Ammunition

A detailed catalog of munitions, for small arms to heavy ordnance. Each entry includes ballistics data, usage scenarios, and compatibility with weapons.

“The lifeline of firepower.”

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Intermediate Rifle Cartridges

Focusing on the more compact and versatile rounds used in smaller, lighter rifles, this chapter covers rounds like the 5.56x45mm NATO, 5.45x39mm, and .223 Remington. These rounds are favored for their higher velocity, lower recoil, and accuracy over medium ranges.

“Accuracy through volume.”

Battle Rifle Cartridges

This chapter delves into the powerful cartridges used in battle rifles, designed for long-range accuracy and stopping power.

“The Backbone of Modern Firepower”

Battle Rifle Cartridges

.277 TVCM

.277 TrueVelocity (TVCM) is a polymer composite cased cartridge developed by a Texas based company called TrueVelocity. It is one of three entrants into the 6.8 NGSW program.

Cartridge Name	Bullet Mass (g)	Velocity (m/s) from 500mm Barrel	Ballistic Coefficient	Max Range (m) @ 35c	Damage	Penetration	Caliber (mm)	RHA Penetration (MM)	Flesh Penetration (MM)	Concrete Pen (MM)
XM1168 Ball	9.072	914	0.45	2050	12	1.5	7mm	20.565	342.75	109.68
XM1169 Match	10.036	950	0.725	2550	17.5	0.6	7mm	8.55	142.5	45.6
XM1170 AP	9.5	875	0.475	2000	13.4	2.5	7mm	32.8125	546.875	175
XM1171 HAPI	18.144	820	0.35	1300	19	4	7mm	49.2	820	262.4

Damage.png

Velocity (m_s).png

ballistic-coefficient.png

RHA Penetration (MM), Flesh Penetration (MM) and Concrete Pen (MM).png

Ballistic Coefficient.png

Bullet Drop in MRAD @ 15c.png

Glossary of Terms

Comprehensive Glossary of Bullet Construction Types

Term	Manufacturer	Description	Purpose	Applications
FMJ (Full Metal Jacket)	Generic	A soft core (often lead) encased in a harder metal shell.	Reliable feeding, reduced barrel fouling, non-expanding.	Military, training, target shooting.
JHP (Jacketed Hollow Point)	Generic	A jacketed bullet with a hollow cavity in the nose for controlled expansion.	Expands on impact, increasing stopping power.	Self-defense, law enforcement, hunting.
SJHP (Semi-Jacketed Hollow Point)	Generic	Partial jacket with an exposed lead hollow point for rapid expansion.	Greater expansion and energy transfer.	Hunting and self-defense.
SP (Soft Point)	Generic	Jacketed bullet with an exposed soft lead tip.	Controlled expansion and deeper penetration.	Hunting medium-to-large game.
BT (Boat Tail)	Generic	A bullet with a tapered rear end for improved aerodynamics.	Enhances ballistic coefficient and long-range accuracy.	Long-range shooting.
AP (Armor Piercing)	Generic	Hardened steel or tungsten core for penetrating armor.	Designed to defeat armored targets.	Military and law enforcement.
Match	Various	Precision bullets optimized for consistent accuracy.	Competitive shooting and long-range precision.	Match shooting and sniping.
Polymer Tip	Various	Bullet with a polymer tip to improve aerodynamics and initiate expansion.	Enhances accuracy and terminal performance.	Hunting and precision shooting.
Bonded Core	Generic	A chemically or mechanically bonded core and jacket.	Retains weight and ensures deep penetration.	Big game hunting, law enforcement.

Term	Manufacturer	Description	Purpose	Applications
Solid	Generic	Made entirely of a single material, often brass or copper.	High weight retention, straight penetration.	Dangerous game hunting.
Frangible	Generic	Designed to break apart on impact with hard surfaces.	Reduces ricochet and over-penetration.	Training, close-quarters combat.
OTM (Open Tip Match)	Generic	Match-grade bullet with a small hollow point, not designed for expansion.	Maximized precision and aerodynamics.	Competitive shooting, military sniping.
Varmint	Generic	Lightweight, thin-jacketed bullet designed to fragment on impact.	Causes massive tissue damage on small game.	Varmint and predator control.
LRX (Long Range X-Bullet)	Barnes Bullets	Solid copper with a polymer tip and optimized boat-tail for long-range performance.	Reliable expansion at long range and lower velocities.	Long-range hunting.
TTSX (Tipped Triple Shock X)	Barnes Bullets	Solid copper bullet with a polymer tip and expansion grooves.	Combines accuracy, penetration, and weight retention.	Hunting large game, precision shooting.
TSX (Triple Shock X)	Barnes Bullets	Solid copper hollow-point bullet with expansion grooves.	Deep penetration and consistent expansion.	Dangerous game and large game hunting.
ELD-X (Extremely Low Drag – Expanding)	Hornady	Polymer-tipped bullet with heat-shield tip for long-range precision and expansion.	Maximizes accuracy and terminal energy.	Long-range hunting.
ELD-M (Extremely Low Drag – Match)	Hornady	Similar to ELD-X, but designed purely for match shooting without controlled expansion.	Extreme accuracy for long-range competition.	Precision matches.
VLD (Very Low Drag)	Berger Bullets	Bullet with an aerodynamic design for superior drag reduction.	Improves velocity retention and accuracy over distance.	Long-range shooting, competitions.
AccuBond	Nosler	Bonded-core bullet with a polymer tip and boat-tail for controlled expansion.	Combines penetration and accuracy.	Medium-to-large game hunting.

Term	Manufacturer	Description	Purpose	Applications
Partition	Nosler	Dual-core bullet with a solid partition for controlled expansion and deep penetration.	Reliable performance on tough game animals.	Hunting dangerous game.
A-Frame	Swift Bullets	Bonded dual-core bullet similar to Nosler's Partition.	High weight retention and controlled expansion.	Dangerous game hunting.
Ballistic Tip	Nosler	Polymer-tipped bullet with a tapered jacket for controlled expansion.	Reliable terminal performance.	Medium-range hunting.
HST (Hydra-Shok Tactical)	Federal Premium	Hollow-point with improved expansion and weight retention.	Self-defense and law enforcement.	Personal protection.
Gold Dot	Speer	Bonded-core hollow-point bullet for controlled expansion and penetration.	Consistent terminal performance.	Self-defense, law enforcement.
Core-Lokt	Remington	Soft-point bullet with a mechanically locked core.	Deep penetration and controlled expansion.	Hunting medium-to-large game.
SST (Super Shock Tip)	Hornady	Polymer-tipped bullet for rapid expansion and high ballistic coefficient.	Maximizes terminal energy and accuracy.	Medium-to-long-range hunting.
InterBond	Hornady	Bonded-core bullet for high weight retention and controlled expansion.	Penetration and reliability at high velocity.	Hunting large game.
GMX (Gilding Metal eXpanding)	Hornady	Solid copper alloy bullet that expands reliably while retaining weight.	Eco-friendly and effective penetration.	Hunting in lead-free zones.
E-Tip	Nosler	Solid copper bullet with a polymer tip for accuracy and terminal performance.	Reliable expansion and weight retention.	Large game hunting, restricted areas.
FLEX TIP (FTX)	Hornady	Flexible polymer-tipped bullet designed for lever-action rifles.	Safe for tubular magazines, enhanced performance.	Lever-action rifles.
MonoFlex	Hornady	Lead-free version of FTX made from copper alloy.	Eco-friendly expansion and penetration.	Hunting in restricted areas.