

# AMMO101 | RIMFIRE



## HOW IT WORKS

- 1** As the trigger is pulled, the firing pin strikes and crushes the cartridge rim to ignite the primer.
- 2** Gas converted from the burning powder rapidly expands in the cartridge, forcing the bullet out of the cartridge and down the barrel.
- 3** The rifling in the barrel causes the bullet to spin as it exits the barrel and travels downrange.

## THE PRIMER

The primer is responsible for igniting the powder - a high quality primer ensures reliability and consistency shot after shot.

## THE POWDER

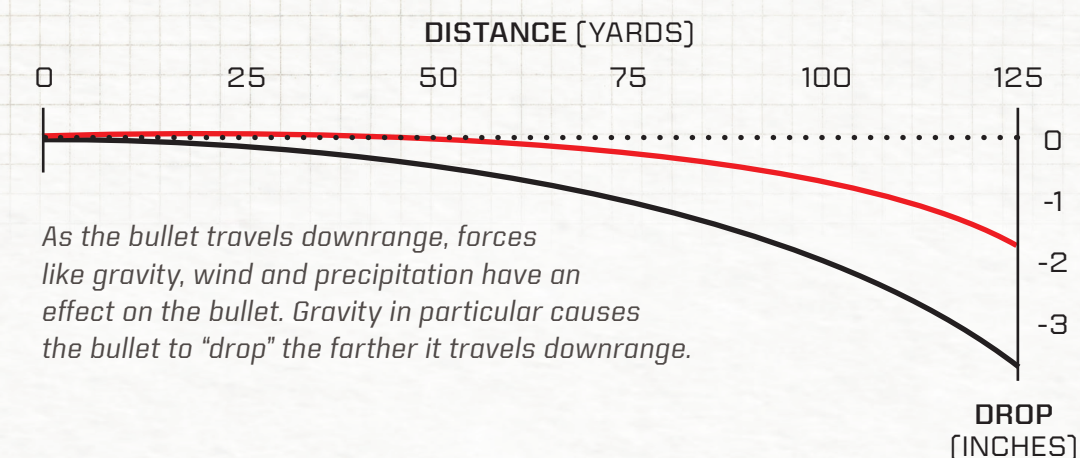
Smokeless powder is a type of propellant that burns cleaner and more consistently, resulting in less fouling in the barrel.

## THE SHELLCASE

The shellcase holds all the components together and is made of brass.

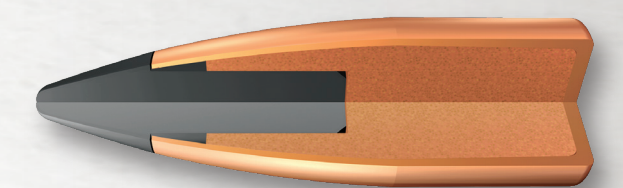
## THE BULLET

Designed with specific performance in mind, different bullets can produce varying degrees of expansion, penetration and accuracy.



## BULLET TYPES

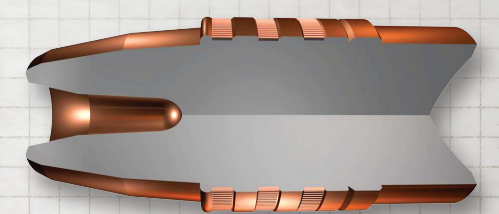
**Polymer Tip**  
Excellent Expansion, Highly Accurate



**Lead Round Nose**  
Good Expansion, Average Penetration



**Plated Hollow Point**  
Good Expansion, Average Penetration



## COMMON USES



### TARGET SHOOTING

High-volume recreational shooting known as "plinking" provides rimfire shooters of all experience levels hours of enjoyment and practice without much recoil or noise.



### HUNTING

Hunting with rimfire ammunition is an excellent way to introduce new hunters to the outdoors. Small game like squirrel, rabbit and groundhogs offer lots of shot opportunities for young and new shooters.\*



### PERSONAL DEFENSE

Rimfire ammunition may not be everyone's first choice for defensive purposes, but many shooters are more comfortable with the low recoil.

## CALIBERS

Rimfire calibers are determined by the inside diameter of the barrel they're shot from. Popular calibers include .17 and .22, common cartridges include 22 LR, 17 HMR, 22 Win Mag and the world's fastest rimfire cartridge the 17 WSM.

