CHUANGJIE FURNITURE MANUFACTURING CO., LTD
NO.18, JU KENG STREET, DA SHUI KENG VILLAGE, GUAN LAN TOWN,
SHEN ZHEN CITY, GUANG DONG PROVINCE, CHINA

The following sample(s) was / were submitted and identified on behalf of the client as:

| | |
|---|---|
| Sample Description | : HIGH BACK OFFICE MESH CHAIR |
| Style / Item No. | : D00203DH |
| Buyer | : DAUPHIN |
| Supplier | : CHUANGJIE FURNITURE MANUFACTURING CO., LTD |
| Manufacturer | : CHUANGJIE FURNITURE MANUFACTURING CO., LTD |
| Country of Origin | : CHINA |
| Country of Destination | : NORTH AMERICA, EUROPE |
| Test Performed | : Selected test(s) as requested by applicant |
| Sample Receiving Date | : Jun 29, 2006 |
| Sample Resubmission Date | : Jul 17, 2006 |
| Test Performing Date | : Jun 29, 2006 to Jul 25, 2006 |
| Test Result(s) | : For further details, please refer to the following page(s) |

Signed for and on behalf of
SGS-CSTC Co., Ltd.

Sunny Sun
Engineer



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**Test Conducted:**

**I. Base on ANSI/BIFMA X5.1 -2002 Type of chair: Type I**

| Test Item | Test Method | Test requirements | Test Result | Rating |
|---|---|---|---|---|
| Back Strength Test - Static - Type I (Functional Load) | ANSI/BIFMA X5.1 -2002 Clause 5.4 | No loss of serviceability when 890N (200lbs.) is applied for 1 min. Applied 90° to the back at 16in. above the seat. | No failure | Pass |
| Back Strength Test - Static - Type I (Proof Load) | ANSI/BIFMA X5.1 -2002 Clause 5.4 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 1334N (300lbs.) is applied for 1 min. Applied 90° to the back at 16in. above the seat. | No failure | Pass |
| Back Strength Test - Static - Type II & III (Functional Load) | ANSI/BIFMA X5.1 -2002 Clause 6.4 | No loss of serviceability when 667N (150lbs.) is applied for 1 min. Applied 90° to the back at 16in. above the seat. | No failure | Pass |
| Back Strength Test - Static - Type II & III (Proof Load) | ANSI/BIFMA X5.1 -2002 Clause 6.4 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 1112N (250lbs.) is applied for 1 min. Applied 90° to the back at 16in. above the seat. | No failure | Pass |
| Base Test – Static | ANSI/BIFMA X5.1 -2002 Clause 7 | No sudden and major change in the structural integrity under 11,120N (2500lbs.) compressions for 1 min. The weight is then removed and reapplied for 1 min. The center column may not touch the test platform during load applications. | No failure | Pass |
| Drop Test – Dynamic (Functional Load) | ANSI/BIFMA X5.1 -2002 Clause 8.4 | No loss of serviceability when 102kg (225lbs.) weight free falls from 6in. height to the center of the seat. | No failure | Pass |
| Drop Test Dynamic (Proof Load) | ANSI/BIFMA X5.1 -2002 Clause 8.4 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 136kg (300lbs.) weight free falls from 6in. height to the center of the seat. | No failure | Pass |
| Swivel Test - Cyclic | ANSI/BIFMA X5.1 -2002 Clause 9 | No loss of serviceability after 60,000cycles of rotation (360°) under a 102kg (225lbs.) load on the seat at its max. height. Seat shall then withstand another 60,000cycles of rotation at its lowest seating position. Total 120,000cycles. | No failure | Pass |
| Tilt Mechanism Test – Cyclic – Type I & II | ANSI/BIFMA X5.1 -2002 Clause 10 | No loss of serviceability after 300,000cycles under a 102kg (225lbs.) load to the center of the seat | No failure | Pass |
| Impact Test – Cyclic | ANSI/BIFMA X5.1 -2002 Clause 11.3 | No loss of serviceability in 100,000cycles impact. A weight of 57kg (125lbs.) free falls onto the seat from 1 in. height. | No failure | Pass |
| Front Corner Load Ease Test –Cyclic – off Center | ANSI/BIFMA X5.1 -2002 Clause 11.4 | No loss of serviceability after load each seat front corner with 734N (165 lbs.) for 20,000 cycles, total 40,000 cycles. Note: this test is done after “Impact test” on the same sample. | No failure | Pass |

