

# BFH SERIES

## BAM FALL HAMMER SERIES

The **BAM Fall Hammer** (also known as **BAM Impact Tester** or **BAM Drop Hammer**) is designed to determine the sensitivity of explosive materials to the impact stimuli by a falling drop weight in accordance with the **BAM procedure**.

OZM Research manufactures four types of standard BAM Fall Hammers for measuring impact sensitivity of solid or liquid energetic materials (primary and secondary high explosives, propellants, pyrotechnics) and also other substances potentially sensitive to impact stimuli in the range of impact energies between 0.25 J and 100 J. Sensitivity of the most sensitive substances such as primary explosives or highly sensitive pyrotechnics can be measured in the range of impact energies from 0.025 J to 20 J on a specially developed BAM Fall Hammer **BFH PEx**.

## APPLICATIONS

The sensitivity to impact stimuli is one of the most important characteristics of energetic materials defining their safety in handling, processing or transportation. Its determination is a necessary part of characterization of new explosives, modified formulations or manufacturing conditions. It is also used for defining influences of impurities or ageing, in the quality control of manufactured explosives, in surveillance of in-service explosives and in transport/storage classification of explosive materials.

## ADVANTAGES & FEATURES

- ▶ Unique Drop Weight Exchange Window for safer, quicker and more convenient exchange of drop weights (**BFH 12A** and **BFH 12** only)
- ▶ Automated Lifting Mechanism remotely executes positioning, drop and collection of Drop Weight (**BFH 12A** only)
- ▶ Wide range of impact energies from 0.25 J to 100 J (seven drop weights from 0.25 kg to 10 kg)
- ▶ Drop weights are equipped with brass grooves to lower sliding friction
- ▶ High corrosion resistance of the critical parts
- ▶ Protective housing as a standard accessory
- ▶ Wide range of accessories

## COMPLIANCE

OZM Research manufactures several modifications of this instrument in order to better fit different classes of explosive materials and different standards of testing, such as:

- **UN Recommendation on the Transport of Dangerous Goods, Manual of Tests and Criteria** – [13.4.2 – Test 3(a)(ii); [13.4.6 – Test 3(a)(vi)]
- **EN 13631-4:2002**
- **Council Regulation (EC) No 440/2008**; A.14
- **GB/T 21567-2008**
- **STANAG 4489**
- **MIL-STD-1751A**, Method 1015 (BAM impact test)
- **MIL-STD-1751A**, Method 1012 & 1013 (Type 12 tools)
- **EMTAP**, Manual of Tests, Test No 43



Drop Weight Exchange Window



Steel cylinders and guide rings



Set of Drop Weights



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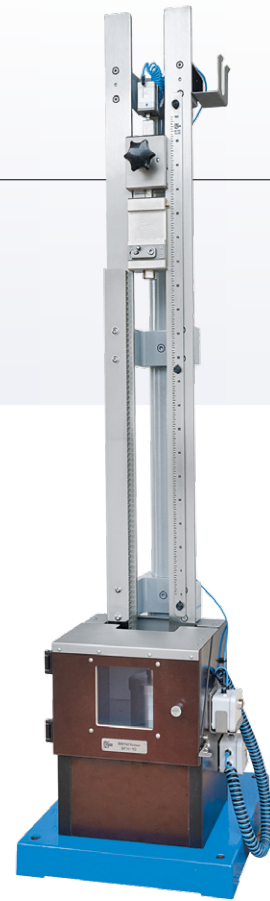
# BFH 10

## STANDARD BAM FALL HAMMER

The **BFH 10™** is fully functional standard model of BAM Fall Hammer, ideal for the customers who are looking for economy but still high-quality solution.

### ADVANTAGES & FEATURES

- ▶ Remotely controlled Electromagnetic or Pneumatic release device
- ▶ Stainless steel guide rails
- ▶ Extra durable drop weights with corrosion-proof coating and modified to lower sliding friction
- ▶ Metric and logarithmic ruler
- ▶ Protective housing in standard
- ▶ Comply with all relevant international standards



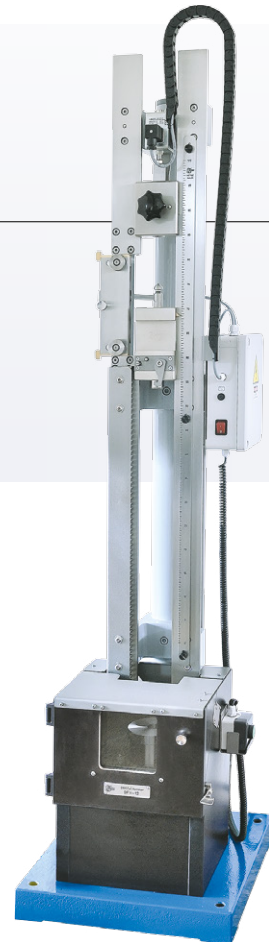
# BFH 12

## IMPROVED BAM FALL HAMMER

The **BFH 12™** is improved model of BAM Fall Hammer supplied by OZM Research. It is equipped with unique Drop Weight Exchange Window for safer, quicker and more convenient exchanges of the drop weights.

### ADVANTAGES & FEATURES

- ▶ Remotely controlled Electromagnetic release device
- ▶ Drop Weight Exchange Window
- ▶ Drop height can be extended up to 2 meters
- ▶ Can be modified for determination of impact sensitivity of detonator according to EN 16763-3:2002
- ▶ Stainless steel guide rails
- ▶ Extra durable drop weights with corrosion-proof coating and modified to lower sliding friction
- ▶ Metric and logarithmic ruler
- ▶ Protective housing in standard
- ▶ Comply with all relevant international standards



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# BFH 12A

## AUTOMATED BAM FALL HAMMER

The BFH 12A™ is the top model of BAM Fall Hammer supplied by OZM Research. It is equipped with automated lifting mechanism for remote controlled positioning, drop and collection of the drop weight.

The BFH 12A also introduces a unique Drop Weight Exchange Window for safer, quicker and more convenient exchanges of the drop weights.

### ADVANTAGES & FEATURES

- ▶ Remotely controlled Electromagnetic release device
- ▶ Automated Lifting Mechanism
- ▶ Drop Weight Exchange Window
- ▶ Remote control with inbuilt guide for Bruceton Up-and-Down procedure and export to PC available
- ▶ Drop height can be extended up to 2 meters
- ▶ Can be modified for determination of impact sensitivity of detonator according to EN 16763-3:2002
- ▶ Stainless steel guide rails
- ▶ Extra durable drop weights with corrosion-proof coating and modified to lower sliding friction
- ▶ Metric and logarithmic ruler
- ▶ Protective housing in standard
- ▶ Comply with all relevant international standards



Remote control



Storage case for drop weights



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