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Shock absorption & penetration test equipment

Description

The INSPEC shock absorption and penetration test equipment comprises a drop enclosure and control system.

The drop assembly is available with either Twin-wire or Monorail guidance systems and offered in various heights to provide different impact speeds depending upon need.

The test equipment itself comprises a steel plate bonded to a concrete block (different mass options available) upon which is mounted an aluminium framework with clear polycarbonate guarding. The front has double opening doors that are interlocked for user safety.

The drop carriage assembly (for headform or striker) is hoisted by an electric winch, and released via a pneumatic, fail-safe, release system.

Depending upon the configuration chosen, the equipment can be used for testing with falling headforms using a range of anvils or falling strikers with a range of fixed headforms. The equipment may also be configured to test a range of body protectors.



(image shown is variant 3SPT configured for EN 397 testing)

The equipment is controlled by the supplied software which interfaces with the instrumentation and measurement system. The program displays the measurand vs time history and saves the data.

Depending upon testing requirements, various accessories are available for purchase so that you may configure the equipment to perform the tests you require. Information on these accessories can be provided separately.

Let us know your requirements and we can suggest accessories for you, plus we are available to discuss any special requirements you may have.

This framework is disassembled for shipping.

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Shock absorption & penetration test equipment (continued)

Services required

Floor mounted
Electricity at 240V and 50Hz
Compressed air at 5-10 bar
Computer with an appropriate version of Microsoft Office for the software (one can be supplied with the rig), note: some antivirus packages and enterprise security systems can prevent the software from working with MS Office correctly, in those cases it is possible to set the software to produce a .csv file which can then be used in Excel.

Optional items

Headforms, strikers and anvils are specific to the standard being tested against. Please specify the required standard(s). The supplied software will only allow the standards requested during purchase to be available for testing.

Approximate dimensions and weight

Item		Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
Drop assembly		900	550	>3365*	>740*
Control box		500	215	500	18

*depends upon option(s) chosen

Relevant standards

The equipment is designed for testing shock absorption, peak acceleration and penetration for a wide variety of ANSI, AS/NZS, British, EN and ISO standards.