\*Cartridges are not shown in actual size and are displayed in order of muzzle energy, slowest to fastest



## WHERE TO SHOOT

Ranges are staffed with skilled professionals and instructors who can offer new shooters advice on the basic skills and rules of safe gun handling. If you're looking for a range, search our comprehensive directory to find a location near you. [Winchester.com/Where-to-Shoot](https://www.winchester.com/Where-to-Shoot)



\*Always consult your local hunting regulations before going afield.

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# AMMO101 | CENTERFIRE RIFLE



## HOW IT WORKS

- 1** As the trigger is pulled, the primer is struck, creating a mini explosion, that ignites the powder.
- 2** Gas generated from the burning powder rapidly expands in the cartridge, forcing the bullet out of the cartridge and down the barrel.
- 3** The rifling in the barrel causes the bullet to spin as it exits the barrel and travels downrange.

## THE SHELLCASE

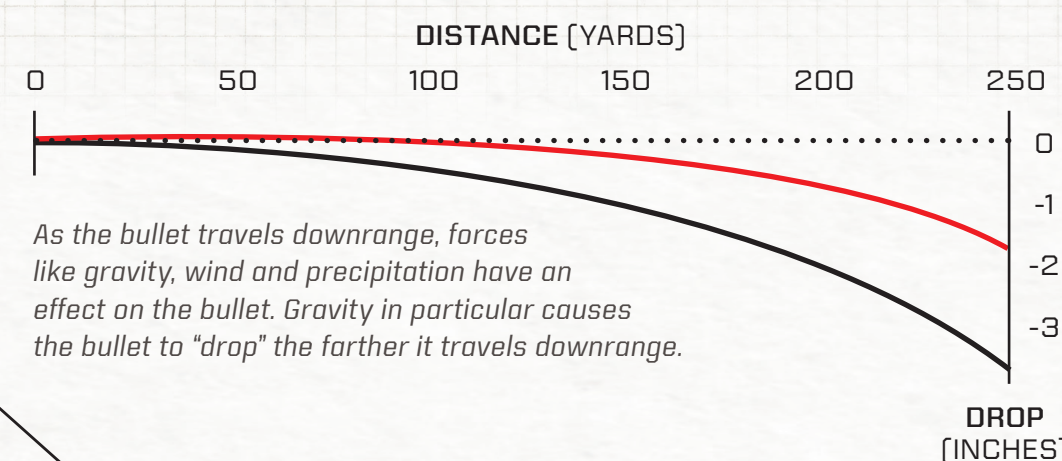
The shellcase holds all the components together and is most commonly made of brass or steel.

## THE POWDER

Smokeless powder is a type of propellant that burns cleaner and more consistently, resulting in less fouling in the barrel.

## THE BULLET

Designed with specific performance in mind, different bullets can produce varying degrees of expansion, penetration and accuracy. Modern bullets are typically a lead core with a 'jacket' around them made of a harder material like copper or copper alloy to reduce barrel fouling. Centerfire rifle bullets are designed to travel farther downrange than other ammunition, so the shape and tip of the bullet play a large role in accuracy at long range.

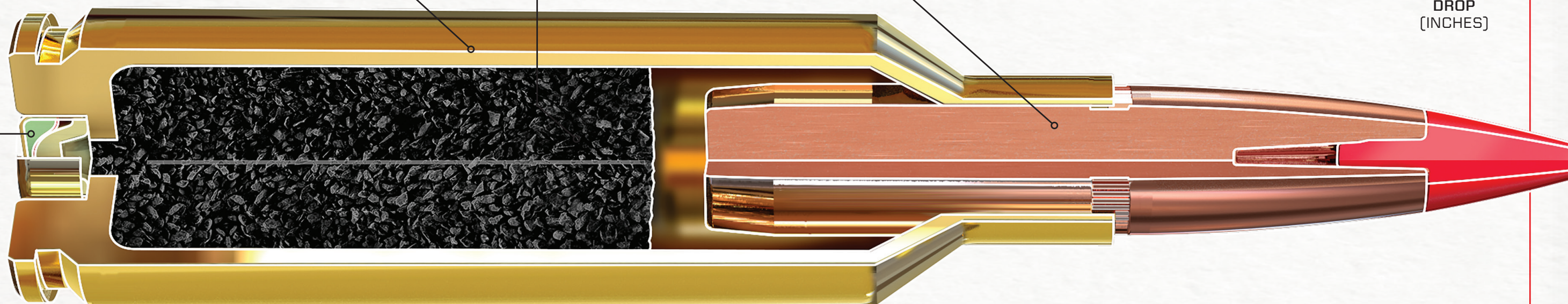


A soft point bullet after impact. Notice the petals that form upon expansion.



