

The magazines presented here are based on *light alloy* magazines. For steel magazines, increase weight by 2%; for plastic or synthetic magazines; decrease weight by 8 percent.

**.17 Hornady Magnum Rimfire**

Notes: This is a powerful rimfire round, quite adequate for the hunting of small game at up to medium range. It approaches the power of the larger .22 Hornet round, and the velocity is exceptional, as is the penetration for a round of its small size. The .17 Hornady Magnum Rimfire also shoots very flat, and this improves the accuracy of the round. The round has a polymer tip (usually red in color) that causes the round to expand greatly in soft tissue. (Hornady calls this a "V-Max" bullet.) The .17 Hornady Magnum Rimfire round is rapidly picking up steam, and is becoming quite popular, with many pistols, revolvers, and rifles being designed for it.

Twilight 2000 Notes: This round does not exist.

Other Names: .17 Hornady Rimfire Magnum, .17 HMR

Nominal Size: 4.32x27mm

Actual Size: 4.32x26.72mm

Case Type: Necked Rimfire

Weight: 4.88 kg per case of 1000; Price: \$80 per case

Magazines:

Per round: 0.004 kg	5-round box: 0.04 kg	9-round box: 0.06 kg	10-round box: 0.07 kg
25-round belt: 0.1 kg	50-round belt: 0.2 kg	100-round belt: 0.39 kg	

**.22 BB Cap**

Notes: This round is one of the oldest self-contained cartridges still available. It is a "gallery" round, designed for indoor shooting at very short-range targets. The round was made by many companies around the world until just before World War 2, but the kind of social shooting that spawned the .22 BB Cap went out of style at that point. Originally, the .22 BB Cap has a round bullet in a short case and was propelled only by the primer, but later designs has a small powder charge and a conical bullet. Today, the round is still occasionally used for indoor shooting, but it is also useful as a pest control round. However, not many firearms are still chambered for the .22 BB Cap, and RWS of Germany is

the only company still making the round.

Other Names: .22 Bulleted Breech Cap

Nominal Size: 5.6x7mm

Actual Size: 5.64x7.21mm

Case Type: Straight Rimfire

Weight: 0.23 kg per box of 100; Price: \$6 per box

Magazines:

Per round: 0.0014 kg			
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**.22 CB Cap**

Notes: This round is basically a more powerful version of the .22 BB Cap, officially first appearing in ammunition catalogs in 1888, but probably invented before that time. The .22 CB Cap is no more accurate than the .22 Short and slightly less powerful, and it is useful only for gallery shooting or pest control. American companies stopped making the .22 CB Cap in 1942, but European companies such as CCI occasionally make lots of them, and RWS offers it on a regular basis and lists it in its catalogs.

Other Names: .22 Conical Bullet Cap, 6mm Flobert

Nominal Size: 5.6x10mm

Actual Size: 5.64x10.67mm

Case Type: Straight Rimfire

Weight: 2.63 kg per case of 1000; Price: \$40 per case

Magazines:

Per round: 0.0021 kg			
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**.22 Long**

Notes: This is forerunner of the .22 Long Rifle round. The .22 Long round has a smaller bullet than a .22 Long Rifle round, similar to that of the .22 Short bullet, in a case similar to that of the .22 Long Rifle. The propellant charge is smaller than that used in the .22 Long Rifle round, resulting in slightly less power. Many believe that the .22 Long round has basically outlived its usefulness, and should be considered obsolete, but many modern manufacturers still make the round. As with the .22 Short, most bolt-action, pump-action, and lever-action weapons chambered for .22 Long Rifle will also be able to fire the .22 Long round, but most .22 Long Rifle semiautomatics cannot.

Nominal Size: 5.7x14mm

Actual Size: 5.66x15.11mm

Case Type: Straight Rimfire

Weight: 3.25 kg per case of 1000; Price \$50 per case

Magazines:

Per round: 0.003 kg	5-round box: 0.03 kg	6-round box: 0.03 kg	7-round box: 0.03 kg
10-round box: 0.05 kg	12-round box: 0.05 kg	20-round box: 0.09 kg	

## **.22 Long Rifle**

Notes: This round was originally developed as a blackpowder cartridge in 1887. It successfully made the jump to smokeless powder, and is now one of the most common rounds in the world. Though today it's most popular use is in target matches and biathlon competitions, it is also one of the most common varmint and small game cartridges. Many a youngster cut his teeth on a .22 Long Rifle-firing rifle, and we even used them for indoor target practice in ROTC. It is, however, unreliable at killing anything larger than a rabbit; if fired out of a pistol-sized weapon, it is even less reliable. Another use is with a silencer (and a very careful aim) for game culling, and as a silenced pistol round for assassination. The main reason that the .22 Long Rifle round (and other rimfire rounds) can be so dangerous is that many people regard .22s as mere playthings, forgetting that any weapon can be lethal.

