BenchPro
(Test Report)

BIFMA INTERNATIONAL

General-Porpuse Office Chairs – Test
American National Standart for Office Furniture

CHAIR TEST NAME: 8. DROP TEST - DYNAMIC

CHAIR: WNT3-DF, LSN3-F

START DATE: DIC-04-2013 START HOUR: 15: 20

END DATE: DIC- 04- 2013,

Chair tests:

___ Backrest Stregth Test – Static (Type I)

___ Backrest Stregth Test – Static (Type II, III)

___ Base Test – Static

_X_ Drop Test – Dynamic

___ Swivel Test – Cyclic

___ Tilt Mechanism Test – Cyclic

__ Seating Durability Test – Cyclic

___ Stability tests

___ Arm Stregth Test – Vertical – Static

___ Arm Stregth Test – Horizontal – Static

___ Backrest Durability Test – Cyclic (Type I)

___ Backrest Durability Test – Cyclic (Type II, III)

___ Caster/Chair Base Durability Test - Cyclic

___ Leg Straght Test – Front and Side Application

___ Footrest Durability Test – Vertical - Cyclic

___ Arm Durability Test - Cyclic

___ Out Stop Test for chairs with Manually Adjustable Seat Depth

___ Tablet Arm Static Load Test

___ Tablet Arm Load Ease Test Cyclic

Type chair:

____X_____ Type I - Tilting Chair

_____ Type II – Fixed seat angle, tilting backrest

_____ Type III – Fixed seat angle, fixed backrest

Apllicability:
This test apply to all chairs types.

Purpose of the test:

The purpose of this test is to evaluate the ability of the chair to withstand heavy and abusive impact forces on the seat.

Test Setup:

a) The unit shall be placed on a test platform.
b) For chairs with a seat height adjustment feature, set the adjustment to its highest position. If other adjustable features are available, set these adjustments at normal use conditions. Casters, if present, shall be initially placed at the apparent worst –case position (typically at a position 90 degrees to the base leg).
c) A test bag as shown in Appendix A or other fixture that gives an equivalent impact shall be attached to a device permitting a free fall to the seating position.
d) The bag shall be centered side – to- side on the seat and shall be positioned not more than 13 mm (0.5 in.) from the most forward surface of the backret during free fall. The bag shall not contact the backrest during the free fall.

Test Procedures:

Functional Load Test

a) A test bag approximately 400 mm (16 in.) in diameter containing sand and / or shot weighing 102 kg (225 lb) shall be raised 152 mm (6 in.) above the uncompressed seat and released one time.
b) Remove the bag and evaluate the product in accordance with the acceptance level.
c) For chairs with seat height adjustment features, set height to its lowest position and repeat a) and b).

Proof Load Test

a) Repeat setup and increase the weight of the test bag to a proof load of 136 kg. (300lb).
b) The test bag shall be raised 152 mm (6 in.) above the uncompressed seat and released one time.
c) Remove the bag and evaluate the product in accordance with the acceptance level.
d) For chairs with height adjustments, set seat height to its lowest position and repeat a) through c). A second chair may be used for testing the chair in the lowest position. Note: If a second chair is used for the proof load test, it must also be subjected to the functional load impact per (functional load test), while in its lowest position.

Acceptance Level

Functional Load, There shall be no loss of serviceability.

Proof Load, There shall be no sudden and major change in the structural integrity of the chair. Loss of serviceability is acceptable.

Conclusion:

The chair didn't loss serviceability, all the chair components looks after of the drop test., Seat, Cylinder, Back bar, Lever mech., Base and casters.

Test: Pass

Video: Done