## THE PRIMER

The primer is responsible for igniting the powder - a high quality primer ensures reliability and consistency shot after shot.



## COMMON USES



### PERSONAL DEFENSE

Increasingly, rifle owners are buying ammunition with special technology, specifically designed for personal defense.



### TARGET SHOOTING

Long-range shooting competitions and outdoor ranges allow the shooter hours of enjoyment and challenging practice.



### HUNTING

One of the most commonly used ammunition types for hunting. Centerfire rifle offerings can accommodate virtually any type of hunting - from small game and varmint to the largest big-game species in the world.\*

## CALIBERS

Centerfire rifle calibers are determined by the inside diameter of the barrel they're shot from. These sizes range from as small as .222 to as large as .50 caliber. Popular cartridges are .223 Rem, .243 Win, .270 Win, 6.8 Western, 300 Win Mag and 350 Legend.\*

\*Cartridges are not shown in actual size



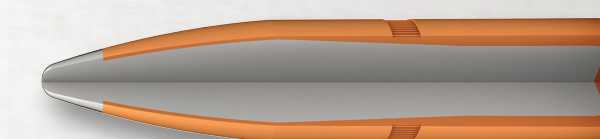
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## BULLET TYPES

### Soft Point

High Expansion, Optimal Penetration



### Polymer Tip

High Expansion, Highly Accurate



### Full Metal Jacket (FMJ)

Little Expansion, Highly Accurate





# AMMO101 | PISTOL



## HOW IT WORKS

- 1** As the trigger is pulled, the primer is struck, creating a spark that ignites the powder.
- 2** Gas converted from the burning powder rapidly expands in the cartridge, forcing the bullet out of the cartridge and down the barrel.
- 3** The rifling in the barrel causes the bullet to spin as it exits the barrel and travels downrange.

## THE PRIMER

The primer is responsible for igniting the powder - a high quality primer ensures reliability and consistency shot after shot.

