

# TNJ-051 chair seat drop impact durability testing machine

Use : This test applies to all types of chairs.

Purpose of Test: to evaluate the ability of a chair to withstand heavy impact forces on the seat.dynamic and cyclic durability seat test.

Standard :

- 1. Drop test Dynamic(ANSI/BIFMA X5.1-2017, clause 7)
- 2. Seating durability tests -Cyclic only (ANSI/BIFMA X5.1-2017, Clause 10.3)
- Drop test Dynamic for unit with seat surfaces (ANSI / BIFMA X5.9 -2012 , Clause 7.2 )
- 4. Durability test for units with seating surfaces cyclic impad (ANSI / BIFMA X5.9 -2012. Clause 7.3)



## **Technical specifications**

a)Frame size: 2m(W) x 1.5m (D) x 2m(H)

b)Pneumatic cylinder/electromagnetic system

-To hold. Release and lift the impact bag (3 different bags)

-Height: Adjustable height up to 1500mm from the test floor

-Attached to the impact bag and allow the impact bag to fall freely on the seat at height up to 200mm

(adjustable)

## c)Impact bag:

-Construction

-Contain shot



-3 bags – with different mass: 57kg (125lb), 102kg(225lb) &136 kg(300lb)

-Diameter 406mm(16")

## d)2 operation mode:

-Electronic predetermined counter (EPC) - 6 digit counter allow the bag to be released lifted for the

specific cycles (seating durability test-100,000 cycles)

-Timer – to lift the bag once it is rested on the seat for 1 minute (drop test)

e)The specified size is to accommodate testing for multiple seating, table and storage as well

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