Technical Report No. 68.190.19.1007.01

Rev. 00

Dated 2019-05-27

Client:	Dongguan Utop Sporting Goods Co., Ltd No.6 Weixiang Road, Niushan Community Foreign Economic Industrial Park, Dongcheng District, Dongguan Guangdong, China
Manufacturer:	Dongguan Utop Sporting Goods Co., Ltd No.6 Weixiang Road, Niushan Community Foreign Economic Industrial Park, Dongcheng District, Dongguan Guangdong, China
Test subject:	Product: Skateboard Model: 2206
Test specification:	EN 13613:2009 (Excluding Clause 7 and 8)
Purpose of examination:	According to the test specification.
Test result:	Pass Details see test results in the clause 3.

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Telefax : +86 755 8828 5299

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TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch, TÜV SÜD Group Building 12 & 13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, Nanshan District, Shenzhen 510656, P.R. China

1 Description of the test subject

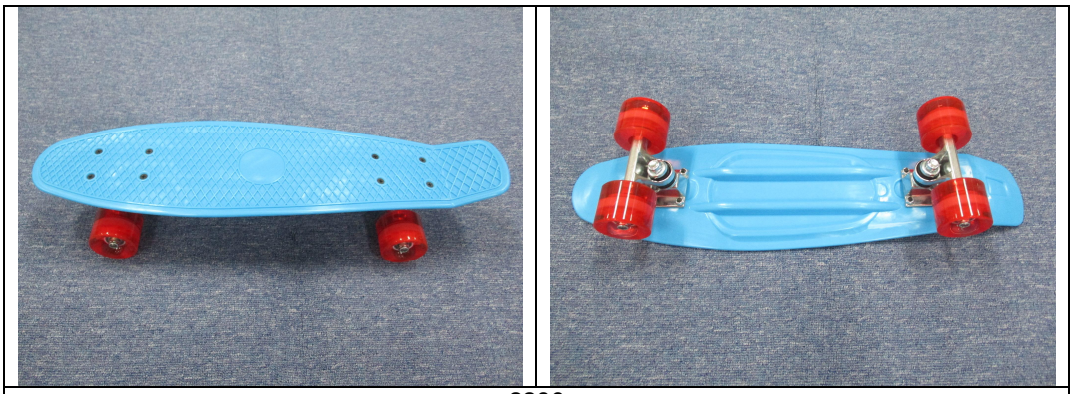
1.1 Function

☒ Manufacturer's specification for intended use:
Skateboard for general purpose use.

1.2 Technical Data

Dimension (L x W x H)	:	575 mm x 153 mm x 107 mm
Weight	:	1,63kg
Max. user weight	:	100 kg
Classification	:	Class A

1.3 Sample Photos



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2 Order

2.1 Date of Purchase Order, Customer's Reference

2019-05-09

2.2 Receipt of Test Sample, Location

2019-05-13, TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Guanlan Lab

2.3 Date of Testing

From 2019-05-14 to 2019-05-23

2.4 Location of Testing

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Guanlan Lab
No.11, Jukeng Rd., Juling Village, Jutang District, Guanlan, Longhua New Ditrisct, Shenzhen, 518110, P.R.China

2.5 Points of Non-compliance or Exceptions of the Test Procedure

None

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3 Test Results

EN 13613:2009 (Test clause numbering according to EN 13613:2009.)
Verdict: P/p = Pass; F/f = Fail; NA/na = Not applicable; NT/nt = Not test as client's requirement.