Nominal Size: 5.7x17mm

Actual Size: 5.66x15.11mm

Case Type: Straight Rimfire

Weight: 3.75 kg per case of 1000; Price \$60 per case

Magazine:

Per round: 0.003 kg	2-round box: 0.02 kg	4-round box: 0.02 kg	5-round box: 0.03 kg
5-round clip: 0.02 kg	6-round box: 0.03 kg	7-round box: 0.04 kg	8-round box: 0.04 kg
9-round box: 0.05 kg	10-round box: 0.05 kg	10-round clip: 0.03 kg	10-round cassette: 0.03 kg
11-round box: 0.06 kg	12-round box: 0.06 kg	15-round box: 0.08 kg	16-round box: 0.08 kg
20-round box: 0.1 kg	25-round box: 0.12 kg	28-round box: 0.14 kg	29-round box: 0.14 kg
50-round box: 0.24 kg	50-round helical: 0.29 kg	100-round helical: 0.57 kg	165-round pan: 0.76 kg
176-round pan: 0.81 kg	177-round pan: 0.82 kg	220-round pan: 1.02 kg	275-round pan: 1.27 kg

### **.22 Extra Long**

Notes: This obsolescent round actually predates the .22 Long Rifle round, being introduced in 1880 as a blackpowder round. It was used in several rifles of various types, as well as some Smith & Wesson revolvers, but has not been listed in any major ammunition catalogs since 1935. This round will not chamber in .22 Long Rifle-firing weapons due to the length, but one can usually get .22 Short, .22 Long, or .22 Long Rifle rounds to chamber in weapons designed for the .22 Extra Long cartridge. In power, the .22 Extra Long, if loaded with smokeless powder, exceeds that of the .22 Long Rifle only by a tiny degree.

Nominal Size: 5.6x19mm

Actual Size: 5.66x19.05mm

Case Type: Straight Rimfire

Weight: 0.48 kg per box of 100; Price: \$16 per box

Magazines:

Per round: 0.0038 kg			
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## **.22 ILARCO**

Notes: The .22 ILARCO was designed in 1987 as an experimental round for the American-180 rimfire submachinegun. It is basically a hot-loaded .22 Long Rifle round, with the heavier bullet of the .22 Winchester Magnum Rimfire round and a strengthened .22 Long Rifle case with much more propellant. This was done to increase the power of the American-180, which could not chamber the longer .22 Winchester Magnum Rimfire round, without having to redesign the action and magazines. The power is almost the same as that of the .22 Winchester Magnum Rimfire. The .22 ILARCO round never went into large-scale production, and the sale of the American-180 patent ensured this. The .22 ILARCO is now a collector's item.

Other Names: .22 Short Magnum Rimfire, .22 Winchester Magnum Rimfire Short

Nominal Size: 5.7x17mm

Actual Size: 5.69x15.11mm

Case Type: Straight Rimfire

Weight: 4.84 kg per box of 100; Price: \$15 per box

Magazines:

Per round: 0.0038 kg	165-round pan: 0.86 kg	177-round pan: 0.92 kg	220-round pan: 1.14 kg
275-round pan: 1.43 kg			

## **.22 Short**

Notes: This is the oldest American modern-style cartridge, having been in production since 1857. The round was originally intended for self-defense, but rapidly proved inadequate for that purpose, and was converted to a gallery round – one that is intended for short-range target shooting, mostly indoors. It is still used in some Olympic and other international target competitions. Most bolt-action, pump-action, and lever-action weapons chambered for .22 Long Rifle will also be able to fire the .22 Short round, but most .22 Long Rifle semiautomatics cannot. The .22 Short round is ideal for varmint or small bird hunting, but velocity drops off rapidly after about 50 meters.

Nominal Size: 5.7x11mm

Actual Size: 5.66x10.74mm

Case Type: Straight Rimfire

Weight: 2.75 kg per case of 1000; Price \$50 per case

Magazines:

Per round: 0.0022 kg	5-round box: 0.02 kg	6-round box: 0.02 kg	7-round box: 0.03 kg
8-round box: 0.03 kg	10-round box: 0.04 kg	12-round box: 0.05 kg	20-round box: 0.07 kg

**.22 Winchester Auto**

Notes: This round was used only in the Winchester M-1903 semiautomatic rifle. It had a long life, but was finally dropped from production in the 1970s, even though it was pronounced obsolete in 1932. It was designed at a time when blackpowder rounds were still somewhat common, and meant to be able to be used with nothing but the then-new smokeless powder. It is roughly the same in power with the .22 Long Rifle, but never really offered more than the fact that it used exclusively smokeless powder. It is now almost impossible to find, and the rifle that fires it is a collector's item.

