# BenchPro
# (Chair Test Report)

**BIFMA INTERNATIONAL**

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

**CHAIR TEST NAME:** 17. CASTER/CHAIR BASE DURABILITY TEST - CYCLIC

LARGE NYLON -BASE CHAIR: HTF-320, CASTERS : 60mm std.

START DATE: MAY-16-2013 START HOUR: 12:00

END DATE: JULY -03-2013, END HOUR: 13:00

## Chair tests:

___ Backrest Stregth Test – Static (Type I)

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

___ Base Test – Static

___ 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)

__X_ 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

_____X___ Type II – Fixed seat angle, tilting backrest

_____X____ Type III – Fixed seat angle, fixed backrest

**Apllicability:** These test apply to pedestal base chairs with casters.

**Purpose of the test:** The purpose of these test is to evaluate the ability of the chair base to withstand fatigue stresses and wear caused by moving the chair back and forth.

**Test Setup: a).**The chair base with casters, shall be cycled on a smooth hard surface with three obstacles in accordance with the obstacle layout.

b). If a complete chair is to be tested, place a 102Kg. (225 lb.) load on the seat of the chair. If a fixture is used, the weight of the test assembly (base assembly, fixture and weights) shall be equivalent to 102kg (225 lb.) plus the weight of the chair in its fully assembled configuration. The base and the casters shall be free to rotate and swivel.

c). The stroke of the cycling device shall be adjusted to ensure a minimum of 762mm (30 in.) of travel.

**Test Procedures**: a). The chair shall be cycled 2000 cycles over the obstacles, and then 98000 cycles on a smooth, hard surface without obstacles.

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

**Durability cycling.** There shall be no loss of serviceability

**Conclusion:**

The test with obstacles, was exceeded the 2000 cycles required, was reached (4,141 cycles).

The test without obstacles, was exceeded the 98,000 cycles required, was reached (150,193 cycles)

After the durability tests, the wheels -casters were spent , but are in functional conditions, and don’t loss serviceability eater.

**Test :** PASS

**Video:** DONE

**Photo:** DONE