



PACKER
ENGINEERING Inc.

Firearms Technology

When your company requires assistance with product improvement, accident investigations, and injury prevention related to firearms, call Packer Engineering. We are a Certified Hand Gun, and Safety Devices (safes) Testing Laboratory for the State of California. Since 1962, manufacturers, insurers, attorneys and law enforcement agencies have selected Packer Engineering for our expertise in various aspects of firearms technology. Many of our projects involve design studies, safety considerations, and review of warnings and operations manuals.

Our staff's broad military experience involves heavy and light firearms, armor, artillery and munitions.

Services

- Design analysis
- Weapons performance testing
- Ammunition performance evaluation
- Firearms safety and operation study
- Material and mechanical failure analysis
- Mechanism design review and testing
- Military specification evaluations
- Accident investigations and reconstructions



Types of Evaluated Firearms:

- Rifles and muzzle-loading rifles
- Shotguns
- Handguns
- Powderless air/CO2 rifles, handguns, and marking pistols



The owner of the shot gun crawled over a fence using the gun as a brace to help himself over the top. Clay stuck in the mussel. He proceeded to shoot the gun. The barrel split apart causing a fragment of the barrel to fly back and strike the man in the head. Using our in-house laboratory, Packer analyzed the non-organic material in the barrel of the subject gun, and proved it was the compacted clay that caused the failure.

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Packer Engineering, a full service engineering consulting practice, serves clients across the nation and around the world. Our multi-disciplinary staff's expertise includes a broad range of engineering disciplines to include aerospace, bioengineering, chemical, civil/structural, electrical/electronics, environmental health & safety, facilities, fire modeling, human factors/ergonomics, materials, mechanical, product integrity and structural engineering.

To learn how your company can enhance or supplement its firearms testing, efficiently and economically, call 800-322-0114 for PACKER..."Engineers with Answers."

Laboratory & Testing Facilities:

- Overload testing chambers
- Chronograph measuring projectile velocities
- Scanning electron microscopy
- High speed video analysis
- Metallographic, dynamic and static test equipment
- Instrumentation laboratories
- High magnification digital photography
- Analytical modeling and rapid prototyping
- Crime scene 3-D laser scanning
- Virtual reality documentation
- Non-destructive x-ray examinations

Types of Projects:

- Ammunition issues
- Firearms malfunctions
- Crime scene investigations
- Accidental discharge
- Tool mark evaluations
- Catastrophic failures
- Trajectory analysis
- Locking device failures
- Forging, casting & powder metal analysis
- Warnings and operations manual reviews
- Climatic, environmental & chemical exposure evaluations