Other Names: .22 Winchester Automatic, .22 Winchester Auto Smokeless

Nominal Size: 5.6x17mm

Actual Size: 5.64x16.89mm

Case Type: Straight Rimfire

Weight: 4.25 kg per box of 100; Price: \$14 per box

Magazines:

Per round: 0.0034 kg			
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**.22 Winchester Magnum Rimfire**

Notes: Though many see this round as a magnum version of the .22 Long Rifle, the .22 Winchester Magnum Rimfire round is actually based on the old .22 Winchester Rimfire round. The .22 Winchester Magnum Rimfire was perhaps the first of the "hyper-velocity" rimfire rounds, and quickly became very popular. The magnum loading means that weapons have to be specially modified or designed to fire the cartridge.

Other Names: .22 Magnum, .22 Magnum Rimfire

Nominal Size: 5.7x24.5mm

Actual Size: 5.69x26.72mm

Case Type: Straight Rimfire

Weight: 6.75 kg per case of 1000; Price: \$110 per case

Magazine:

Per round: 0.0054 kg	2-round box: 0.03 kg	3-round box: 0.04 kg	4-round box: 0.04 kg
5-round box: 0.05 kg	7-round box: 0.07 kg	9-round box: 0.09 kg	10-round box: 0.09 kg
10-round cassette: 0.07 kg	12-round box: 0.11 kg	15-round box: 0.14 kg	

**.22 Winchester Rimfire**

Notes: This (not to be confused with the Winchester Magnum Rimfire) round was introduced in 1890 for the Winchester 1890 pump-action rifle. Originally, Winchester used a flat-nosed bullet, and Remington used a round-nosed bullet and called it the .22 Remington Special; later, this distinction was lost as Winchester went to a round-nosed bullet. It was chambered in many pump-action, single-shot, and bolt-action rifles after its introduction, but has long been out of production, except for a special one-time production run in 1986 by Winchester. The Winchester Rimfire has more power than the .22 Long Rifle, but not as much as the .22 Winchester Rimfire Magnum. The .22 Winchester Rimfire will chamber and fire in most weapons that will chamber the .22 Winchester Magnum Rimfire; .22 Short, Long, and Long Rifle round will not work in a .22 Winchester Rimfire weapon, because they are narrower than the .22 Winchester Rimfire and fit too loosely.

Other Names: .22 Remington Special

Nominal Size: 5.7x24mm

Actual Size: 5.69x24.36mm

Case Type: Straight Rimfire

Weight: 6.25 kg per box of 100; Price: \$20 per box

Magazines:

Per round: 0.005 kg			
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The magazines presented here are based on *light alloy* magazines. For steel magazines, increase weight by 2%; for plastic or synthetic magazines; decrease weight by 8 percent.

**2.7mm Kolibri**

Notes: This round was the smallest commercially-manufactured centerfire round ever made. It was used in the Kolibri pistol until 1914, when it was replaced by the 3mm Kolibri round. It is an obsolete round, and a collector’s item that in real life would fetch thousands of times the game price shown here. It was designed for ladies’ self defense, but the wounds it cases are equally tiny, and it has no real practical value other than target practice. Virtually any 2.7mm Kolibri round today would be handloaded.

Nominal Size: 2.7x9mm

Actual Size: 2.72x9.4mm

Case Type: Straight

Weight: 0.04 per box of 100; Price: \$20 per box

Magazines:

Per round: 0.0004 kg	5-round box: 0.004 kg		
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**3mm Kolibri**

Notes: This round, build for a ladies’ defense pistol at the turn of the 20<sup>th</sup> century, is a tiny, low-power round that often does little more than annoying damage. The case is generally so thin that it is impractical to reload them, and the round typically uses an unjacketed lead bullet. These items are now a collectors’ item.

Nominal Size: 3x8mm

Actual Size: 3.05x8.13mm

Case Type: Straight

Weight: 0.06 kg per box of 100; Price \$20 per box

Magazines:

Per round: 0.0005 kg	5-round box: 0.06 kg		
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**5.45mm Russian Short**

Notes: Originally developed for the PSM pistol, this cartridge is considered a poor round by most Western experts. It is, however, more effective against body armor than its size and energy would otherwise indicate. The bullet is jacketed, and has a steel front half and lead rear half.

