Apache AH-64
30x113mm Target Practice Spotter

Alternative Training Ammunition for the M788 TP
Overview

30mm x 113 Target Practice
Spotter Cartridge
Background
Design Description
Ballistic Performance
Safety Compliance
30mm x 113 Ammunition Family for M230 Gun

Tactical

PIE-T · PIE · HEDP

Training

Spotter · TP
30mm x 113 Spotter Cartridge - Background

• In 2007 the US Army issued a Market Survey for an Apache training cartridge with a visible impact signature at ranges up to 3000m in day and night conditions while using an unaided eye, FLIR, night vision goggles, and day TV.

• The US Army invited contractors to participate in a technical demonstration at Ft Rucker in December 2007

• General Dynamics Ordnance and Tactical Systems delivered and demonstrated a 30mm x 113 Target Practice Spotter (TPS) cartridge for enhanced Apache M230 weapon training that is:
  • Compatible with the M230 weapon system
  • A ballistic match to the current M788 training ammunition
  • Visible under required conditions while impacting a steel target
The 30mm Spotter Cartridge is Fully Compliant with the 30mm Gun System including Interior and Exterior Ballistic Performance
30mm x 113 Target Practice Spotter Projectile

- Driving Band
- Aluminum Disc
- Incendiary Mixture
- Steel Body
- Aluminum Nose Cap

GD-OTS Has Demonstrated Launch Survival and Reliable Function at Terminal Impact.
30mm x 113 Spotter Cartridge – Ballistic Match to M788 Training Cartridge
30mm x 113 Spotter Cartridge
Testing at Fort Rucker

1500m Steel Target

1500m Day Impact

1500m Night Impact
30mm x 113 Spotter Cartridge
Testing at Fort Rucker: 1500m Day Impact
30mm x 113 Spotter Cartridge
Testing at Fort Rucker: 1500m Night Impact
30mm x 113 Spotter Cartridge
Testing at Fort Rucker: 1500m Day Target

White Steel Target at 1500m ~3.5sec Time of Flight
30mm x 113 Spotter Cartridge
Testing at Fort Rucker: 3000m Night Target

Six Round Burst With One Impact

M230 Gun Position

Steel Target at 3000m ~12sec Time of Flight
30mm x 113 Target Practice Spotter Cartridge
Safety Performance

40 Feet Drop Simulation: Air gun accelerated projectile with piston simulating cartridge mass for controlled velocity impact simulating drop from 40 feet

Survives Extreme Drop Conditions and Is Safe to Handle
M230 Weapon Double Cartridge Feed Condition

Survives Double Ram Feed Loads in the M230 Gun System
Summary

30x113mm Target Practice Spotter cartridge:

• Is functional in the M230 automatic weapon

• Is a ballistic match to the 30x113mm cartridge family: M788 TP, M789 HEDP, PIE, and PIE-T

• Is designed using qualified components currently used in other production rounds such as: M788, PGU-28A/B and M940

• Has been demonstrated at 1500m and 3000m for the US Army at Fort Rucker in night and day conditions

30mm Spotter Cartridge is Operable in M230 Gun and Has Been Demonstrated for the US Army
Conclusion

GD-OTS is Ready to Produce for Current Needs or Develop for Future Apache AH-64 Needs
30mm x 113 Spotter Cartridge

Questions / Comments