



SGS U.S. Testing Co. Inc.

US-D-OPS-04-02-T

291 Fairfield Avenue Fairfield, NJ 07004 Tel: 973.575.5252 Fax: 973.575.8271

HUMANSIZE INC. OF NEWARK
33 Rutherford Street
Newark, NJ 07105
Attn: Garrick Goh

Test Report No: 172390-3 Date: 5 February 2003

SAMPLE(S) SUBMITTED

BY THE CLIENT AS: Standard Task Chair - Graphite

DATE OF RECEIPT: November 1, 2002

TEST PERIOD: November 22, 2002 - January 9, 2003

TEST(S) REQUESTED: BSEN 1335-3: 2000
Office Furniture-Office Work chair
Part 3: Safety Test Methods

TEST RESULTS: The submitted sample complies with all applicable requirements of the referenced specification.

TESTING PERFORMED BY:

[Handwritten signature]

N. KITOV
LABORATORY TECHNICIAN

SIGNED FOR THE COMPANY BY:

[Handwritten signature]

C.R. ROBERTI, CPP
MANAGER, PRODUCTS EVALUATION

This report is issued by SGS U.S. Testing Company Inc. under its General Conditions for Testing Services, as printed on reverse side. SGS U.S. Testing's responsibility under this report is limited to proven negligence and will in no case be more than the amount of the testing fees. Except by special arrangement, samples are not retained by SGS U.S. Testing for more than 30 days. The results shown on this test report refer only to the sample(s) tested unless otherwise stated, under the conditions agreed upon. Anyone relying on this report should understand all of the details of the engagement. Neither the name, seals, marks nor insignia of SGS U.S. Testing may be used in any advertising or promotional materials without the prior written approval of SGS U.S. Testing. The test report cannot be reproduced, except in full, without prior written permission of SGS U.S. Testing Company Inc.



TESTS PERFORMED AND RESULTS

The following test program was conducted in a laboratory environment maintained at 70°F and 50% Relative Humidity. Each sample was individually tested after conditioning in the test environment for at least 48 hours prior to conducting the test.

The complete detailed procedures may be found in the referenced specification and are only summarized herein. The results obtained for each of the applicable tests are presented in their respective section describing the procedure below:

5. Stability Tests

5.1 Front Edge Overbalancing

Procedure

The seat height and backrest were set at their highest position. A mass of 27 kg is allowed to hang freely, from the front edge of the seat, by using a strap, which is attached to the rear of the seat.

Results:

The chair did not over balance as a result of this test.

5.2 Forwards Overbalancing

Position the chair with the stops against the supporting points on the front. The seat height and the backrest were set at their highest position. A vertical force of 600 N was applied by means of the small seat loading pad at a point 60 mm from the front edge of the seat that was most likely to cause overbalancing. A horizontal force of 20N was applied outwards from the point where the base of the loading pad met the upper surface of the seat for at least 5 sec.

Results:

The chair did not overbalance as a result of this test.

5.3 Sideways Overbalancing

Procedure

The chair was positioned with the stops against the supporting points on the side. The seat height and the backrest were set at their highest position. A vertical force of 250N was applied by means of the small seat loading pad at a point 100 mm from the side edge of the seat and between 175 mm and 250 mm forward of the rear edge of the seat. A vertical force of 350 N was applied by means of the small seat loading pad a point 40 mm inwards from the outer edge of the arm rest. A horizontal force of 20N was then applied outwards from the point where the base of the loading pad met the upper surface of the armrest for at least 5 sec.

Results:

The chair did not overbalance as result of this test.



5.4 Rearward Overbalancing

5.4.1 Determination of the maximum offset of the back rest

Procedure:

The chair was positioned with the stops against the supporting points on the back. The seat height was set to highest position and the backrest was set at its most adverse position. The base of the chair was restrained by applying a mass > 75 kg at a point above the pneumatic piston to prevent it from lifting. A force of 315 N was applied to the backrest at a point 220 mm above the seating surface perpendicular to the backrest.

Results:

The maximum offset of the backrest was measured to be 300 mm.

5.4.2 Chairs with back rest inclination

Procedure:

The seat height and the backrest were set at their highest position. The chair was loaded with the specified 13 discs such that they were firmly settled against the backrest. A light support was used to prevent the upper discs from sliding off.

Results:

The chair did not overbalance as a result of this test.

6. Testing of rolling resistance of the unloaded chair

6.1 Test Method

Procedure:

The chair was placed on an appropriate test surface. A pull force was applied at a height of 200 ± 50 mm above the floor surface and the chair was pulled over a distance of at least 550 mm. A speed of $50 \pm$ mm/s was maintained.

Results:

The pull force was measured to be 85.2 N.

6.2 Fatigue

Procedure:

The chair was placed on a rotating table having a horizontal smooth surface such that the rotating axis of the chair coincided with the rotating axis of the table. The base was prevented from rotating while allowing natural movement of the castors. The duration of the fatigue test was 100 hours. At completion of test a pull force required to pull the chairs (similar to 6.1) was applied and measured.

Results:

The pull force was measured to be 90.7 N.



SGS U.S. Testing Co. Inc.

US-D-OPS-04-03-T

Report No.: 172390-3

9.2.1 Functional Load

Procedure:

A force of 750 N was applied five (5) times to each armrest.

Result:

No fracture or damage to any component of the chair was evident/apparent as a result of this test.

9.2.2 Overload

Procedure:

A force of 900 N was applied five (5) times to each armrest.

Result:

No fracture or damage to any component of the chair was evident/apparent as a result of this test.

End of Report