Other Names: 5.45mm Soviet Pistol

Nominal Size: 5.45x18mm

Actual Size: 5.33x17.78mm

Case Type: Necked

Weight: 5 kg per case of 1000; Price \$80 per case

Magazines:

Per round: 0.004 kg	8-round box: 0.06 kg	24-round box: 0.16 kg	
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**5.5mm Velo Dog**

Notes: This round was introduced in 1894, designed to be fired from the French Velo Dog revolver. The revolver passed out of favor quickly, but a number of Belgian and German revolvers also chambered the round over the years, and it was manufactured by several countries up to 1940. Today, only Fiocchi of Italy makes the 5.5mm Velo Dog round. It is a round that has little more power than a .22 Long Rifle round; the 5.5mm Velo Dog was designed to do little more than allow bicyclists to scare off aggressive dogs (hence the name).

Other Names: 5.75mm Velo Dog

Nominal Size: 5.5x29mm

Actual Size: 5.72x28.45mm

Case Type: Straight

Weight: 0.68 kg per box of 100; Price: \$22 per box

Magazines:

Per round: 0.005 kg			
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**5.7mm FN**

Notes: This round was developed in the late 1980s by FN for their new P90 Personal Defense Weapon (PDW). It was later chambered in their Five-sevenN pistol. It was designed to replace the 9mm Parabellum round in certain applications (such as for rear area troops), but no country has as yet adopted either weapon that fires the round in large numbers. (In fact, most Americans are most likely to see the P-90 PDW on the TV show *Stargate SG-1*.) The bullet is very sharply pointed, and the case resembles that of the .221 fireball. The bullet is very light, but has high velocity, and is known for penetration.

A special armor piercing version, the 5.7mm FN High-Velocity, is also available. Double all costs of ammunition for this round.

Other Names: 5.7x28mm, 5.7x28mm FN, 5.7mm P90

Notes: 5.7x28mm

Actual Size: 5.59x28.7mm

Case Type: Necked

Weight: 8.75 kg per case of 1000; Price: \$280 per case

Magazines:

Per round: 0.007 kg	20-round box: 0.23 kg	25-round box: 0.28 kg	50-round box: 0.45 kg
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**7mm Nambu**

Notes: This round was designed to be fired from only one weapon, the Japanese Small Nambu (more commonly known as the Baby Nambu) pistol. It was never an official Japanese service round, nor was the pistol an official sidearm, but it was popular with many high-ranking officers. After World War 2, the Baby Nambus and their ammunition were taken home by US soldiers and Marines as war trophies, but the pistols are now scares and their rounds even scarcer. Virtually any 7mm Nambu round found today would be handloaded, but the gunsmith would have to work almost from scratch. The 7mm Nambu round is not considered an effective self-defense round by Western standards, and might not even be

very good against vermin.

Nominal Size: 7x20mm

Actual Size: 7.11x19.81mm

Case Type: Necked

Weight: 0.99 kg per box of 100; Price: \$32 per box

Magazines:

Per round: 0.008 kg	7-round box: 0.1 kg		
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**7.5mm Swiss Army**

Notes: This round was adopted by the Swiss Army for their revolvers as a blackpowder round in 1882. It was soon converted to a smokeless powder cartridge, and used by the Swiss Army until 1903. Surplus Swiss revolvers were sold on the US market in the 1960s, and a few other weapons were also chambered for the cartridge, but weapons that fire the 7.5mm Swiss Army round are relatively rare.

Other Names: 7.5mm Swiss Army Revolver, 7.5mm Norwegian Revolver

Nominal Size: 7.5x23mm

Actual Size: 8.05x22.61mm

Case Type: Straight

Weight: 11.5 per box of 100; Price: \$36 per box

Magazines:

Per round: 0.009 kg			
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**7.65mm Longue**

Notes: This French military pistol cartridge was used from 1935 to 1950, when it was replaced by the 9mm Parabellum. It is still used to a small extent by the French Police. A large number of pistols chambering this cartridge have been sold on the surplus market, and thus the demand for the 7.65mm

Longue round lives on. The 7.65mm Longue is slightly more powerful than the .32 ACP round, but it is still a bullet best suited to emergency self defense. As a submachinegun cartridge, it was basically a failure.

Other Names: 7.65mm MAS, 7.65mm French

Nominal Size: 7.65x19.5mm

Actual Size: 7.85x19.81mm

Case Type: Straight

Weight: 9.63 kg per case of 1000; Price: \$150 per case

Magazines:

Per round: 0.008 kg	8-round box: 0.11 kg	20-round box: 0.25 kg	32-round box: 0.39 kg
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**7.62mm Nagant Revolver**

Notes: This round was designed specifically for use in the Russian 1895 Nagant revolver, and later used in the Pieper revolver. The round has great velocity, but this has as much to do with the revolver’s design as with the round itself. The bullet is light and thus stopping power is not what the velocity would seem to indicate.