To be continued…

| Test Item | Test Method | Test requirements | Test Result | Rating |
|---|---|---|---|---|
| Stability Test – Rear Stability | ANSI/BIFMA X5.1 -2002 Clause 12.3 | A 79kg (173lbs.) weight is placed to the seat center (strapped as Fig. 12a). Obstruct the chair casters/legs with 13mm (½in.) obstacle. A tipping force is applied to the chair back until the total weight is transferred to the rear support members. The tipping force shall not be less than:<br>Type I and II –89N (20 lbs.)<br>Type III –156N (35 lbs.) | The tipping force was more than 89N (Type I) | Pass |
| Stability Test – Front Stability | ANSI/BIFMA X5.1 -2002 Clause 12.4 | The chair is obstructed with a 13mm (½ in.) obstruction to the chair casters/legs. A downward load of 600N (135lbs.) is centered 60mm (2.4in.) from the seat front center edge. The seat shall withstand a 20N (4.5lbf.) horizontally from the front seat edge without tipping. | The tipping force was more than 20N | Pass |
| Arm Strength Test Vertical - Static (Functional Load) | ANSI/BIFMA X5.1 -2002 Clause 13.4 | No loss of serviceability when 890N (200lbs.) is applied for 1 min. The vertical load is uniformly applied along a 127mm (5in.) length at the apparent weakest point. | No failure | Pass |
| Arm Strength Test Vertical-Static (Proof Load) | ANSI/BIFMA X5.1 -2002 Clause 13.4 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 1334N (300lbs.) is applied for 1 min. The vertical load is uniformly applied along a 127mm (5 in.) length at the apparent weakest point. | No failure | Pass |
| Arm Strength Test Horizontal –Static (Functional Load) | ANSI/BIFMA X5.1 -2002 Clause 14.4 | No loss of serviceability when 445N (100lbs.) for 1 min. is applied horizontally outward to the armrest at the most forward point of the armrest. | No failure | Pass |
| Arm Strength Test Horizontal - Static (Proof Load) | ANSI/BIFMA X5.1 -2002 Clause 14.4 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when 667N (150lbs.) for 1 min. is applied horizontally outward to the armrest at the most forward point of the armrest. | No failure | Pass |
| Back Durability Test – Cyclic – Type I | ANSI/BIFMA X5.1 -2002 Clause 15 | No loss of serviceability in 120,000 cycles with a 102kg (225lbs.) in the center of the seat and a 445N (100lbf.) 90° to the center of the chair back. For chairs with a back width greater than 406mm (16in.), test at the center of chair back for 80,000cycles and then 102mm (4in.) off-center 40,000 cycles, half to each side. | No failure | Pass |
| Back Durability Test – Cyclic – Type II & III | ANSI/BIFMA X5.1 - 2002 Clause 16 | No loss of serviceability in 120,000 cycles with a 102kg (225lbs.) in the center of the seat and a 334N (75lbf.) 90° to the center of the chair back. For chairs with a back width greater than 406mm (16in.), test at the center of chair back for 80,000cycles and then 102mm (4in.) off-center 40,000 cycles, half to each side. | No failure | Pass |

