

BenchPro

(Chair Test Report)

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

CHAIR TEST NAME: 10. TILT MECHANISM TEST - CYCLIC

WNT3-F,

START DATE: July-04-2013 START HOUR: 12:00

END DATE: August 8 -2013

Chair tests:

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

Type chair:

- ☒ Type I - Tilting Chair
- ☐ Type II – Fixed seat angle, tilting backrest

_____ Type III – Fixed seat angle, fixed backrest

Appllicability: This test apply to all types of chairs with tilting backrest.

Purpose of the test: The purpose of this test is to evaluate the ability of the tilt mechanism to withstand fatigue stresses and wear caused by repeated tilting.

Test Setup:

- a). The chair or fixture with attached tilt mechanism shall be restrained on a test platform.
- b). If adjustable features are available, all adjustments shall be set at normal use conditions.
- c). A cyclic device shall be attached to the chair or fixture at any location appropriate to apply a controlled (push and / or pull) motion.
- d) A test load of 102 kg (225 lb) shall be secured on the center of the seat (or equivalent location on the fixture).
- e) Adjust the cycling device to move the mechanism between the front and back stops, without overriding or impacting either stop.

Test Procedures:

The unit shall be cycled for 300,000 cycles at an appropriate rate between 10 and 30 cycles per minute. The tilt mechanism and /or cycling device should be checked and adjusted as needed to maintain the original conditions specified.

- b). At the conclusion of cycling, a 22N (5 lbf.) pull force shall be applied to each caster in line with caster steam centerline.

Acceptance level. There shall be no loss of serviceability to the tilt mechanism.

Conclusion: After the tilt mechanism test, the chair didn't loss serviceability, all the chair components looks goods: Seat, Cylinder, Back bar, Lever mech., Base and casters.

Test : PASS

Video: DONE

Photo: DONE