





CE TEST REPORT

Related to CE Directive: 2001/95/EC (General Product Safety Directive)	
Prepared For:	Jinhua Youzhi Sports Equipment Co., Ltd yNo. 466, Donggang North Street, shoetang office, Jindong District, Jinhua City, Zhejiang Province (3rd floor, Building 6, Zhejiang Dongzheng Craft Products Co., Ltd.)
Product Name:	Treadmill
Main Model:	YZ-Z1
Trade Mark:	YZ-Z2, YZ-Z6, YZ-Z8, C1, OT-1, BT-1, U6, A1, BT-2, TS-8
Prepared By :	Dongguan True Safety Testing Co., Ltd. Room 201.No.20.East of Houjie Avenue,Houjie,Dongguan,Guangdong,China
Test Date:	Dec. 09, 2022 To Dec. 15, 2022
Date of Report :	Dec. 15, 2022
Report No.:	TST20221240038-1SR



APPLIED STANDRD(S)	
EN ISO 20957-1:2013 Stationary training equipment - Part 1: General safety requirements and test methods EN 957-6:2010+A1:2014 Stationary training equipment Part 6: Treadmills, additional specific safety requirements and test methods EN 62233:2008 Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure	
ACOUSTIC OF ENVIRONMENT	
Description of the test environment : Indoors Air temperature : 23±5 °C (Clause 6.1 of EN ISO 20957-1:2013) Barometric pressure : approximate 1.1×105Pa Relative humidity : 58%~75%R.H. (Clause 6.1 of EN ISO 20957-1:2013)	
SAMPLE INFORMATION	
Test Item description:	Treadmill
Test model:	YZ-Z1
Model reference:	YZ-Z2, YZ-Z6, YZ-Z8, C1, OT-1, BT-1, U6, A1, BT-2, TS-8
Trade Mark:	N/A
Manufacturer:	Jinhua Youzhi Sports Equipment Co., Ltd No. 466, Donggang North Street, shoetang office, Jindong District, Jinhua City, Zhejiang Province (3rd floor, Building 6, Zhejiang Dongzheng Craft Products Co., Ltd.)
Accuracy classes:	Class H (Clause 4.2 of EN ISO 20957-1:2013)
Usage classes:	Class H (Clause 4.2 of EN ISO 20957-1:2013)
Ratings:	220-240V~ 50/60Hz 480W
Maximum load:	/
Copy of Marking Plate:	
<div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 0 auto;"><p>Treadmill Model: YZ-Z1 Ratings:220-240V~ 50/60Hz 480W</p><p> </p><p>Jinhua Youzhi Sports Equipment Co., Ltd.</p></div>	



POSSIBLE TEST CASE VERDICTS:	
test case does not apply to the test object.:	N/A
test object does meet the requirement :	P (Pass)
test object does not meet the requirement :	F (Fail)
Date of receipt of test item:	Dec. 09, 2022
Date (s) of performance of tests.:	Dec. 09, 2022 To Dec. 13, 2022
GENERAL REMARKS:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report <input type="checkbox"/> comma / <input checked="" type="checkbox"/> int is used as the decimal separator.	
The application for obtaining a UKCA Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided :	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies):	Same as manufacturer
GENERAL PRODUCT INFORMATION AND OTHER REMARS	
Product Description 1. Instructions and equipment marking related to safety is applied in the language that is acceptable in the country in which the equipment is to be sold. 2.The product was submitted and tested for use at the manufacturer's recommended ambient temperature (Tma) of 45°C. 3. All models are the same except for the model name. All tests were performed on YZ-Z1	



Name and address of the testing laboratory :

Dongguan True Safety Testing Co., Ltd.
Room 201.No.20.East of Houjie
Avenue,Houjie,Dongguan,Guangdong,China

Grace

Test by:

Technician

Dec. 15, 2022

Date

Apple Li

Review by:

Project Engineer

Dec. 15, 2022

Date

Andy



Approved by:

Andy/ Manager

Dec. 15, 2022



Test result:

EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
5	Safety requirements		P
5.1	General If any of the following safety requirements are applicable, the equipment shall meet the requirements using the test methods described in Clause 6.		P
5.2	Stability of equipment The stationary training equipment shall be stable in any direction, in training, folding and storage positions. The test shall be in accordance with 6.2.	See 6.2	P
5.3	External construction		P
5.3.1	Edges and corners All edges and corners of surfaces supporting bodies shall have a radius $r \geq 2,5$ mm. All other edges of components which are accessible to the user or to third parties shall be free of burrs, rounded or protected. Test in accordance with 6.3.1.	No burrs, rounded or protected. See 6.3.1	P
5.3.2	Tube ends When tested in accordance with 6.3.2, accessible tube ends shall be closed off, e.g. by parts of the equipment or by plugs. If plugs are used, they shall remain in position at the end of the endurance load test, as described in the relevant parts of the applicable specific standards. If no endurance test is described in a specific standard the pullout force of the plug shall be ≥ 20 N.	Meet the requirement See 6.3.2	P
5.3.3	Squeeze and shear points within the accessible hand and foot area Squeeze and shear points between moving parts, between moving parts and fixed parts, or between a moving part and the floor shall be guarded or shall have a minimum clearance of at least 60 mm, except as follows: a) if only the fingers are at risk, the dimension shall be at least 25 mm; b) if third party access is prevented by the user's body position, and where the user is able to immediately stop the movement, the distance shall be at least 25 mm; c) if the angle between two adjacent moving parts or between a rigid part and an adjacent moving part is always 50 degrees or greater, it is not considered a shear point; d) open and obvious stops are excluded; however, if the stop is the part which is moving, then it shall pass no closer than 25 mm from any fixed frame member throughout its range of movement.	Meet the requirement See 6.3.3	P



EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
	<p>All products shall fulfil the above requirements during use.</p> <p>For foldable products during folding or unfolding, the above requirements are waived if the following three requirements are simultaneously met:</p> <ul style="list-style-type: none"> — inadvertent movement is not possible during folding, unfolding, transportation and/or storage; — access to squeeze and shear points remain at all times in the user’s field of vision; — the user can stop the motion at any time. <p>Test in accordance with 6.3.3.</p>		
5.3.4	<p>Squeeze and shear points as well as rotating and reciprocating points in the accessible hand and foot area</p> <p>The distance between movable parts or between a movable and a fixed part shall be at least 60 mm except as follows:</p> <ul style="list-style-type: none"> a) if only fingers are at risk, the dimension shall not be less than 25 mm; b) if the distance between the moving part and fixed part, or between two moving parts, does not change during use or setup, the distance shall be greater than 25 mm or less than 9,5 mm; c) open and obvious stops are excluded. However, if the stop is the part which is moving, then it shall pass no closer than 25 mm to any fixed frame member throughout its range of movement. <p>Test in accordance with 6.3.3.</p>	<p>Meet the requirement See 6.3.3</p>	P
5.3.5	<p>Weights and resistant means</p> <p>The range of motion of all weights attached to the stationary training equipment shall be limited to that required to perform the exercise. Test in accordance with 6.3.4.</p> <p>Weights and resistant means with stored energies (e.g. bungee cords, elastic tubes, mechanical springs) shall move freely and return to the starting point.</p> <p>Weights shall be securely retained during use.</p>	<p>Meet the requirement See 6.3.4</p>	P
5.4	<p>Entrapment of the user</p> <p>The possibility of users not being able to exit the equipment when using it according to the user’s manual shall be avoided (e.g. providing assisted means of escape).</p> <p>Test in accordance with 6.4.</p>	<p>Meet the requirement See 6.4</p>	P
5.5	<p>Adjustment components and locking mechanisms</p> <p>Adjustment components and locking mechanisms on the stationary training equipment shall function securely, be conspicuous, self-evident and safely accessible to the user. The possibility of unintended change shall be eliminated.</p>		N/A



EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
	Adjustment components and locking mechanisms e.g. knobs and levers shall not interfere with the user's range of movement. Weight selection pins shall be fitted with a retention device to prevent unintended change or movement during the exercise. Test in accordance with 6.5.		
5.6	Ropes, belts, chains and attachment components		N/A
5.6.1	General Ropes, belts, chains and their attachment components (e.g. snap links, shackles, carabineers, clamps or similar) shall have a safety factor against breakage of 6 times the maximum possible tension that can be developed. The design of the pulleys and the bending radius shall be in accordance with the applicable requirements of the rope, belt or chain manufacturers. Ropes, belts, chains and their attachment components shall not break and function as described in the user's manual. Test in accordance with 6.6.		N/A
5.6.2	Ropes and belts Rope and belt ends shall be, as a minimum, flush with the end of the termination means and shall be visible for inspection. Pressed connections shall not be subjected to bending. Rope and belt ends and grips shall have no sharp edges or frayed ends. Test in accordance with 6.6.		N/A
5.6.3	Rope and belt guides A means shall be provided to prevent a rope or a belt becoming unintentionally disengaged during use or set-up. Test in accordance with 6.7.		N/A
5.7	Pull-in points Pull-in points of rope or belt drives up to 1 800 mm height shall be protected except if the surface pressure is ≤ 90 N/cm ² or when access to the pull-in point is prevented by the user's body during exercising. This may be achieved by ensuring that the angle between the rope and the guard is not less than 50° in all positions. The guard shall not rotate together with the pulley. Test in accordance with 6.3.5. Pull-in points for chains, gears and sprockets shall be protected in accordance with ISO 12100. For flywheels the test finger (see Figure 1) shall not become trapped when tested in accordance with 6.8.		P
5.8	Hand grips		P



EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
5.8.1	Integral handgrips Gripping positions shall be easily identifiable and designed to reduce slipping (e.g. textured, coated, knurled). Test in accordance with 6.9.		P
5.8.2	Applied handgrips When tested in accordance with 6.10, applied handgrips shall not be removed. Applied handgrips shall be equipped with a surface that reduces hand slip.		N/A
5.8.3	Rotating handgrips Rotating handgrips shall be secured during use and shall be designed to reduce slipping (e.g. textured). Test in accordance with 6.11.		N/A
5.9	Endurance test The stationary training equipment shall function as specified in the manufacturer's instructions after the test has been carried out. Test in accordance with 6.12.	Meet the requirement See 6.12	P
5.10	Isometric test requirements If the stationary training equipment is designed to perform an isometric test, then the load or force on the user's body shall be displayed with an accuracy of $\pm 10\%$ in the range of measurement given in the user's manual and the read outs shall be SI units. Test in accordance with 6.13.	Meet the requirement See 6.13	P
5.11	Heart rate measurement system The function of the heart rate measurement system shall be indicated on the display when the equipment is receiving a usable signal from the user, e.g. a blinking heart. Test in accordance with 6.14.		N/A
5.12	Heart rate control mode The function of the heart rate measurement system shall be permanently indicated on the display when the equipment is receiving a usable signal from the user, e.g. a blinking heart. The loss of heart rate signal shall result in effort intensity remaining at the same intensity for maximum 60 s and then decrease until the minimum intensity is reached. The rate of decrease shall be at least 10 % in each 20 s time period. Test in accordance with 6.15.		N/A
5.13	Electrical safety Concerning electrical and electronic aspects of stationary training equipment EN 60335-1 shall be applied. For medical devices EN 60601-1 shall be applied.		N/A



EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
5.14	Loading		P
5.14.1	<p>Intrinsic loading</p> <p>Each piece of equipment loaded with the user's bodymass shall withstand a force F of 2,5 times the bodymass.</p> <p>After the test the equipment shall not be broken and shall still function as intended by the manufacturer.</p> <p>Test in accordance with 6.16.</p>	<p>Meet the requirement</p> <p>See 6.16</p>	P
5.14.2	<p>Extrinsic loading</p> <p>When tested according to 6.3.4 and loaded with the user's bodymass and/or reaction forces or moments of the user as well as other forces or moments caused by any other source (e.g. additional weights supported by a stand), each piece of equipment shall withstand a load F according to Formula (1):</p> $F = [Gk + 1,5 G] \cdot 2,5 \cdot 9,81m/s^2$ <p>where</p> <p><i>F</i> is the load in newton;</p> <p><i>G</i> is the maximum load in kilograms indicated by the manufacturer (see 5.17);</p> <p><i>Gk</i> is the load in kilograms applied by the bodymass to the support being tested;</p> <p>1,5 is the dynamic factor;</p> <p>2,5 is the safety factor</p> <p>After the test the equipment shall not be broken and shall still function as intended by the manufacturer.</p> <p>Test in accordance with 6.17.</p>		N/A
5.15	<p>Care and maintenance</p> <p>Care and, if applicable, maintenance advice shall be provided with each piece of equipment. The advice shall include at least:</p> <p>a) a warning notice to the effect that the safety level of the equipment can be maintained only if it is examined regularly for damage and wear, e.g. ropes, pulleys, connection points;</p> <p>b) an advice to replace defective components immediately and/or keep the equipment out of use until repair;</p> <p>c) special attention to components most susceptible to wear.</p> <p>Test in accordance with 6.18.</p>	<p>Meet the requirement</p> <p>See 6.18</p>	P
5.16	<p>Assembly instructions</p> <p>If the stationary training equipment requires assembly, then a manual shall be supplied (in the national language), giving clear and accurate assembly instructions relating to the stationary training equipment and with an emphasis on safe assembly.</p>	<p>Meet the requirement</p> <p>See 6.18</p>	P