To be continued…

| Test Item | Test Method | Test requirements | Test Result | Rating |
|---|---|---|---|---|
| Caster / Chair Base Durability Test for Pedestal Base Chair | ANSI/BIFMA X5.1 -2002 Clause 17.1 | No loss of service after 2,000cycles over a hard surface with 3 obstacles and 98, 000cycles over a smooth hard surface without obstacles under a 102kg (225lbs.) load on the seat. Test stroke is 762mm (30in.) minimum. The caster should not separate under 22N (5lbs.) pulling force in line with the caster stem after the cycling test. | No failure | Pass |
| Caster / Chair Base Durability Test for Chairs with Legs | ANSI/BIFMA X5.1 -2002 Clause 17.2 | No loss of service after 2,000cycles over a hard surface with 2 obstacles and 98, 000cycles over a smooth hard surface without obstacles under a 102kg (225lbs.) load on the seat. Test stroke is 762mm (30in.) minimum. The caster should not separate under 22N (5lbs.) pulling force in line with the caster stem after the cycling test. | NA | ---- |
| Leg Strength Test -Front Load (Functional Load) | ANSI/BIFMA X5.1 -2002 Clause 18.3 | No loss of serviceability when a force of 334N (75lbf.) is applied to each front leg individually for 1 minute. | NA | ---- |
| Leg Strength Test-Front Load (Proof Load) | ANSI/BIFMA X5.1 -2002 Clause 18.3 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when a force of 556N (125lbf.) is applied to each front leg individually for 1 minute. | NA | ---- |
| Leg Strength Test -Side Load (Functional Load) | ANSI/BIFMA X5.1 -2002 Clause 18.4 | No loss of serviceability when a force of 334N (75lbf.) is applied once to each front and rear leg individually for 1 minute. | NA | ---- |
| Leg Strength Test -Side Load (Proof Load) | ANSI/BIFMA X5.1 -2002 Clause 18.4 | No sudden and major change in the structural integrity (loss of serviceability is acceptable) when a force of 512N (115lbf.) is applied once to the front and rear leg individually for 1 minute. | NA | ---- |
| Footrest Durability Test | ANSI/BIFMA X5.1 -2002 Clause 19 | No loss of serviceability after 50,000cycles of a 890N (200lbf) load vertical along 102mm (4in.) length of the footrest at the apparent weakest point of the structure. | NA | ---- |
| Arm Durability Test-Cyclic | ANSI/BIFMA X5.1 -2002 Clause 20 | No structural breakage or loss of serviceability when a force of 400N (90lbf.) is applied to each arm at a 10º angle ±1º for 60,000cycles | No failure | Pass |
| Out Stop Tests for Chairs with Manually Adjustable Seat Depth | ANSI/BIFMA X5.1 -2002 Clause 21 | Place a 70 kg (154 lb) rigid mass in the center of the seat. Hold the seat at its most position. A cable is attached to the most rigid point of the vertical centerline of the seat. Hang a weight of 25 kg (55 lb) on the opposite end of the cable. Release the weight so it can drag the seat move forward rapidly and impact | NA | ---- |
| Tablet Arm Static Load Test | ANSI/BIFMA X5.1 -2002 Clause 22 | Apply a load of 68 kg (150 lb) at the apparent weakest position for 5 minutes and remove the load. No sudden and major change in the chair when the application of the load. | NA | ----- |

To be continued…



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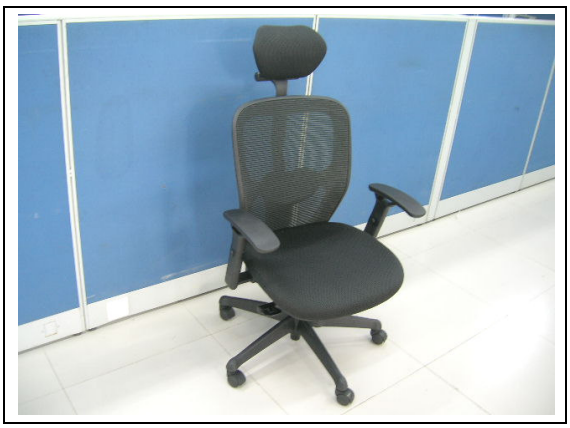
| Test Item | Test Method | Test requirements | Test Result | Rating |
|---|---|---|---|---|
| Tablet Arm Load Ease Test - Cyclic | ANSI/BIFMA X5.1 -2002 Clause 23 | No loss of serviceability to the unit after loading the tablet surface with a weight of 35 kg (77 lb) for a total 100,000 cycles. | NA | ---- |

**Remark:** 1) NA – not applicable.

2) Type of chair:
Type I – tilt chair: a chair with a seat tilts with a counterbalancing force;
Type II – fixed seat angle, tilting backrest: a chair that provides a fixed angle with a tilting backrest.
Type III – fixed seat angle, fixed backrest: a chair that provides a fixed seat angle with a fixed backrest.