## THE POWDER

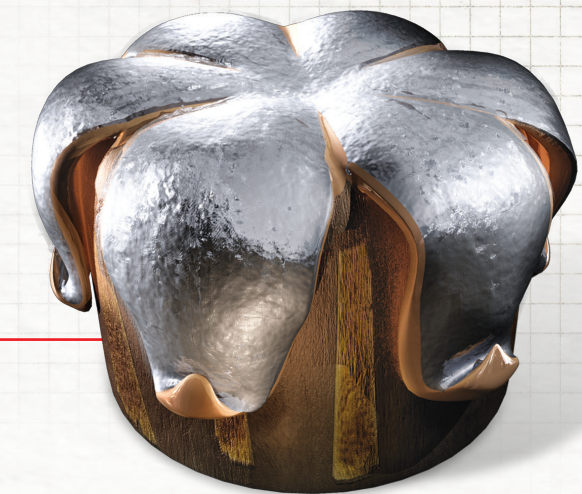
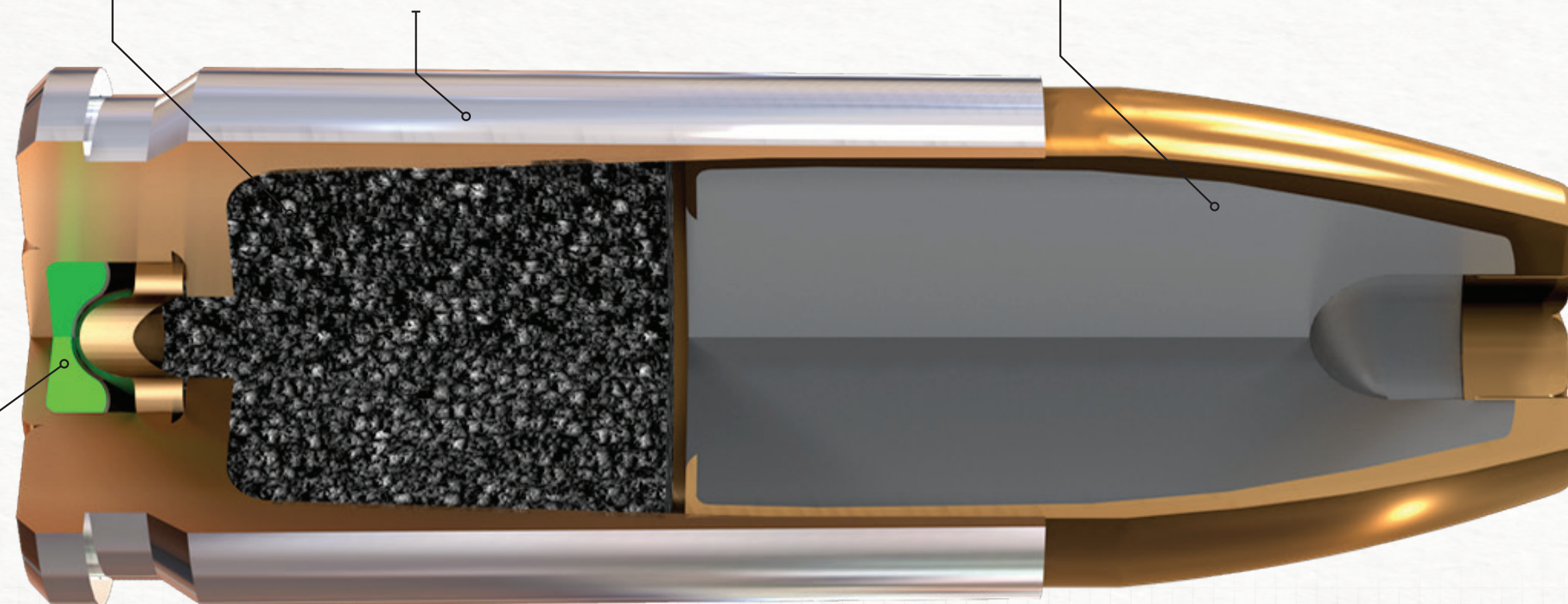
Smokeless powder is a type of propellant that burns cleaner and more consistently, resulting in less fouling in the barrel.

## THE BULLET

Designed with specific performance in mind, different bullets can produce varying degrees of expansion, penetration and accuracy. Modern bullets are typically a lead core with a 'jacket' around them made of a harder material like copper or copper alloy to reduce barrel fouling.

## THE SHELLCASE

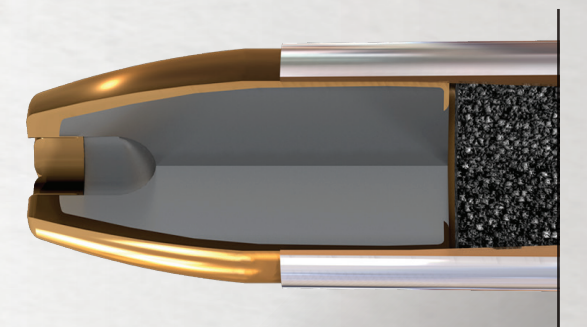
The shellcase holds all the components together and is most commonly made of brass or steel. This illustration shows a nickel plated shellcase.



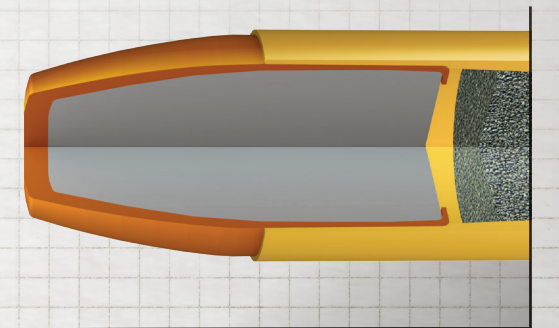
A jacketed hollow point bullet after impact. Notice the petals that form upon expansion.

## BULLET TYPES

**Jacketed Hollow Point (JHP)**  
High Expansion, Optimal Penetration



**Full Metal Jacket (FMJ)**  
No Expansion, Deep Penetration



## COMMON USES



### PERSONAL DEFENSE

Increasingly, handgun owners are buying ammunition with special technology, specifically designed for personal defense.



### TARGET SHOOTING

High-volume shooting competitions and indoor ranges allow the shooter hours of enjoyment and practice.



