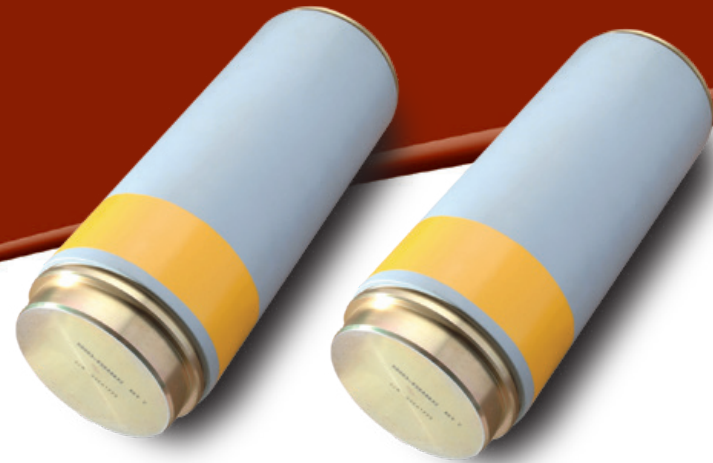


Mission Success  
 Ensign-Bickford Aerospace & Defense Company (EBAD) is dedicated to supporting our customers in the aerospace and defense industry through on-time delivery of innovative products that exceed expectations and assure mission success.



**Warheads Capabilities**

EBAD has designed, developed and produced a wide range of explosive and pyrotechnic products used for defense applications. EBAD maintains strong technical and operational expertise to perform new development and build-to-print warhead programs. EBAD's core competency in handling and pressing explosive powders, pressed charge manufacture, cast-cure explosives, melt-cast explosives, and extrudable plastic bonded explosive (PBX) products reduces cost and risk for warhead programs.

**Applications**

- Missile warhead programs
- Shoulder-fired munitions
- Mortars
- Payloads

**Warhead Processing**

**Load**

- Warhead body preparation, including primers, adhesives, liners, and release agents
- Explosive processing (pressing and/or mixing and casting)
- Explosive machining

**Assemble**

- Complete warhead integration, including boosters, safe-arm devices and fuzing

**Test**

- Test arena (up to 6.5 lbs N.E.W.) with high speed video, pressure measurement, etc.

**Equipment**

**Cast/Cure**

- 1 - 200 gallon capacity (3.5 - 750 l)
- 10 - 2,000 lbs (4.5 - 907.2 kgs) per mix
- Powder drying, handling, and weighing systems
- Liquid metering and weighing systems

**Pressing**

- 450 ton (400 metric ton) dual-acting Savage Press
- Smaller presses to manufacture boosters or smaller billets
- Customizable diameter and lengths
- Billets and Shaped Charges

**Machining**

- Remote explosive machining
- Haas TL-2 CNC Lathe
- Supermax YCM-TC-26 CNC Lathe
- Haas VF-2 CNC Mill

**Explosive Fill Expertise**

**Cast/Cure**

- PAX-47, PBXN-107, PBXN-109, PBXN-110, PBXN-112, PBXN-114

**Pressed**

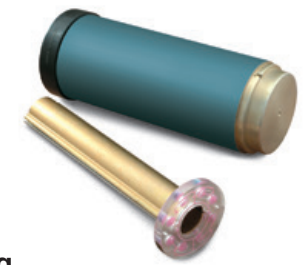
- LX-14, PAX-3, PAX-30, PAX-42, PBXN-5, PBXN-7, PBXN-9, PBXN-10

**Melt/Cast**

- AFX-256

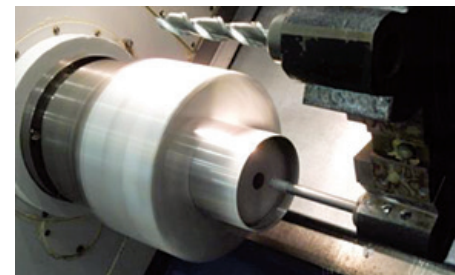
**Extruded**

- PBXN-301



**Inspection and Testing**

- Full analytical lab for energetics characterization and chemical analysis
- SpectraVision dual-head X-ray system
  - 160 & 320 kV output
  - image intensifier with real-time digital camera system
  - imaging plate with FujiFilm Dynamix HR-50 Industrial Computed Radiography system
- Coordinate Measuring Machine (CMM)



CNC Machining



Radiographic Inspection



ENSIGN-BICKFORD AEROSPACE & DEFENSE COMPANY  
 640 HOPMEADOW STREET, P.O. BOX 429, SIMSBURY, CT 06070, USA [www.EBAD.com](http://www.EBAD.com)

**Attention:** The information and recommendations described in this brochure cannot possibly cover every application of the products or variation of conditions under which the products are used. The recommendations here in are based on the manufacturer's experience, research and testing. They are believed to be accurate, but no warranties are made, express or implied. In addition, the specifications contained herein are all nominal which represent our current production. The products described may be subject to change. Please feel free to contact Ensign-Bickford Aerospace & Defense Company for verification. No Warranties or Liabilities: THE PRODUCTS DESCRIBED HEREIN are sold "AS IS" and without any warranty or guaranty, express, or implied, arising by law or otherwise including without limitation any warranty of merchantability or fitness for a particular purpose. Buyer and user agree further to release and discharge seller from any and all liabilities whatsoever arising out of the purchase or use of any product described herein whether or not such liability is occasioned by seller's negligence or based upon strict products liability or upon principles of indemnity or contribution. Content©2019 Ensign-Bickford Aerospace & Defense Company, Simsbury, CT 06070, U.S.A.