Other Names: 7.62mm Russian Nagant Revolver

Nominal Size: 7.62x38mm

Actual Size: 7.49x38.86mm

Case Type: Straight

Weight: 1.71 kg per box of 100; Price: \$55 per box

Magazines:

Per round: 0.014 kg			
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**7.65mm Parabellum**

Notes: This round was designed in 1900 for the then-new Luger pistol. It is still chambered primarily in old Lugers, though a variety of pistols throughout the years have been chambered for 7.65mm Parabellum, including some relatively new ones. It is not in current military service, but it is a popular civilian round, particularly in those countries where the use of "military" rounds by civilians is prohibited. It is a small, lightweight cartridge not known for stopping power or velocity, but it generally doesn't produce much recoil.

Other Names: 7.65mm Luger, .30 Luger

Nominal Size: 7.65x21mm

Actual Size: 7.82x19.05mm

Case Type: Necked

Weight: 11.38 kg per case of 1000; Price: \$180 per case

Magazines:

Per round: 0.009 kg	8-round box: 0.13 kg	9-round box: 0.14 kg	12-round box: 0.19 kg
13-round box: 0.2 kg	14-round box: 0.21 kg	15-round box: 0.23 kg	16-round box: 0.24 kg
20-round box: 0.3 kg	32-round box: 0.47 kg	50-round box: 0.72 kg	

**7.62mm Tokarev**

Notes: This cartridge was introduced along with the Tokarev TT-30 pistol in 1930. This cartridge is almost identical to the .30 Mauser round and most weapons chambered for 7.62mm Tokarev will chamber and fire the .30 Mauser round without difficulty, and vice versa. The round has a flat trajectory and, when jacketed, has decent body armor penetration when provided with an adequate-length barrel. Russian-made ammunition is typically steel-cased and not reloadable under most circumstances. However, there is some Western manufacture of the 7.62mm Tokarev round, and these are reloadable.

A subsonic variant of the 7.62mm Tokarev is made for use in silenced pistols. This ammunition has a reduced propellant charge. Multiply all prices by three for this ammunition.

Other Names: 7.62mm Russian Pistol, 7.62mm Russian

Nominal Size: 7.62x25mm

Actual Size: 7.8x26.64mm

Case Type: Necked\_

Weight: 15.88 kg per case of 1000; Price: \$250 per case

Magazines:

Per round: 0.013 kg	7-round box: 0.16 kg	8-round box: 0.18 kg	9-round box: 0.2 kg
10-round box: 0.22 kg	10-round clip: 0.13 kg	18-round box: 0.38 kg	20-round box: 0.42 kg
30-round box: 0.61 kg	32-round box: 0.65 kg	35-round box: 0.71 kg	36-round box: 0.73 kg
40-round box: 0.8 kg	71-round drum: 1.41 kg		

**8mm Gasser**

Notes: This round was designed in 1898 as a new round for the Rast-Gasser revolver. Thereafter, a number of different European revolvers chambered the 8mm Gasser. It was popular in Europe for a time, but never manufactured in the US, and rarely even sold there. It is now considered a quite obsolete round and ammunition is very hard to find. Handloading is virtually the only way to get 8mm Gasser ammunition these days; the round can be worked up from a .32 Smith & Wesson Long case.

Other Names: 8mm Rast-Gasser

Nominal Size: 8x26mm

Actual Size: 8.13x26.34mm

Case Type: Straight

Weight: 1.36 kg per box of 100; Price: \$44 per box

Magazines:

Per round: 0.011 kg			
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**8mm Lebel Revolver**

Notes: This round was designed for the 1892 French Ordinance revolver, and some other manufacturers also made revolvers in this chambering. Some single-shot rifles were also chambered for the 8mm Lebel Revolver cartridge. It's an average handgun in lethality and stopping power, but is considered obsolete these days, and no longer manufactured. It can be handloaded using .32-20 cases as a starting point, but the .32-20 itself is not a common round. .32 Smith & Wesson ammunition can be fired out of a revolver that is chambered for 8mm Lebel, but the case will bulge slightly when the charge goes off, and accuracy will be poor.