### HUNTING

While not as commonly used as rifle or shotgun ammo, handgun offerings with special technology in larger calibers allow hunters to enjoy the added challenge of pursuing game with a handgun.\*

## CALIBERS

Handgun calibers are determined by the inside diameter of the barrel they're shot from. These sizes range from as small as .22 to as large as .50 caliber. Popular cartridges are .22 LR, .380 Auto, 9 MM, .38 Special, 40 S&W and 45 Auto.\*

\*Cartridges are not shown in actual size



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\*Always consult your local hunting regulations before going afield.

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# AMMO101 | SHOTSHELL



## HOW IT WORKS

- 1 As the trigger is pulled, the primer is struck, creating a mini explosion, that ignites the powder.
- 2 Gas generated from the burning powder rapidly expands in the cartridge, forcing the shot out of the cartridge and down the barrel.
- 3 Shot leaves the barrel as a small, tight group of projectiles and disperses into a wider "pattern" as it travels farther downrange.

## THE PRIMER

The primer is responsible for igniting the powder - a high quality primer ensures reliability and consistency shot after shot.

## THE POWDER

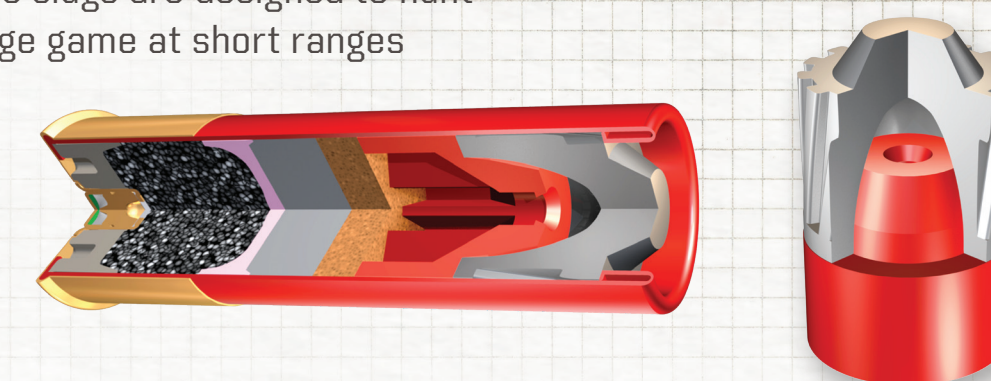
Smokeless powder is a type of propellant that burns cleaner and more consistently, resulting in less fouling in the barrel.

## THE WAD

A wad is the part, usually plastic, that separates the powder from the shot or slug. It properly seals the expanding gases during ignition for consistent performance, and provides a barrier between the shot and the barrel while shot is traveling down the barrel.