**Photo Appendix:**



To be continued…



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## II. Base on ISTA 1A: 2001

**Test Results:**

**1. Shipping marks**

Main mark:

No shipping mark.

**2. Description of Package:**

1) External Container Size (inch) : length 30-1/8 x width 25-3/4 x depth 13

2) Gross Weight of Packaged-Product Tested (lbs.): 54.80

3) Shipping Carton

| | |
|---|---|
| Forms | : Double Wall corrugates board |
| Box Makers Certificate | : No |
| Joint | : Stitched Joint(Double & Diagonal) |
| Closed With | : Pressure sensitive tape |
| Style | : Top opening |

4) Internal Packing (Details please see photo)

- The hardware was packed into a plastic bag.
- The cylinder was packed into a plastic bag and then packed into an inner box
- The other components were packed into plastic bags.
- One set of chair was packed into a shipping carton under protection of polyfoam blocks and corrugated pads.

**3. Transportation Test (As Per ISTA Project 1A: 2001)**

Sample Size One Master Carton

1) Vibration Test

| | |
|---|---|
| Mode of Vibration | : circular motion |
| Vibration Frequency | : 200cpm |
| Duration of the Test | : 71 minutes |
| Number of Impact | : 14200 times |
| Inspection before Vibration | : Yes |
| Inspection after Vibration | : Yes |

2) Drop Test

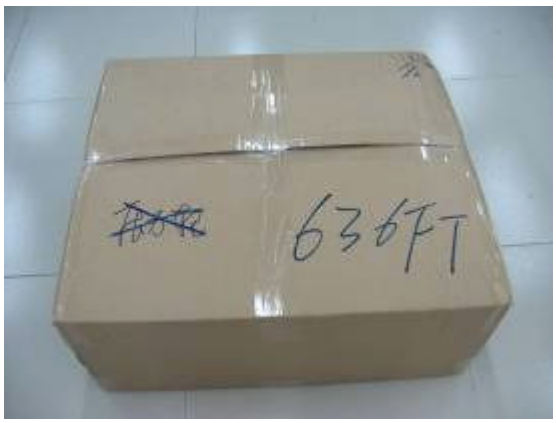
| | |
|---|---|
| Number of Drop | : 10 |
| Height of Drop (inch) | : 18 |
| Inspection before Drop | : Yes |
| Inspection after Drop | : Yes |

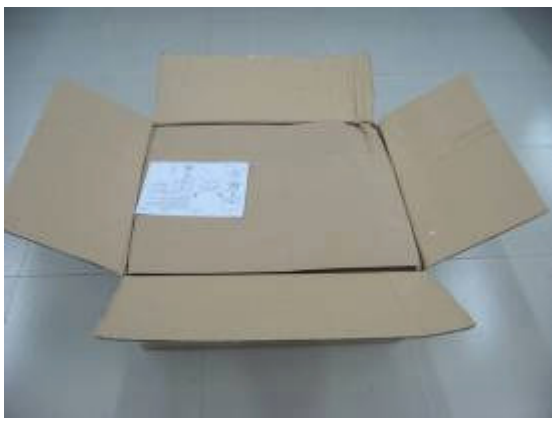
Result:

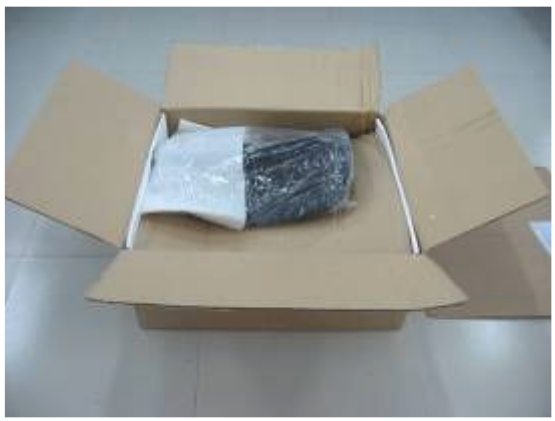
Satisfactory: after performing the vibration and drop test, no visual damage was found on the product.