Other Names: 8mm Lebel, 8mm Reglementaire Francaise

Nominal Size: 8x27mm

Actual Size: 8.2x27.18mm

Case Type: Straight

Weight: 1.44 kg per box of 100; Price: \$46 per box

Magazines:

Per round: 0.012 kg			
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**8mm Nambu**

Notes: This cartridge was used only by Japanese forces. It was introduced in 1904 for use in Japanese service pistols, and used until the end of World War 2. After that war, veterans of the Pacific Theater brought home a lot of Nambu pistols as war trophies (especially US soldiers and Marines), but ammunition for those pistols has been hard to find, since most stocks of that ammunition were destroyed by occupying US troops after World War 2. Genuine Nambu cartridges are even more collector's items than the pistols are, and most of those who actually shoot their Nambu pistols do so with handloaded rounds. In the 1980s, a company in Illinois actually manufactured 8mm Nambu rounds for a short time, but no company has done so in nearly two decades. The round's light powder charge and light bullet limits its effectiveness.

Nominal Size: 8x21mm

Actual Size: 8.13x21.85mm

Case Type: Necked

Weight: 1.14kg per box of 100; Price \$36 per box



Magazines:

Per round: 0.009 kg	6-round box: 0.1 kg	8-round box: 0.13 kg	30-round box: 0.44 kg
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**8mm Roth-Steyr**

Notes: This round was designed to be fired from the Roth-Steyr automatic pistol and was never chambered in any other weapon. It was adopted in 1907, and was a popular war trophy to be brought home by Allied troops after World War 2, but the ammunition is now manufactured only by Fiocchi, in small amounts. It is a decent combat round, more powerful than the .32 ACP but less so than the .380 ACP.

Nominal Size: 8x19mm

Actual Size: 8.36x18.8mm

Case Type: Straight

Weight: 1 kg per box of 100; Price: \$32 per box

Magazines:

Per round: 0.008 kg	10-round clip: 0.08 kg		
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**9x21mm**

Notes: This round was specifically designed for use in countries where the civilian use of "military" cartridges, such as 9mm Parabellum, is illegal. The 9x21mm round is basically a 9mm Parabellum round with the case lengthened by 2 millimeters, but the round seated more deeply in the case, so the overall dimensions of the round are identical to the 9mm Parabellum. The same magazines, breech faces, feed ramps, etc., that are used for the 9mm Parabellum can also be used for the 9x21mm round. Ballistically, they are virtually identical.

In most of the European Union, the laws in certain countries that generated the 9x21mm round are being changed. It is likely that in the future, the conditions that created the 9x21mm round will disappear, and possibly, the 9x21mm round with it.

Other Names: 9mm IMI

Nominal Size: 9x21mm

Actual Size: 9.02x21.08mm

Case Type: Straight

Weight: 13.5 kg per case of 1000; Price: \$220 per case

Magazines:

Per round: 0.011 kg	8-round box: 0.16 kg	10-round box: 0.19 kg	11-round box: 0.2 kg
12-round box: 0.22 kg	13-round box: 0.24 kg	14-round box: 0.25 kg	15-round box: 0.27 kg
16-round box: 0.29 kg	17-round box: 0.3 kg	18-round box: 0.32 kg	21-round box: 0.37 kg
26-round box: 0.45 kg			

**9mm Action Express**

Notes: This round was designed in 1988 by Action Arms Ltd. It is basically a .41 Action Express round necked down to take a 9mm Parabellum bullet. It is designed to allow 9mm Parabellum pistols and carbines to take a more powerful bullet with a minimum of modifications, or allow .41 Action Express weapons to be taken down to a smaller caliber. The 9mm Action Express has been tested in a number of existing weapons and is offered commercially in a few. It is not being commercially manufactured at present, but is easily handloaded.

Other Names: 9mm AE

Nominal Size: 9x22mm

Actual Size: 9.02x22mm

Case Type: Necked

Weight: 1.4 kg per box of 100; Price: \$44 per box

Magazines:

Per round: 0.011 kg	10-round box: 0.2 kg		
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**9mm Browning Long**

Notes: This was once a popular handgun cartridge in Europe, but was never used by US handgun manufacturers. It was introduced in 1903 as one of the chamberings for the Browning M-1903 pistol, and thereafter used in several other pistols. In the US, it is sort of a curiosity round, never officially adopted by any manufacturer, but sometimes used in weapons bought from Europe or seized as war trophies. It is a decent combat round, but easily surpassed by more modern rounds. It is basically considered obsolete, but can be handloaded, and is still manufactured in some out-of-the-way areas.