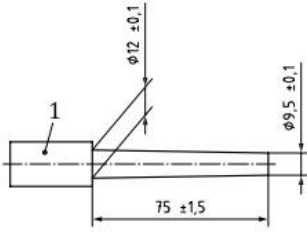
EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
	<p>If the stationary training equipment requires assembly, then a list of tools needed shall be provided.</p> <p>If the stationary training equipment requires assembly, then a comprehensive parts list shall be supplied, including identifying part numbers.</p> <p>The manufacturer shall indicate the total mass and the total surface area (e.g. foot print) of equipment.</p> <p>When stationary training equipment is attached/anchored, e.g. to a wall or the floor, assembly instructions including the attaching/anchoring operations shall be provided.</p> <p>The manufacturer shall provide the minimum value (force) each attachment shall support.</p> <p>Test in accordance with 6.18.</p>		
5.17	<p>General instructions for use</p> <p>Each item of stationary training equipment shall be accompanied by a user's manual, in the national language including at least the following information.</p> <p>a) Customer service address.</p> <p>b) Full address of the manufacturer or importer.</p> <p>c) Indication of field of application (e.g. indoor use, explanation of the usage class).</p> <p>d) Indication that the free area shall be not less than 0,6 m greater than the training area in the directions from which the equipment is accessed. The free area must also include the area for emergency dismount. Where equipment is positioned adjacent to each other the value of the free area may be shared. The free area and training area shall be illustrated with a dedicated figure.</p> <p>e) Information on the correct use of the equipment and its features with the emphasis on safe operation, and the importance of keeping unsupervised children away from the equipment.</p> <p>f) Exercise instructions with advice with regard to correct biomechanical positioning of the user on the stationary training equipment. A warning indicating that injuries to health may result from incorrect or excessive training. Instructions shall be given in respect of every major exercise type for which the equipment is designed.</p> <p>g) Texts concerning difficult or complicated manoeuvres shall be accompanied by illustrations.</p> <p>h) Instruction on how to safely use access and escape assist means.</p> <p>i) Design illustration.</p>	<p>Meet the requirement</p> <p>See 6.18</p>	P



EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
	<p>j) Warning that if any of the adjustment devices are left projecting, they could interfere with the user’s movement.</p> <p>k) Warning that free standing equipment shall be installed on a stable and levelled base.</p> <p>l) Setting of the load and equipment further adjustments (e.g. seat adjustments).</p> <p>m) Indication of the maximum user body mass.</p> <p>n) Indication of the maximum training mass, if applicable.</p> <p>o) Explanation of the displayed data, if applicable.</p> <p>p) If the heart rate is displayed, a warning with the following content shall be given: “WARNING! Heart rate monitoring systems may be inaccurate. Over exercising may result in serious injury or death. If you feel faint stop exercising immediately”.</p> <p>Test in accordance with 6.18.</p>		
5.18	<p>Marking</p> <p>Stationary training equipment shall be permanently marked with the following minimum information:</p> <p>a) name or trademark and full address of the manufacturer, supplier or importer; b) maximum body mass of user and the maximum training mass for the individual exercise stations (if applicable);</p> <p>c) usage classes S, H or I and accuracy classes A, B, C, which can be combined (e.g. SA) if both classes are specified in that part of this International Standard;</p> <p>d) individual code number (which contains information about type and year of manufacture);</p> <p>e) graphical symbol or written information in the national language(s) instructing the user to read the information supplied by the manufacturer;</p> <p>f) for class S and I equipment, a conspicuous graphical symbol or written information in the national language(s) shall be applied if the equipment needs attachment/anchoring for safe operation.</p> <p>It is the responsibility of the manufacturer to display compliance with this International Standard by the additional indication of ISO 20957 in connection with the letter symbol of the designation class(es) (class S, H and I).</p> <p>Test in accordance with 6.18.</p>	<p>Meet the requirement</p> <p>See 6.18</p>	P
6	Test methods		P
6.1	<p>Test conditions</p> <p>All testing shall be performed under the following conditions:</p>		P



EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
	a) temperature of 23 °C ± 5 °C; b) relative humidity of 55 % to 75 %		
6.2	Stability test		P
6.2.1	<p>Test in training position Place the equipment on a (10~12)° incline surface, in the most onerous position. Perform exercise(s) that involve(s) the user's mass, with the equipment loaded with a person weighing (100 ± 5)kg, using the minimum as well as the maximum load, over the full range of exercise motion. In addition, if applicable, perform exercise(s) that does not involve the user's mass, using the minimum as well as the maximum load, over the full range of exercise motion. The equipment shall not tip over in either test. The test person shall not lean or try to influence the balance of the machine.</p>	No tip over in the test	P
6.2.2	<p>Test in folded/storage position Place equipment, folded according to the user's manual, on a (10 ~12)°incline surface. The equipment shall not tip over in either test.</p>		N/A
6.3	External construction		P
6.3.1	<p>Test of edges and corners Test by measuring the radius and visual and tactile examination.</p>	No visual defect	P
6.3.2	<p>Tube ends This test is a visual inspection of the unit to verify that all tube ends in the accessible hand and foot area are closed off. The pull-out test shall be performed in a quasi static manner with an appropriate device.</p>	No visual defect	P
6.3.3	<p>Testing of squeeze and shear points and rotating and reciprocating points Measure the minimum distance between two moving parts or a moving part and a fixed part.</p>	Meet the requirements	P
6.3.4	<p>Weights and resistant means A performance test using the maximum and minimum resistance or weights including added resistance or weights (e.g. incremental weights) shall be carried out over the maximum range of movement.</p>		N/A
6.3.5	<p>Testing of pull-in points Apparatus: test finger in accordance with Figure 1. Surface hardness ≥ HRC 40 (measured in accordance with ISO 6508-1). Approach the pull-in point with the test finger probe to determine whether</p>	See table 1	P

EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
	<p>the test finger can become trapped. For non-protected pull-in points measure the pressure perpendicularly to the moving direction in the most onerous position of the mechanism (e.g. the rim of a pulley or the minimum radius of a cam).</p> <p>The test shall be performed with the maximum load. The pressure shall not exceed 90 N/cm² in any part of the mechanism.</p>		
6.4	<p>Testing of entrapment</p> <p>A visual and performance test shall be carried out to determine whether or not the user can become entrapped.</p>		N/A
6.5	<p>Adjustment components and locking mechanisms</p> <p>Perform a visual and functional examination before, during and after every test.</p>		N/A
6.6	<p>Tensile test for ropes, belts, chains and attachment components</p> <p>Measure the tension of the rope, belt or chain as well as the attachment components while statically applying the maximum specified load. Then perform a tensile test, with 6 times the maximum measured tension for the whole functional system.</p>		N/A
6.7	<p>Testing of rope and belt guides</p> <p>Perform a functional test.</p>		N/A
6.8	<p>Testing of flywheels</p> <p>Insert the test finger (see Figure 1) from all sides into any possible entrapment point between the drive and transmission elements, while the equipment is in normal operation.</p> <p>Do not introduce the test finger beyond the edge of the protective covering.</p> <p>Determine whether the test finger becomes trapped.</p> <div style="text-align: center;">  </div> <p>Key 1 handle Ra-value ≤ 0,40 μm Surface hardness ≥ HRC 40 (measured in accordance with ISO 6508-1)</p>		P
6.9	<p>Testing of integral handgrips</p> <p>Perform a functional test.</p>		P
6.10	<p>Determination of the removing force of applied handgrips</p> <p>Apply a force of 70 N carefully to the handgrip by means of an appropriate</p>		N/A



EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
	pulling device.		
6.11	Testing of rotating handgrips Perform a functional test.		N/A
6.12	Testing of endurance load Carry out the test as close as possible to normal exercise frequency and free of shocks for: a) class H 12 000 cycles over 80 % of the possible range of movement; b) class S 100 000 cycles over 80 % of the possible range of movement; 1) with maximum load; 2) in direction of load in accordance with the exercise instructions fixed by a 50 percentile man; 3) with a frequency of movement in accordance with the user's manual. If the equipment offers multiple exercise stations the test shall be done with all stations and functions as described in the user's manual.		N/A
6.13	Testing of isometric equipment Measure the static output force or torque of the body in the position(s) as described in the user's manual and compare this value to the displayed value. Perform the test using the following three values: — minimum; —maximum; — a third random value between these two points.		P
6.14	Testing of the heart rate measurement system Perform a visual test by using the heart rate measurement system.		P
6.15	Testing of the heart rate control mode Set the equipment to the heart rate control mode with a target of 120 bpm. Operate the product according to the manufacturer's specifications, then use a heart rate simulator or a person to activate the control mode. Cut off the signal and then check if the resistance or the load reduces according to the requirements shown in 5.12. If there are more than one heart rate control system, each system shall be tested. Test the heart rate indicator by visual testing 6.16 Testing of intrinsic loading Carry out the test quasi-statically. Apply the load F in the most onerous position when used according to the instructions in the user's manual on a surface area of 300 mm × 300 mm for 5 min on the stationary training		P