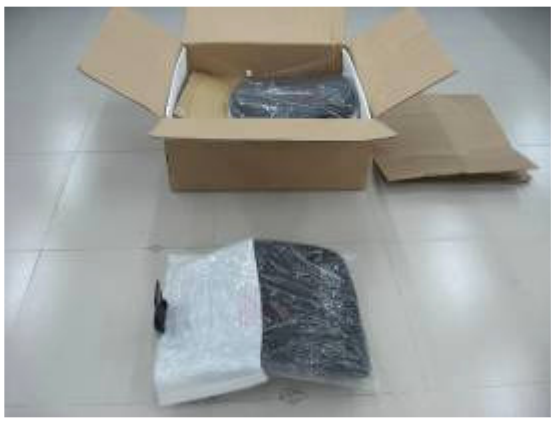
To be continued…

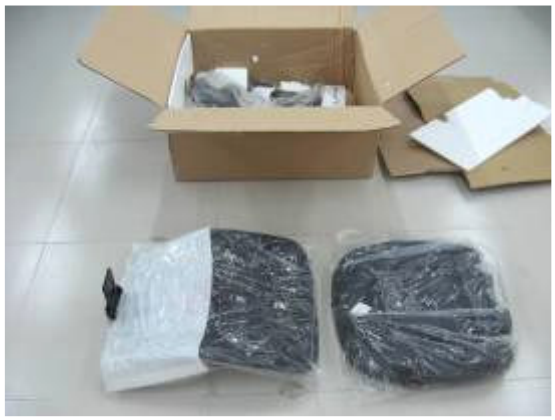
**Photo Appendix:**

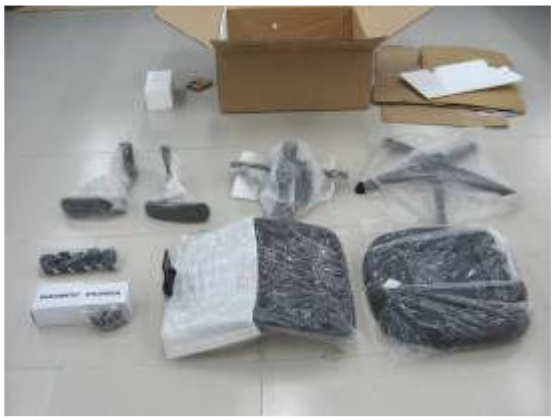










To be continued…



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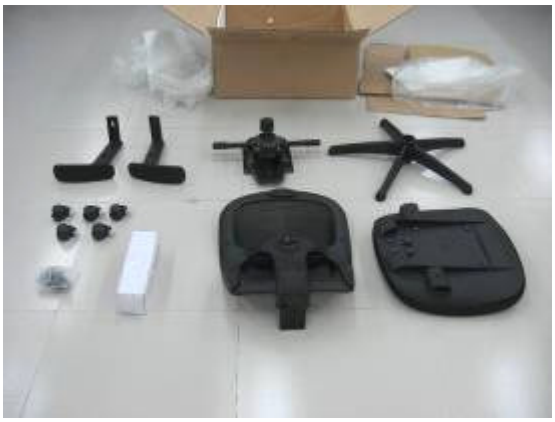

