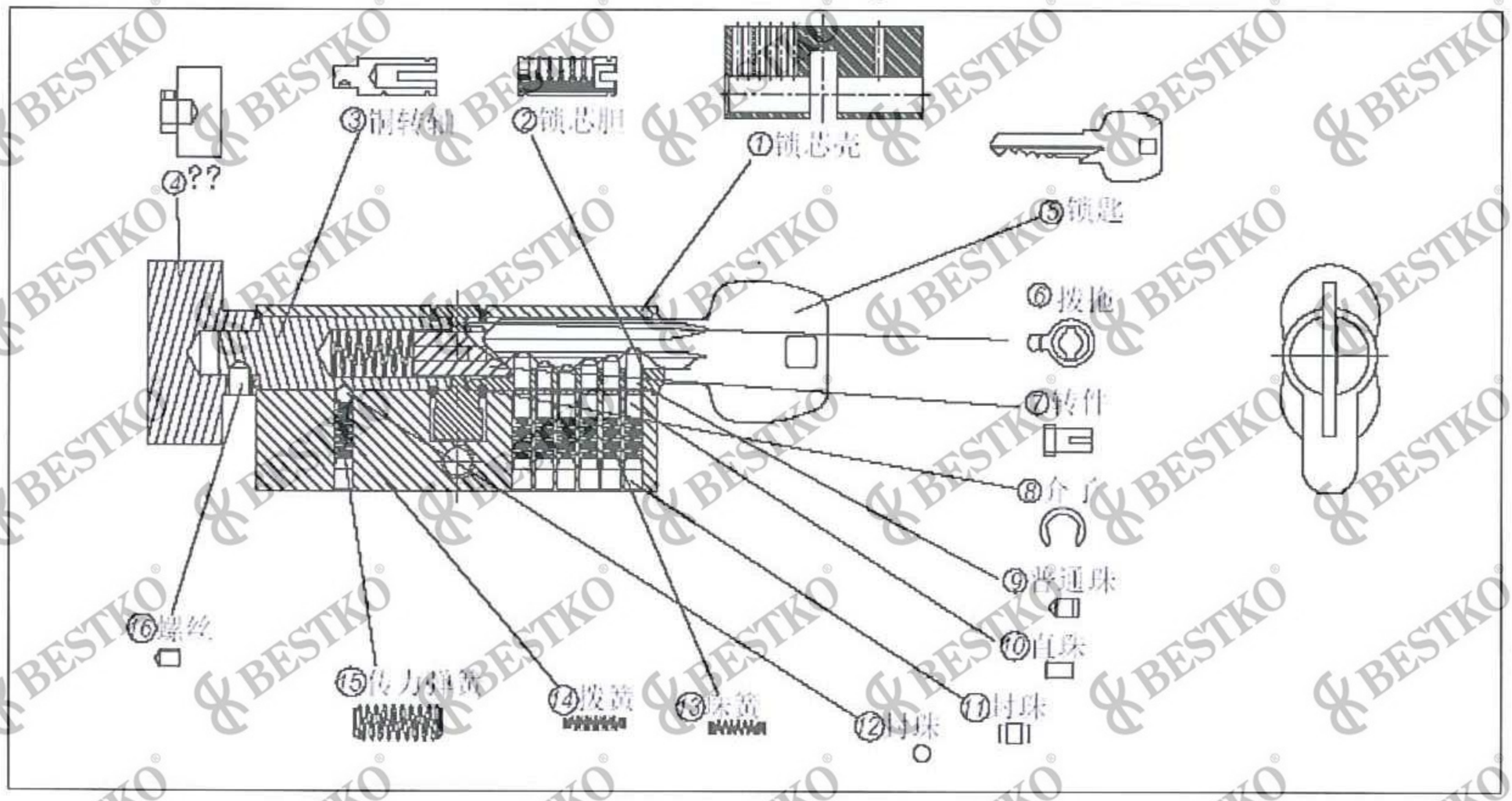
Appendix B

Product Drawing



**********End of Report**********