Other Names: 9x20mmSR, 9mm Swedish m/07

Nominal Size: 9x20mm

Actual Size: 9.02x20.32mm

Case Type: Straight

Weight: 1.3 kg per box of 100; Price: \$42 per box

Magazines:

Per round: 0.01 kg	7-round box: 0.13 kg	8-round box: 0.15 kg	
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**9mm Glisenti**

Notes: This round was first developed for the Italian M-10 Glisenti pistol, and was subsequently chambered in a variety of pistols and submachineguns, as it was the official Italian military pistol cartridge in both World War 1 and World War 2. The size is almost identical to the 9mm Parabellum, but the powder load is not anywhere near as heavy. 9mm Parabellum can often be loaded into a weapon designed for 9mm Glisenti, but this should never be done, because the 9mm Parabellum cartridge is much more powerful and will cause a chamber explosion. The only manufacturer now making the 9mm Glisenti is Fiocchi, but it may be easily handloaded starting with 9mm Parabellum cases.

Nominal Size: 9x19mm

Actual Size: 9.02x19.05mm

Case Type: Straight

Weight: 1.21 kg per box of 100; Price: \$38 per box

Magazines:

Per round: 0.01 kg	7-round box: 0.12 kg	8-round box: 0.14 kg	
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**9mm Largo**

Notes: This cartridge was designed in 1910 for the Danish Bergmann-Bayard pistol. The Spanish, however, were the largest users of this round, chambering dozens of pistols and even some submachineguns for the cartridge. This round, however, has never been manufactured in the US, and pistols chambered for the 9mm Largo round in the US and Canada are largely war trophies or military surplus items. It is basically a longer version of the .38 Automatic round. Handloaders will find that virtually any 9mm bullet will work in the 9mm Largo case, but results may vary wildly, of course. The round has a good punch and decent penetration, but tends to produce a lot of muzzle blast and barrel wear.

Other Names: 9mm Bergmann-Bayard, 9mm Bayard Long, 9mm Bayard, 9mm Astra

Nominal Size: 9x23mm

Actual Size: 9.02x23.11mm

Case Type: Straight

Weight: 14.75 kg per case of 1000; Price: \$240 per case

Magazines:

Per round: 0.012 kg	7-round box: 0.15 kg	8-round box: 0.17 kg	10-round box: 0.21 kg
16-round box: 0.31 kg	20-round box: 0.39 kg	25-round box: 0.48 kg	30-round box: 0.57 kg
32-round box: 0.6 kg	36-round box: 0.67 kg	40-round box: 0.75 kg	

**9mm Makarov**

Notes: This cartridge was adopted at the end of World War 2, and has become the standard Russian pistol cartridge. It is also used in several submachineguns. It may have been based on an experimental German cartridge, the 9mm Ultra. It has more power than a .380 ACP, but less than a 9mm Parabellum, and is considered underpowered.

In recent years an attempt has been made to improve this cartridge, primarily for use in submachineguns. This led to the 9mm Makarov Hi-Impulse round. This bullet is mildly pointed (as opposed to the rounded 9mm Makarov bullet), and the round is loaded with more propellant. Triple all

prices for this ammunition.

Other Names: 9mm PM, 9x18mm Russian, 9mm Stechkin, 9mm Type 59

Nominal Size: 9x18mm

Actual Size: 9.22x18.03mm

Case Type: Straight

Weight: 12 kg per case of 1000; Price: \$190 per case

Magazines:

Per round: 0.01 kg	5-round box: 0.09 kg	6-round box: 0.11 kg	7-round box: 0.12 kg
8-round box: 0.14 kg	10-round box: 0.17 kg	12-round box: 0.2 kg	15-round box: 0.24 kg
18-round box: 0.28 kg	20-round box: 0.31 kg	22-round box: 0.34 kg	25-round box: 0.39 kg
27-round box: 0.42 kg	30-round box: 0.46 kg	32-round box: 0.49 kg	40-round box: 0.61 kg
67-round helical: 1.03 kg			

## 9mm Mauser

Notes: This round was developed as a alternate round for the Mauser pistol, specifically for export to Africa and South America. The round and the version of the Mauser that chambered it had a short life and were discontinued by Mauser in 1914. It was revived in 1933 for the Swiss Neuhausen submachinegun, and later for the Austrian Steyr-Solothurn. Manufacture then resumed in several countries, most notably in Hungary, where it was used until well after World War 2. However, it is not being manufactured now, and is a collector's item. The 9mm Mauser round is very powerful, much more so than the 9mm Parabellum, and approaching the power of the .38 Super round. Handloaders will discover that they may have to make the cases from scratch or from .357 Magnum rounds, as they are very long cases.