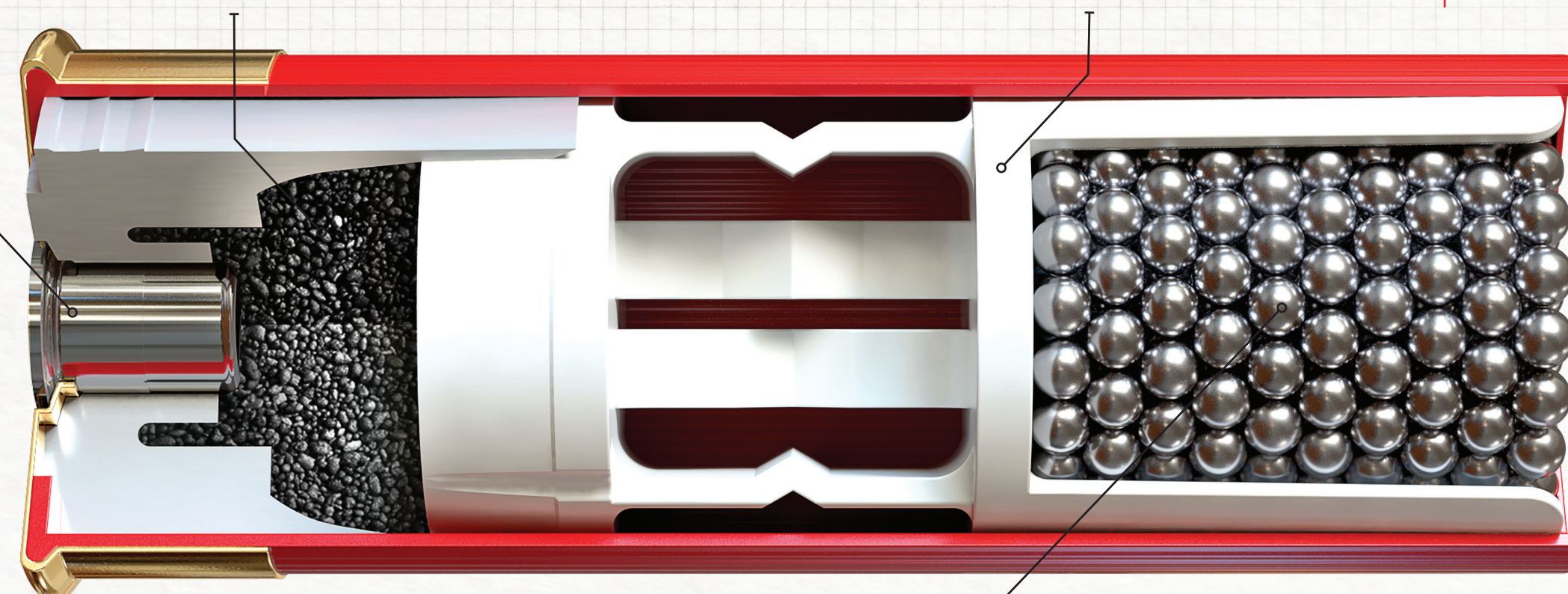
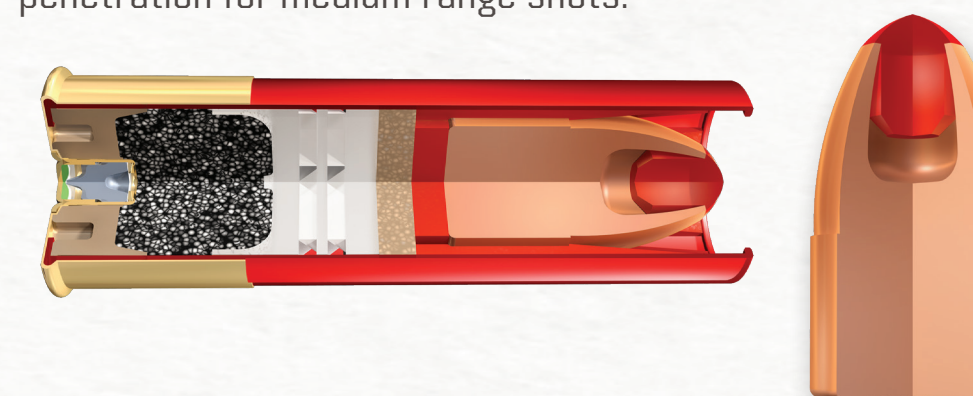
## SMOOTHBORE SLUGS

Smooth bore slugs are designed to hunt medium-large game at short ranges by firing a single large projectile.



## RIFLED BARREL SLUGS

Sabot slugs are High Performance projectiles designed to be fired in a rifled barrel and are used for medium to large game. These offer greater accuracy and penetration for medium range shots.



## COMMON USES



### PERSONAL DEFENSE

Increasingly, shotgun owners are buying ammunition with special technology, specifically designed for personal defense.



### TARGET SHOOTING

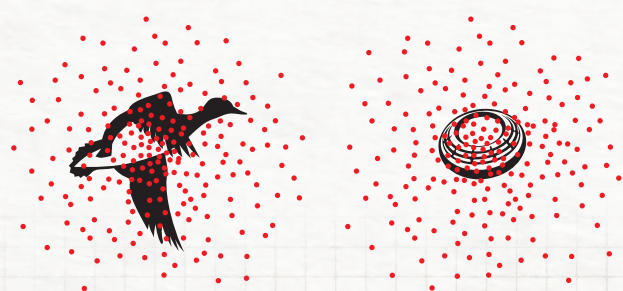
Clay target shooting is popular all over the world and is accessible to everyone from weekend recreational shooters to Olympic athletes and competition shooters.