EN ISO 20957-1			
Clause	Requirement- Test	Result-Remark	Verdict
	equipment. Only equipment that requires anchoring for normal use shall be fixed during the test.		
6.17	Testing of extrinsic loading Carry out the test quasi-statically. Apply the load F in the most onerous position when used according to the instructions in the user's manual for 5 min on the stationary training equipment. Place the determined load on the equipment as in normal practice and in a position which imposes greatest strain on the equipment. When the load bearing surface is divided, apply the test load to each part in proportion to the total surface area at the same time. The load should be applied through a load applicator in a way that simulates the situation that occurs when the equipment is used according to the instructions in the user's manual.	Meet the requirements	P
6.18	Testing of care and maintenance, assembly instructions, general instructions for use and marking Verify the information provided by the manufacturer versus the equipment being tested.	Meet the requirements	P
6.19	Test report The test report shall include at least the following information: a) name and address of the testing facility and location where the test was carried out when different from the address of the reporting facility; b) unique identification of the report (such as serial number), each page, and total number of pages of the report; c) name and address of the client; d) description and identification of the test item; e) date of receipt of the test item and date(s) of the performance of the test; f) identification of the test specification or description of the method or procedure; g) description of the sampling procedure, where relevant; h) any deviations, additions or exclusions from the test specification, and any other information relevant to a specific test; i) measurements, examinations and derived results, supported by tables, graphs, sketches and photographs as appropriate, and any failures identified; j) statement on the measurement uncertainty (where relevant); k) signature and title or an equivalent marking of person(s) accepting technical responsibility for the test report and date of issue; l) statement to the effect that the test results relate only to the items test	Meet the requirements	P



EN 957-6			
Clause	Requirement- Test	Result-Remark	Verdict
5	Safety requirements		P
5.1	Squeeze and shear points within the accessible area		P
5.2	Transmission elements and rotating parts		P
5.3	Temperature rise		P
5.4	Safety stop		P
5.4.1	<p>General</p> <p>All power driven treadmills shall be equipped with a safety stop switch, which shall include a push-button operated switch and/or a pull-cord operated switch.</p> <p>The push-button type or pull cord safety stop actuator shall be in a reachable position in front of the user and in an area of +180 mm parallel to the centreline of the running surface.</p> <p>If the push-button type safety stop actuator is outside this area it shall be duplicated on the opposite side except when a pull-cord actuator is provided.</p>		P
5.4.2	<p>Characteristics</p> <p>Operating the safety stop shall result in the machine cutting off the main power of the motor and the inclination system without relying on any software functions.</p> <p>The contacts of manually operated safety stop devices shall ensure positive opening. The achievement of contacts separation shall be the direct result of a specified movement of the switch actuator through non resilient members. Emergency stop relays or manually reset fail-safe relays may be used.</p> <p>Test in accordance with 6.3</p>		P
5.4.3	<p>Actuator(s)</p> <p>Actuators of safety stop devices shall be coloured RED. Where a background exists behind the device actuator, it shall be coloured YELLOW. The actuator of a push-button operated switch shall be of the palm or mushroom head type.</p> <p>The background around the actuator shall be at least 5 mm wider than the actuator itself on all sides.</p> <p>Pull-cord safety stop actuators shall release with a maximum force of 50 % of the force required to release the Attachment device when attached to the</p>		P



