

BIFMA Chair Stability Tester



Application

This machine is suitable to test the seats (such as chairs, office chairs) forward stability. The purpose of these tests is to evaluate the front and rear stability of chairs.

Principle

Put the test-piece on the test table, blocked the front leg, apply specified force with forward 20N applied at seat loading point, check the article tends to overturn forward or not to

determine the test-piece forward stability performance.

Install the loading basket under the table which is lifting by Pneumatic actuator, max loading capacity up to 150kg, the lift of cylinder is controlled by pneumatic attenuation device, Load-bearing basket adopt rubber cushioning device to ensure that fall to final position will not produce damage, the operation unit of table can control loading basket to rise or go down, dynamical movement can position device adjustment, easy to operation.

Loading basket can load the weights as bellows(loading basket weight is 10kg)

- 4kg for each piece, 28pcs(100x100x50mm)
- 2kg for each piece, 10pcs(100x50x50mm)
- 1kg for each piece, 4pcs(100x50x25mm)

Weight: 600N increment

Specification

- A 79 kg (173 lb.) weight shall be placed on the seat at the center of the unit or on the seating position nearest to the center of the chair
- A block, obstruction or other restraining device 13 mm (0.5 in.) in height shall be affixed to the test platform. The device shall prevent sliding but not restrict the unit from tipping. On chairs that rotate, the base and casters shall be positioned to offer the least resistance to rearward tipping of the chair
- Loader: diameter 200mm.
- Seat height: 30 to 65cm, manual adjustment

Testing Standards

ANSI/BIFMA X5.1-2011 12	Stability Tests
BS EN 1355-3:2009 7.1.1	Front edge overturning
BSEN 1355-3:2009.7.1.2	Forwards overturning