Instruments for Safety Testing

CTL22 BAM Fallhammer Test Apparatus

For determining the sensitivity of powders to impact stimuli for assessing transport, packaging and regulatory classification (UN, EC and EMTAP)

Some powders are deliberately manufactured with highly energetic behaviour, but occasionally it is an unexpected property of a new material. For regulatory compliance there are a number of screening tests which have to be performed on new materials in order that they can be safely transported. One such screening is a BAM Fallhammer test, which measures sensitivity to mechanical force and enables testing to UN & EU Regulations.

Functional Specification and Deliverables

- A solid cast steel base block
- Main 100 mm diameter anvil
- A centring ring for locating the intermediate anvil on the main anvil
- 2 x Intermediate 26 mm diameter anvils
- 2 x locating rings with orifices for gas release
- 200 steel cylinders (roller bearings)
- 50 rubber ‘o’rings for steel cylinders (liquid testing only)
- 100 steel collars for steel cylinders locating
- An upper to lower cylinder distance gauge for 1 - 2 mm sample gap setting required for liquids
- A central column with guides (graduated scale) ready set for correct height
- A 1 kg drop weight carrier assembly
- A 1 kg weight already fitted to 1 kg drop weight assembly for a 2 kg overall weight
- A 5 kg drop weight carrier assembly
- A 5 kg weight already fitted to 5 kg drop weight assembly for 10 kg overall weight
- A drop weight electromagnetic release device
- An electromagnetic power supply distribution box together with electromagnet 24V supply cable, 100 - 120 V / 220 - 240V mains inlet supply cable and remote handset for weight release (power ON = drop, power OFF = hold)
- Electromagnet safety pin
- A 40 mm³ sample loading spatula
- A polycarbonate protective shield
- 1 x instruction manual

Benefits:

- Excellent for screening products for sensitivity to impact stimuli in order to determine whether a substance is an impact sensitive explosive
- Excellent screening tool for classifying a product for transport and EU packaging and labelling classification
- Simple to use electromagnetic drop weight release mechanism
- Robust design

Optional Extras

- Zone 22 certified power supply control equipment for electromagnet drop mechanism
- Additional sets of BAM Fallhammer collars and rollers
- Bespoke custom weights or other requirements may be possible (please enquire)
- Training

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