BenchPro
(Chair Test Report)

BIFMA INTERNATIONAL
General-Purpose Office Chairs – Test
American National Standard for Office Furniture

CHAIR TEST NAME: 9.-Swivel Test-Cyclic

START DATE: JUNE-19-2013 START HOUR: 12:00
END DATE: JUNE-27-2013 END HOUR: 13:00

Chair tests:

___ Backrest Strength Test – Static (Type I)
___ Backrest Durability Test – Cyclic (Type I)
___ Backrest Strength Test – Static (Type II, III)
___ Backrest Durability Test – Cyclic (Type II, III)
___ Base Test – Static
___ Caster/Chair Base Durability Test - Cyclic
___ Drop Test – Dynamic
___ Leg Straight Test – Front and Side Application
___ X Swivel Test – Cyclic
___ Footrest Durability Test – Vertical - Cyclic
___ Tilt Mechanism Test – Cyclic
___ Arm Durability Test - Cyclic
___ Seating Durability Test – Cyclic
___ Out Stop Test for chairs with Manually Adjustable Seat Depth
___ Stability tests
___ Tablet Arm Static Load Test
___ Arm Strength Test – Vertical – Static
___ Tablet Arm Load Ease Test Cyclic
___ Arm Strength Test – Horizontal – Static

Type chair:

___ X ___ Type I - Tilting Chair
___ X ___ Type II – Fixed seat angle, tilting backrest
________ Type III – Fixed seat angle, fixed backrest
**Aplicability:** This test applies to all chairs types with a swivel seat.

**Purpose of the test:** The purpose of this test is to evaluate the ability of the chair to withstand stresses and wear caused by repeated swiveling.

**Test Setup:**

a). The chair shall be restrained on a platform. Either the seat or the platform shall be restrained from rotation.

b). If the seat height is adjustable, seat it to the maximum seat height position. Set all other adjustable features to the normal use condition.

c). A 102 kg. (225 lb) load shall be placed on the seat such that the center of gravity of the load is 51 to 64 mm (2 to 2.5 in.) forward of the centerline of the spindle.

d). The cycling device shall be adjusted to rotate the lesser of the following:

the available range of rotation or 360 +/- 10 grades. If the available range of rotation is less than 360 grades, the rotation of the test machine shall be adjusted such that the swivel mechanism touches but does not override the stops. The rotation may be either bi-directional (alternating) or unidirectional.

e). For chairs that swivel 360 grades, a cycle is one full rotation. For chairs that swivel less than 360*, one cycle is rotating from one stop to the other stop.

**Test Procedures:**

a). The seat or platform shall rotate for 60,000 cycles at an appropriate rate between 5 and 15 rotations per minute.

b). If the seat height is adjustable set the height to its lowest position.

c) For all chairs, continue the rest for an additional 60,000 cycles to a total of 120,000 cycles.

d) Record finding.

**Acceptance Level:** There shall be no loss of serviceability

**Conclusion:** The test exceeded the acceptance levels straight that requires proof by 60,000 cycles, we made the swivel test Cyclic rotating 80,000 cycles in two directions, to complete a total of 160,000 cycles; after that we reviewed all the components of chair and there were not damage, and are in functional conditions.
Test: PASS
Video: DONE