

Suspension Connector Durability Tester



Application

Suitable for evaluating the durability of the suspension mechanism used for swings in children's amusement facilities.

Principle: After simulating the situation in normal use, after loading the suspension mechanism with a certain weight, after a certain number of cycles, check whether its performance meets the safety requirements

Conform to the standard: ISO 8124.

Technical parameters

Load	6.75kg, 13.5kg, 18.5kg, 30kg cumulative
Load loading method	hanging
Fixed rod eccentricity	100mm ~ 220mm
Swing angle	$\pm 5^\circ \sim \pm 45^\circ$ ($10^\circ \sim 90^\circ$) can be set
Number of suspension mechanisms	one
Test speed	1 ~ 60r / min can be set
Count	0 ~ 999 999 can be set
Control mode	PLC + touch screen
Volume (WxDxH)	40x52x78cm
Weight (approx)	$\approx 75\text{Kg}$
Power supply	1 ϕ AC 220V 50Hz 3A

Procedure

Attach each type of swing element to its support member in accordance with the installation instructions, and

mount in a suitable test fixture.

Flexible components of the swing element may be replaced by rigid components of at least the same size and mass, as long as the alternate components do not affect the moving parts of the swing element.

Secure the appropriate test mass to each occupant position to be tested.

Oscillate this suspended unit through an arc with an included angle as specified for a total of 180 000 cycles (forward and backward).

Determine whether any loosening or structural failure of the suspension connector occurs.