EN 957-6			
Clause	Requirement- Test	Result-Remark	Verdict
	<p>user according to the manufacturers' recommendation.</p> <p>The actuator cord shall have a suitable length so that the actuator releases at a position not more than 70 % of the length of the running surface.</p> <p>Test in accordance with 6.4.</p>		
5.5	<p>Immobilization method</p> <p>For power driven treadmills there shall be an immobilization method for the treadmill to prevent uncontrolled usage of third parties. This method shall be explained in the instructions for use.</p> <p>Test in accordance with 6.5.</p>		P
5.6	<p>Stability</p> <p>The treadmill shall be stable in both training and storage positions when Tested in accordance with 6.6.</p>		P
5.7	<p>Static loading</p> <p>Classes H,S and I treadmills shall not break under a load of 4 times the maximum body mass specified by the manufacturer or 4000 N whichever is greater. Test in accordance with 6.7. The treadmill shall withstand the test in flat, mid and maximum inclination. where inclination is applicable.</p>		N/A
5.8	<p>Endurance</p> <p>When tested in accordance with 6.8. the treadmill shall withstand:</p> <p>a) 12 000 impacts for class H and</p> <p>b) 100 000 impacts for classes S and I.</p> <p>After the test the treadmill shall be capable to functioning according to the manufacturer's information on the correct use and shall not show any breakage.</p>		N/A
5.9	Handrails		N/A
5.9.1	<p>General</p> <p>Treadmills shall be equipped with two side handrails or with two side handrails and a front handlebar for user support and emergency dismount.</p>		N/A
5.9.2	<p>Treadmills with side handrails only</p> <p>The top of the side handrails shall be at a height between 800 mm and 950 mm above the running surface measured vertically. which may not be perpendicular to the running surface at all incline positions.</p> <p>The distance between the side handrails shall not exceed 900 mm (inside to inside)</p>		N/A



EN 957-6			
Clause	Requirement- Test	Result-Remark	Verdict
	Each side handrails shall extend beyond line A(see Figure 2). The side handrails shall show no permanent deformation of more than 3 % when tested in accordance with 6.9.		
5.9.3	Treadmills with front handlebar and side handrails Either the side handrails shall be in accordance with 5.9.2 or the front handlebar shall be at a height between 800mm and 950mm above the running surface in any inclination. The front handle bar shall consist of a singlegrip-ablelengthofminimum500mm or two grip-able lengths of minimum 175 mm located Symmetrically to the longitudinal axis of the running surface with a minimum distance of 375 mm and a maximum distance of 675 mm from centre to centre. The side handrails and the front handlebar shall show no permanent deformation of more than 3% when tested in accordance with 6.9.n case of treadmills having both the side handrails and the front handlebar both of them shall fulfil this requirement.		N/A
5.10	Foot rails Treadmills shall be equipped with foot rails, see Figure 1. The foot rails shall be a minimum length of 70 % of the length of the running surface "/" and have a minimum width of 80 mm. The foot rails shall cover at least 25% of the length of the running surface"" in front of line A and at least 45% of the lengths of the running surface ""behind see Figure 2. The foot rails shall have a slip resistant Surface over minimum70% of the whole length of the foot rail with a minimum width of 70 mm and with a friction factor in the most onerous direction of more than 05. when tested in accordance with ISO 5904 NOTE1 Because of the narrow width of the foot rails, this test may be carried out on a shorter test length than specified in ISO 5904. The lowest measured force shall be used for the friction factor calculation. When tested in accordance with 6.10.the foot rails shall show no permanent deformation of more than 3%. The attachment of the side handrails shall avoid a trip hazard. NOTE2 This section does not apply to manual treadmills without incline or flywheel.		P
5.11	Running surface Permanent marking in a contrasting colour is required on the running surface to determine if the belt is either moving or stationary At least one marking shall be visible from the top view in any position of the running surface. The marking shall have a minimum dimension of 150 mm x50 mm and a		P