### HUNTING

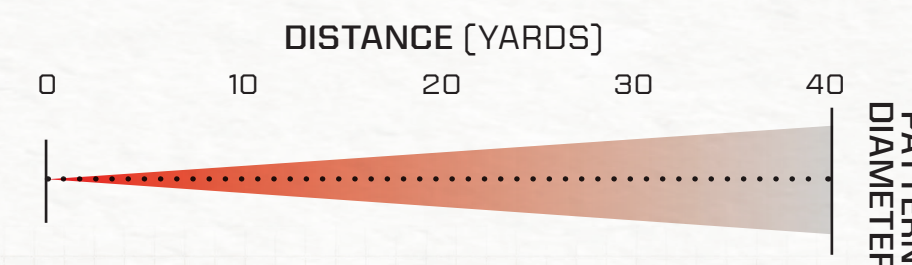
Shotshells are extremely popular for hunting and used on a large variety of game, from larger game like deer and turkey to smaller game like dove, quail and everything in between.\*

\*Always consult your local hunting regulations before going afield.



## THE SHOT

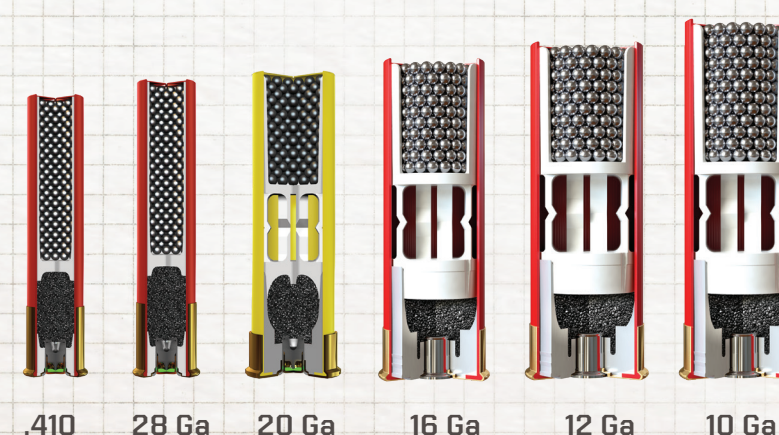
Rather than a single bullet, shotshells contain hundreds of pellets, known as "shot." Designed to shoot at fast-flying clay targets and small game like dove, quail and pheasant, this multitude of projectiles improves the odds of the shooter hitting a moving target.



*A small, dense pattern just feet from the barrel will turn into a larger, thinner pattern downrange.*

## GAUGES

Shotgun gauges are determined by the inside diameter of the barrel they're shot from. These sizes range from as small as .410 Bore to 10 Gauge.



\*Cartridges are not shown in actual size

## SHOT SIZES

| STANDARD SHOT SIZES          | DENSITY | 9          | 8.5  | 8      | 7.5  | 7             | 6     | 5   | 4   | 3   | 2   | 1   | B   | BB  | BBB | T   |
|------------------------------|---------|------------|------|--------|------|---------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Shot Number                  |         | 9          | 8.5  | 8      | 7.5  | 7             | 6     | 5   | 4   | 3   | 2   | 1   | B   | BB  | BBB | T   |
| Diameter In Inches           |         | .08        | .085 | .09    | .095 | .10           | .11   | .12 | .13 | .14 | .15 | .16 | .17 | .18 | .19 | .20 |
| Pellets/Oz., Steel           | 7.9*    | -          | -    | 577    | 490  | 420           | 316   | 243 | 191 | 153 | 125 | 103 | -   | 72  | 61  | 53  |
| Pellets/Oz., Lead            | 11.0*   | 585        | 500  | 410    | 350  | 300           | 225   | 170 | 135 | -   | 87  | -   | -   | 50  | -   | -   |
| Pellets/Oz Bismuth           | 9.7*    | -          | -    | -      | -    | -             | -     | 194 | 155 | -   | 83  | -   | -   | -   | -   | -   |
| * Grams per cubic centimeter |         |            |      |        |      |               |       |     |     |     |     |     |     |     |     |     |
| BUCKSHOT SIZES               |         | 4          | 3    | 1      | 0    | 00            | 000   |     |     |     |     |     |     |     |     |     |
| Shot Number                  |         | 4          | 3    | 1      | 0    | 00            | 000   |     |     |     |     |     |     |     |     |     |
| Diameter In Inches           |         | .24        | .25  | .30    | .32  | .33           | .36   |     |     |     |     |     |     |     |     |     |
| # Pellets Typical Load       |         | 27, 34, 41 | 20   | 16, 24 | 12   | 9, 12, 15, 18 | 8, 10 |     |     |     |     |     |     |     |     |     |

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