

Elastomeric Shock Pad / Modular Elastomer Pad (ESP / MEP)

Description

ESPs/MEPs are specified in many helmet standards as a means to perform quick and easy checks on the overall performance of the shock absorption and impact test equipment.

The elastomeric pad has a hardness of 70 Shore A and is moulded on to an aluminium base plate, which can, in turn, be fixed to the anvil of the test rig.

In use, it is recommended to perform five consecutive drops of the striker or headform on to the pad and to record the resulting force / acceleration indications.

The values obtained for the last three drops may then be used for analysis (that is, typically, comparison with results from previous drops).

Top view



Bottom view



Services required

Shock absorption / impact test equipment

Approximate size & weight

13cm diameter x 3cm high : 0.6 kg

Relevant standards

ANSI Z89.1 : 2014

ASTM F1446-15b

CPSC 16 CFR Part 1203 : 1998

CSA Z94.1-15

AS/NZS 1801 : 1999

BS 6658 : 1985

PSDB 21/04

SS 98-2005

ISO 10256 : 2003

Although not required by many other helmet standards, the use of the ESP/MEP is recommended as good laboratory practice to verify consistent performance of the test rig.