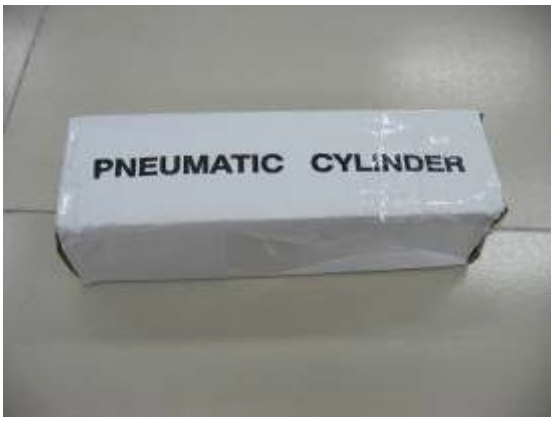


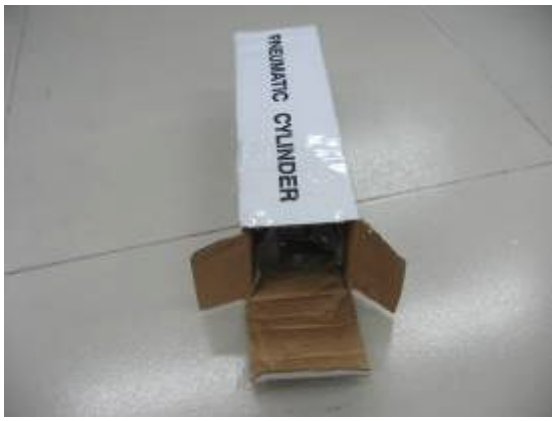


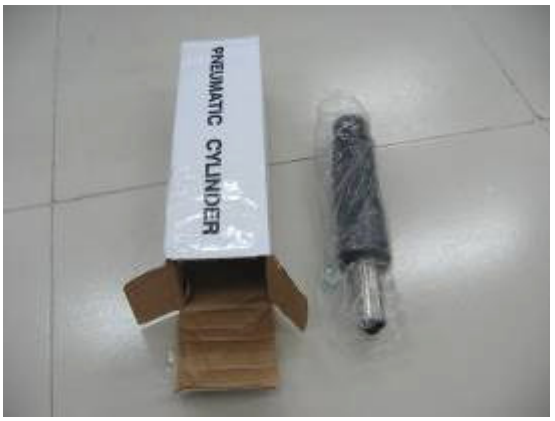


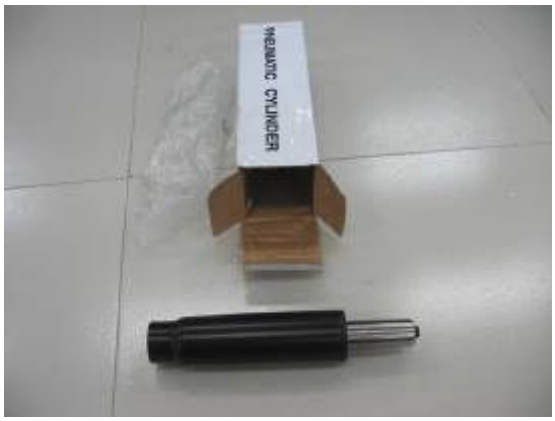


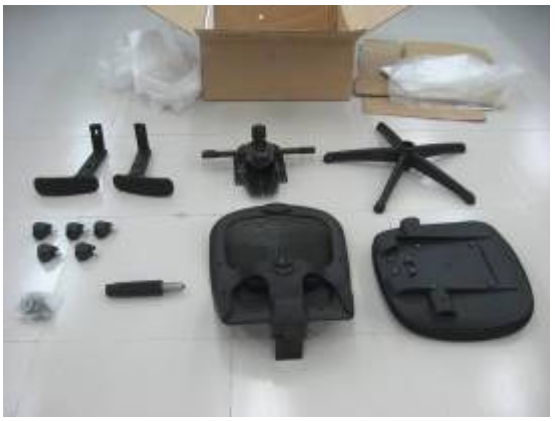

To be continued…



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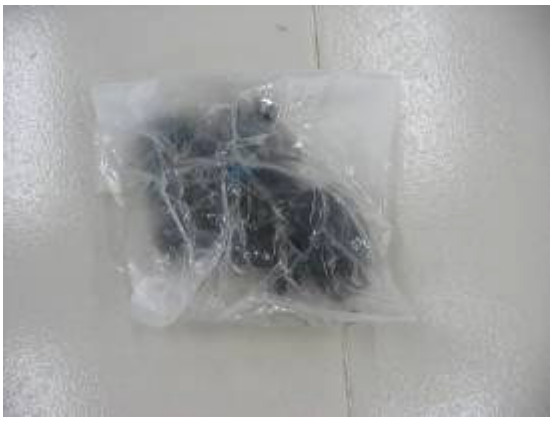

***End of Report***



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