Clause	Requirement – Test	Measurements Results – Remarks	Verdict
5.2	**Requirements**		
5.2.1	There shall be no projections above the upper surface of the deck. The complete upper surface of the deck shall be equipped with an anti-slide surface.	Fulfilled.	P
5.2.2	When tested in accordance with 6.8, it shall not be possible to touch, with the test cylinder (see 6.8.2), any projection which has a length greater than 10 mm and less than 100 mm^2 in area.	Fulfilled. No projection was under the deck.	P
	6.8 External design Using the cylinder, test any projecting parts such as screws and levers that project by more than 10 mm and less than 100 mm in area. Present the cylinder at any angle to the part under test. Note whether or not the part under test touches the outer surface, excluding the ends, of the cylinder.		
5.2.3	When the action bolt (kingpin) of the truck is fully tightened, no part of the action bolt shall be in contact with the underside of the deck.	Fulfilled.	P
5.2.4	If a part of the axles and means of securing the wheels shall project beyond the outer edge of the wheels than the axle and means of securing the wheels shall not project beyond the deck. All edges on the skateboard which can come into contact with parts of the body during normal use shall be rendered safe, or shaped so that injuries cannot occur.	Fulfilled.	P
5.2.5	The corners and edges of the deck shall be rounded off and free from burr and sharp or protruding edges. The outlines of the deck shall be rounded off with a minimum radius of 10 mm.	Fulfilled.	P
5.2.6	Where self-locking nuts are used, the entire thread, including the locking section, shall be in contact with the bolt. Self-locking nuts and other self-locking fixings that are loosened several times for the purpose of modification or servicing, shall be suitable for this purpose.	Fulfilled.	P
	The information supplied by the manufacturer shall indicate if self-locking nuts and other self-locking elements can loose their effectiveness.	NT Not test according to the client's requirements.	
5.2.7	When tested in accordance with 6.5, the coefficient of adhesion (μ_0) of the wheels shall be a minimum of 0,3.	μ_0: 0,75	P

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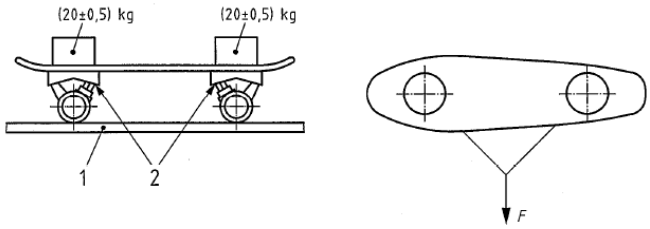
	6.5 Wheel adhesion test Degrease the tyre surface of the wheels of the skateboard and the steel plate. Measure the mass of the skateboard. Load the skateboard with a mass of (20 ± 0,5) kg over each axle and place it on the steel plate so that the lay is perpendicular to the force F to be applied. Apply force without shock to the trucks (see Figure 3) and when the wheels are at the point of slipping, measure the applied force F.  Figure 3 Calculate the coefficient of adhesion of the wheels: $\mu_0 = \frac{F}{(40+m)\times g}$ where F is the force applied, in newtons; m is the mass of the skateboard, in kilograms; g is the acceleration due to gravity, i.e. 9,81 m/s^2.		
5.2.8	When tested in accordance with 6.6, the wheel bearings shall not get stuck or disintegrate. **6.6 Speed test** For skateboards Class A, place a mass of (50 ± 0,5) kg over the one axle set of wheels under test. Run the skateboard continuously at a speed of (20 ± 0,5) km/h for at least 6 min. For skateboards Class B, place a mass of (40 ± 0,5) kg over the one axle set of wheels under test. Run the skateboard continuously at a speed of (20 ± 0,5) km/h for at least 3 min. Note whether or not the wheel bearings seize up or disintegrate.	Class A. Fulfilled. The wheel bearings were not get stuck or disinte-grated after the test.	P
5.2.9	When tested in accordance with 6.7, 6.9 and 6.10, no part of the skateboard shall break, there shall be no signs of functional damage and no fastening devices shall have worked loose.	Class A. No functional damage or fastening devices worked loose after the test.	P

