

BULLETS

DEFINITION, TYPES



- Projectile propelled from a firearm.
- Made of metals such as copper , lead, brass, bronze, steel, aluminium etc.,

- The traditional bullet is made of soft metal and has rounded nose.
- The metal is lead with varying amounts of antimony added to provide hardness.

A. Jacketed:

- ❖ Smokeless powder increased the temperature and the velocities of the projectiles.
- ❖ It was found that lead bullet did not work in these velocities they got deformed.
- ❖ Accuracy was adversely affected.
- ❖ So, to avoid the bullet is covered with soft lead is surrounded by another metal(copper, zinc, nickel), usually copper that allows the bullet to penetrate a target more easily.



B. Non Jacketed Bullets:

- ❖ It have the material ,made of typically lead .
- ❖ These bullet are exposed in contact with the barrel.



Non-jacketed bullets

- Most common material is lead



Plain lead



Copper washed



Nylon-coated

Bullet shapes:

A. Round-nose :

- ❖ It is made of soft metal and has a rounded nose.
- ❖ End of the bullet is blunted for max penetration
- ❖ Used in rifles and revolvers.



ROUND NOSE BULLET



HOLLOW POINT BULLET

B. Hollow point:

- ❖ It has a depression in the nose of soft metal.
- ❖ This bullet is designed to expand or mushroom upon impact.
- ❖ A hole in the bullet creates more damage, inhibits penetration, and spreads or mushrooms on impact.
- ❖ The bullet is excellent for aim accuracy and good for expansion.

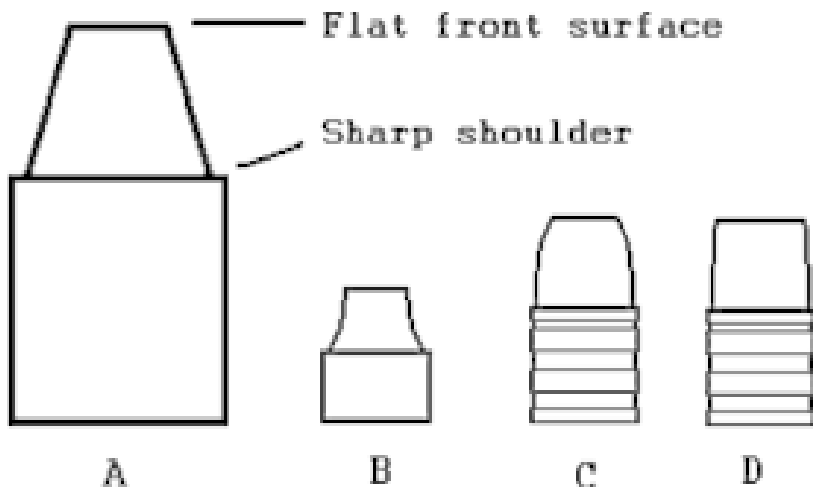
C. Wadcutter:

- ❖ Front of the bullet is flattened .
- ❖ Used exclusively as a practice load.



D. Semi wad cutter:

- ❖ It is a variation on wadcutter. This bullet has a cylindrical body with shoulder and a flat point on the tip.
- ❖ used in automatic pistols in most cases.
- ❖ This bullet has a less drag the wadcutter .



E . Boat tailed:

- ❖ Called tapering bullets.
- ❖ Its base is tapered.
- ❖ Tapering helps the flow of air over the bullet and reduce air resistance.
- ❖ Boat tailing improves the aim and range of projectile.



F. . STREAM LINED:

- ❖ It's a logical development of boat tailed bullets.
- ❖ Here tapering on both nose and base .
- ❖ Nose side point helps in easy & smooth penetration of air and base provides smooth sliding surface for the air to flow over bullet

G. CYLINDRO CONOIDAL :

- ❖ Has a hollow base, when fired bullet expands and seal the bore.
- ❖ The base is formed of elastic locus pith, which by its expansion against the inner surface of the blow pipe prevented the escape of air which passes it.



H. DUMDUM BULLETS

- ❖ On which fragments extensively upon striking.
- ❖ These are not in use.

I. FRANGIBLE BULLETS

- ❖ It completely disintegrate.
- ❖ It is made from iron which fragments on impact.

J. INCENDIARY BULLETS:

- ❖ It contains phosphorous, so it catches fire on hitting the target.

DUM DUM BULLETS



FRANGIBLE BULLETS

INCENDIARY BULLETS



DATBLACKYOUNGIN



FIRE STORM



5.56/223 Incendiary Ammo

K. Explosive Bullets:

- It contains explosive at the front end and cause fire in the target.
- They are banned.
- The wound impact is larger, destruction of tissues.



L. TRACER BULLET

it leaves a visible mark or trace while in flight, due to which the gunner can observe the strike of the shock.



M. PLASTIC BULLETS

- ❖ Is solid cylinder of polyvinylchloride.
- ❖ It is fired from a smooth bore weapon and effective upto 50-70mtrs.
- ❖ Used for riot control(police)
- ❖ It should not be fired at a person under 20mtr range.



SHOTS:

shot gun uses shots instead of bullets.

1. Pellets
2. Buckshots
3. Balls

- Main types of shot gun ammunition or ball ammunition:

1. Rotary or rotax

The gases produced in cartridge press against twisted ridges inside and rotate the projectile.

2. Expansive ball

It is belted. It fragments on hitting target.

3. Multishot Ball

it is lead ball containing lead shots.

4. Paradox projectile

It is fired from paradox guns having shallow grooves near the muzzle end.

Bullet caliber

- Caliber: the cross section diameter of the bullet inside of a firearm's barrel.
- Caliber also matches the diameter of the bullet. Usually expressed in in hundredths of an inch or in millimeters.

Working of firearm

- The firing pin hits the base of the cartridge, igniting the primer powder.
- The primer powder sparks through the flash hole to the main propellant supply.
- The pressure of the explosion pushes the bullet from the casing into the barrel.
- The bullet follows lands and grooves to spiral out of the barrel.