

**Test Report No. 7191010724-MEC11-OCS**  
dated 22 Sep 2011



PSB Singapore

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**Subject:**

Testing of Office Chair submitted by Merryfair Chair System Sdn Bhd on 14 Jun 2011.

**Tested For:**

Merryfair Chair System Sdn Bhd  
No 2, Jalan Koporat 1/KU9, Taman Perindustrian Meru,  
42200 Klang, Selangor D.E.  
Malaysia

**Date of Test:**

20 Jun 2011 to 21 Sep 2011

**Description of Sample:**

Two complete sets of Office Chair as shown in the photograph 1 were received. The following descriptions were given by the client:

Model : Ovo  
Product Type : Office Chair  
Country of Origin : Malaysia

**Method of Test:**

As requested by the client, the tests were conducted in accordance with the following standard:

ANSI/BIFMA X5.1 – 2002 "General-Purpose Office Chairs – Tests"

The tests were conducted at TÜV SÜD PSB furniture test laboratory, a FIRA (UK) Accredited Testing Laboratory, located at No.1 Science Park Drive. Singapore 118221.



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TUV®

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**Results:**

Clause	Test	Parameters	Results	Requirement
5	Back Strength Test – Static – Type I	Functional load = 890 N Proof load = 1334 N Duration = 1 min	Passed	Functional load: No loss of serviceability Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
6	Back Strength Test – Static – Type II & III	Functional load = Proof load = Duration =	N/A	
7	Base Test – Static	Loading force = 11.1 KN Duration = 1 min Cycles = 2	Passed	No sudden & major change in the structural integrity of the base.
8	Drop Test – Dynamic	Highest seat position: Functional load = 102 kg Proof load = 136 kg Drop ht = 152 mm  Lowest seat position: Functional load = 102 kg Proof load = 136 kg Drop ht = 152 mm	Passed	Functional load: No loss of serviceability  Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
9	Swivel Test – Cyclic	Seat load = 102 kg Cycles = 60,000 highest position 60,000 lowest position Rate = 5 - 15 cycles/min	Passed	No loss of serviceability
10	Tilt Mechanism Test – Cyclic	Seat load = 102 kg Cycles = 300000 Rate = 10 - 30 cycles/min	Passed	No loss of serviceability to the tilt mechanism
11	Seating Durability Test – Cyclic  - Impact Test  - Front Corner Load-Ease Test – Cyclic – Off Center	Seat load = 57 kg Drop ht = 25 mm Cycles = 100000 Rate = 10 - 30 cycles/min  Seat load = 734 N Cycle = 40000 Rate = 10 - 30 cycles/min	Passed	No loss of serviceability

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**Results:**

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12	Stability Tests - Type I a) Rear Stability 1. Locked 2. Unlocked  b) Front Stability	Seat weight = 79 kg  Vertical Load = 600 N Horizontal force = 20 N	Passed	Force required for front support to lift off shall be more than: - Type I & II : 89N - Type III : 156N  Chair shall not tip over
13	Arm Strength Test – Vertical – Static	Functional load = 890 N Proof load = 1334 N Duration = 1 min	Passed	Functional load: No loss of serviceability Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
14	Arm Strength Test – Horizontal – Static	Functional load = 445 N Proof load = 667 N Duration = 1 min	Passed	
15	Back Durability Test – Cyclic – Type I	Seat weight = 102 kg Loading force = 445 N Cycles = 120000 Rate = 10 - 30 cycles/min	Passed	No loss of serviceability
16	Back Durability Test – Cyclic – Type II & III	Seat weight = Loading force = Cycles = Rate =	N/A	
17	Caster / Chair Base Durability Test – Cyclic  - Pedestal Base Chairs	Seat weight = 102 kg Cycles = 2 000 (Obstacles) 98 000 (No obstacles) Rate = 10 ± 2 cycles/min	Passed	No loss of serviceability
	Caster Retention for Each Caster	Applied force = 22 N		No part of castor shall separate from base

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**Results:**

Clause	Test	Parameters	Results	Requirement
18	Leg Strength Test – Front & Side Application  - Front Load Test  - Side Load Test	Functional load = Proof load = Duration =  Functional load = Proof load = Duration =	N/A	Functional load: No loss of serviceability  Proof Load: No sudden & major change in structural integrity. Loss of serviceability is acceptable
19	Footrest Durability Test – Vertical – Cyclic	Loading force = Cycles = Rate =	N/A	No loss of serviceability
20	Arm Durability Test – Cyclic	Applied force = 400 N Cycles = 60000 Rate = 10 - 30 cycles/min	Passed	Structural breakage or loss of serviceability shall constitute failure
21	Out Stop Tests for Chairs with Manually Adjustable Seat Depth	Seat weight = Loading weight = Cycles =	N/A	No loss of serviceability
22	Tablet Arm Static Load Test	Applied load = Duration =	N/A	No sudden and major change in the structural integrity of the chair. After test, tablet arm must allow egress from the unit; other losses of serviceability are acceptable
23	Tablet Arm Load Ease Test – Cyclic	Applied load = Cycles = Rate =	N/A	No loss of serviceability

**Remarks:**

1) N/A: Not applicable due to features not available on chair.

  
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Consumer & Safety Products  
Mechanical Centre



Photograph 1 : Ovo



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July 2011