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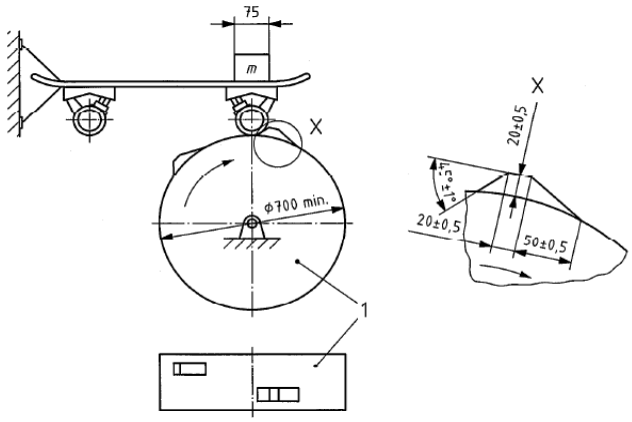
	6.7 Endurance test Test the set of wheels of the skateboard while the skateboard is allowed only to move vertically on the tested end and is fixed horizontally and vertically on the other end of the skateboard (see Figure 4). Place a mass m = (40 ± 0,5) kg for skateboards of Class A and m = (25 ± 0,5) kg for Class B over a length of 75 mm centrally over the deck axle. For skateboards Class A and B set the cylinder in motion and run it until the distance covered by the wheels under test is (25 ± 0,5) km. Note whether or not there is any breakage, signs of functional damage, or any fastening devices have worked loose.  Figure 4	Class A. No functional damage after the test.	P
	6.9 Drop test Drop the cylindrical weight (20 kg), in free fall, down the guide tube on to the centre of the skateboard three times, then three times on to the central area of one axle, and finally three times on to the central area of the other axle. During the test, hold the skateboard to prevent it from rolling away. For skateboards Class A, drop the weight through (300 ± 5) mm on to the centre of the board and through (200 ± 5) mm on to the centre of the axles. For skateboards Class B, drop the weight through (200 + 5) mm on to the centre of the board and through (200 ± 5) mm on to the centre of the axles. Carry out the test after the skateboard has been conditioned for at least 24 h at conditions specified in 6.4. If plastic material is used for decks or trucks the skateboard has to be conditioned for at least 6 h at a temperature of (- 5 + 1) °C. Start the test within 1 min of removing the skateboard from the conditioning environment and complete it within 5 min. Note whether or not there is any breakage, signs of functional damage or any fastening devices have worked loose.	Class A. No functional damage after the test.	P

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	6.10 Impact test Drive the skateboard (speed: 18 km/h) three times against the kerb. Note whether or not there is any breakage, signs of functional damage, or any fastening devices have worked loose.	No functional damage after the test.	P
7	**Marking** Each skateboard shall be legibly and durably marked with the following information: a) the number of this European Standard; b) the name, trademark or other means of identification of the manufacturer or retailer; c) means of identification of the product; d) maximum mass limit of the user; e) advice: The use of protective equipment is recommended.	Not test according to the client's requirements.	NT
8	**Information supplied by the manufacturer**		
8.1	**General** All skateboards shall be supplied with information supplied by the manufacturer. This document shall contain, in text or picture form, at least the information in accordance with 8.2 to 8.5.	Not test according to the client's requirements.	NT
8.2	**Information about the construction of the skateboard** The following shall be included: a) a note to the effect that no modifications shall be made that can impair safety; b) a note indicating if self-locking nuts and other self-locking fixings can lose their effectiveness.		NT
8.3	**Instructions for use** The following notes shall be included: a) notes concerning limitations of use according to regulations of road safety and recommendations regarding or descriptions of suitable surfaces (flat, clean, dry and where possible away from other road users); b) use of the following protective equipment: hand/wrist protection, knee protection, head protection and elbow protection; c) instruction to check that the skateboard steering mechanism, if present, is correctly adjusted and that the connective components are firmly secured; d) description for using and for braking.		NT

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8.4	**Servicing and maintenance instructions** Clear note stating that regular maintenance enhances the safety of the equipment. This includes: a) note regarding the maintenance of the bearings; b) replacement of wheels and cushions (where possible or present); c) lubrication of the bearings; d) steering adjustment; e) note to remove any sharp edges created through use; f) inspection; g) note to look for splinters and cracks in the deck and to replace when needed.		NT
8.5	**Skateboards safety code** **WARNING — Skateboarding can be dangerous.** Proposal for details see below. Skateboard safety code: a) Choose to skateboard in places which allow you to improve your skills, not on pavements or streets, where serious accidents have happened to skateboarders and other people. b) Children under eight years of age should be supervised at all times when skateboarding. c) Learn everything slowly, including new tricks. When losing balance don't wait until you fall, step off and start again. Ride down gentle slopes at first. Then ride slopes where your speed is only as fast as you can run off the board without falling. d) Most serious skateboard injuries are broken bones so learn to fall (by rolling if possible) without the skateboard first. e) Skateboarders starting to learn need to try with a friend or parent. Most bad accidents happen in the first month. f) Before you jump off a skateboard watch where it may go: it could injure someone else. g) Avoid skateboarding on wet or uneven surfaces. h) Join a club in your area and learn more. Prove you are a good skateboarder and care about yourself and others.		NT

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4 Remark

4.1 The test results exclusively base on the submitted sample.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
TÜV SÜD Group

Engineer: Luke Long
Luke Long
Project Handler

Technical Report checked: Adam Hou
Adam Hou
Designated Reviewer

--- End of Report ---

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TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch, TÜV SÜD Group
Building 12 & 13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, Nanshan District, Shenzhen 510656, P.R. China