EN 957-6			
Clause	Requirement- Test	Result-Remark	Verdict
	<p>maximum dimension of 450 mmx100 mm.Between two markings a minimum space of the size of one marking shall be provided.</p> <p>This requirement is only applicable for classes S and I.</p> <p>Test in accordance with 6.11.</p>		
5.12	<p>Acceleration</p> <p>For motorised treadmills the initial starting speed of the running surface shall not exceed 2.4 km/h. The acceleration of the running surface. with the treadmill in an unloaded condition. shall not exceed 0.9 m/s</p> <p>Test in accordance with 6.12.</p>		P
5.13	<p>Heart rate control mode (if applicable)</p> <p>The proper function of the heart rate system shall be indicated on the display e.g. by a blinking heart or any other means.</p> <p>The loss of heart rate signal shall result in speed remaining at the same level for maximum 60 s and then decrease until the minimum speed is reached. The rate of decrease shall be at least 1 km/h in 20 s.</p> <p>Test in accordance with 6.13</p>		P
5.14	<p>Folding treadmills</p> <p>A folding treadmill shall be equipped with a safe locking system to keep it in a folded position where the running surface is designed to be folded up when stored.</p> <p>A folding treadmill shall be equipped with a safe locking system to keep it in the useable position when the side handrails are designed to be folded down when stored.</p> <p>The folding portion shall not be capable of reaching a stable position of equilibrium before being locked.</p> <p>The maximum vertical handling force shall be less than 150 N.</p> <p>If there is stored energy,e.g.compressed gas spring in the packaged position or in folded position, a safety device to avoid inadvertent release of the stored energy shall be provided.</p> <p>Test in accordance with 6.14.</p>		P
5.15	<p>Electrical safety</p> <p>Concerning electrical and electronic aspects,the equipment shall meet the requirements of EN 60335-1 for general use and for medical use EN 60601-1.</p>		P
5.16	<p>Additional classified requirements</p> <p>Classes A.B and C shall fulfil the requirements of Table 1.</p>	See Table 1.	P
5.17	<p>Additional warning label</p> <p>If a heart rate system exists:</p>		P

EN 957-6			
Clause	Requirement- Test	Result-Remark	Verdict
	<p>For classes S and I a warning label with the following content shall be attached: "WARNING! Heart rate monitoring systems may be inaccurate. Over exercising may result in serious injury or death. If you feel faint stop exercising immediately".</p> <p>All labels shall be placed in a conspicuous position on the display console</p>		

Table 1 — Classified basic requirements

	Class A	Class B	Class C	Testing
Read out (display indicator)	speed, inclination (if fitted) in % (see Figure 4) distance, time in SI units	speed, inclination (if fitted) in %, distance, time in SI units	none	visual test, performance test
Accuracy	time ± 1 % distance ± 5 % speed ± 5 % up to 2 km/h ± 0,1 km/h inclination (if any) ± 10 % accuracy above 2 % inclination	time ± 1 % ^a distance ± 10 % speed ± 10 % up to 2 km/h ± 0,2 km/h inclination (if any) ± 15 % accuracy above 2 % inclination	none ^b	6.15
Minimum length and width of the running surface for motor driven treadmills in mm	≤ 8 km/h: 1 000 × 400 > 8 km/h to 16 km/h: 1 200 × 400 > 16 km/h: 1 300 × 400	≤ 8 km/h: 1 000 × 400 > 8 km/h to 16 km/h: 1 200 × 400 > 16 km/h: 1 300 × 400	1 000 × 325 ≤ 6 km/h (walking) > 6 km/h see class B	references to speed measuring test
Minimum length and width of the running surface / for manual driven treadmills in mm	not applicable	1 000 × 400	1 000 × 325	—
Minimum speed	≤ 0,5 km/h, increments 0,1	≤ 2 km/h, increments 0,5	≤ 3 km/h	6.15
^a For mechanical timing devices ± 5 % is allowed. ^b If included: <ul style="list-style-type: none"> - time ± 2 %^a - distance ± 20 % - speed ± 20 % up to 3 km/h ± 0,3 km/h - inclination ± 25 % accuracy above 2 % inclination. 				

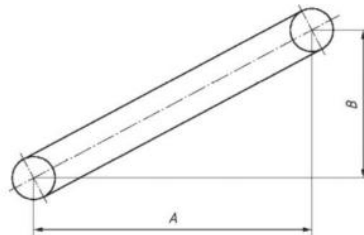


Figure 4 — Calculation of percentage of the inclination

The inclination α is to calculate as follows (see Figure 4):

$$\alpha = B/A \times 100$$

where

α is in %.



EN 62233:2008			
Clause	Requirement + Test	Result - Remark	Verdict
EMF- ELECTROMAGNETICS FIELDS			
	The tested product also complies with the requirements of EN 62233:2008		P
	Limit..... 100%	Measured max.: 10.9%	P
Notes			
<ul style="list-style-type: none"> • Tested at 240V 50Hz • Measuring distance: 0cm; • Sensor location: Against the massage head; • Operating conditions: Continuously without load, highest speed setting; • Background noise level: less than 1% of limit. 			



Dongguan True Safety Testing Co., Ltd.

Report No.: TST20221240038-1SR

ANNEX A:

Photo-documentation



Photo 1 General appearance of the EUT



Photo 2 General appearance of the EUT





Photo 3 General appearance of the EUT



Photo 4 General appearance of the EUT



*****End of report*****