Other Names: 9mm Mauser Pistol

Nominal Size: 9x25mm

Actual Size: 9.02x24.92mm

Case Type: Straight

Weight: 1.58 kg per box of 100; Price: \$50 per box

Magazines:

Per round: 0.013 kg	20-round box: 0.42 kg	40-round box: 0.8 kg	
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**9mm Parabellum**

Notes: Besides being the most common pistol cartridge in the world, the 9mm Parabellum is also the most common submachinegun cartridge in the world. It was introduced in 1902 and has been adopted by practically every non-Communist country in the world since then. Though it was quite popular from its inception worldwide, it was not popular in the US until 1951, when the first domestically-built handguns were chambered for it. Lately, however, the 9mm Parabellum round has been criticized for its lack of stopping power; many police departments are moving to .40 or 10mm-firing handguns, and the militaries of several countries are moving back to the .45 ACP round for its special operations forces.

A subsonic version of this cartridge is made for use with silenced weapons. Triple all ammunition costs for this ammunition.

Other Names: 9mm Luger, 9x19mm, 9mm Patrone '08

Nominal Size: 9x19mm

Actual Size: 9.02x19.15mm

Case Type: Straight

Weight: 12.25 kg per case of 1000; Price \$200 per case

Magazines:

Per round: 0.01 kg	6-round box: 0.11 kg	7-round box: 0.13 kg	8-round box: 0.14 kg
8-round clip: 0.08 kg	9-round box: 0.16 kg	10-round box: 0.17 kg	10-round clip: 0.1 kg
11-round box: 0.19 kg	12-round box: 0.2 kg	13-round box: 0.21 kg	14-round box: 0.23 kg

15-round box: 0.25 kg	16-round box: 0.26 kg	17-round box: 0.28 kg	18-round box: 0.29 kg
19-round box: 0.3 kg	20-round box: 0.32 kg	22-round box: 0.35 kg	24-round box: 0.38 kg
25-round box: 0.4 kg	26-round box: 0.41 kg	28-round box: 0.44 kg	30-round box: 0.47 kg
32-round box, drum, or snail drum: 0.5 kg	33-round box: 0.52 kg	34-round box: 0.53 kg	35-round box: 0.55 kg
36-round box: 0.56 kg	36-round helical: 0.57 kg	40-round box or drum: 0.62 kg	50-round box or drum: 0.77 kg
50-round helical: 0.79 kg	60-round drum: 0.92 kg	64-round helical: 1 kg	71-round drum: 1.08 kg
100-round helical: 1.56 kg	100-round C-Mag: 1.52 kg	108-round drum: 1.64 kg	

## **9mm Steyr**

Notes: Once the standard Austrian military pistol cartridge, the 9mm Steyr round was designed for use in the Steyr M-1912 pistol. The 9mm Steyr round is very similar in size and appearance to the 9mm Largo round, and can be easily confused. The 9mm Steyr is now making a slow comeback; however, the best source is still handloading, though Fiocchi still manufactures the 9mm Steyr. It is a decent man-stopper, and a good combat pistol round.

Other Names: 9mm Mannlicher

Nominal Size: 9x23mm

Actual Size: 9.02x22.96mm

Case Type: Straight

Weight: 1.46 kg per box of 100; Price: \$46 per box

Magazines:

Per round: 0.012 kg	7-round box: 0.15 kg	8-round box: 0.17 kg	8-round clip: 0.09 kg
11-round box: 0.22 kg	18-round box: 0.35 kg	32-round box: 0.6 kg	

**9mm Ultra**

Notes: This round was first introduced for the Walther PP Super pistol in 1972. It was designed specifically for the West German Police, and was not available on the open market until 1975. Since then, many pistols have been chambered for 9mm Ultra, especially after surplus West German Police pistols were sold after they discontinued the use of the round. The 9mm Ultra round was meant to allow the German Police to continue to carry the light, handy pistols they favored yet have a more powerful cartridge, but this experiment was not successful, as the 9mm Ultra really demands a heavier weapon or acceptance of a lot of recoil and muzzle blast. (German Police eventually realized they might as well carry 9mm Parabellum weapons.) The round is slightly more effective than the .380 ACP, and slightly less effective than the 9mm Parabellum. Several European manufacturers still make the 9mm Ultra.

Other Names: 9mm Police, 9x18mm Police

Nominal Size: 9x18mm

Actual Size: 9.02x18.29mm

Case Type: Straight

Weight: 8.05 kg per case of 1000; Price: \$190 per case

Magazines:

Per round: 0.009 kg	7-round box: 0.12 kg	8-round box: 0.13 kg	13-round box: 0.2 kg
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**9mm Winchester Magnum**

Notes: The 9mm Winchester Magnum appears to have been introduced in 1977, though a decade later it was still an extremely rare round, and it was not listed in Winchester catalogs until 1988. It was not chambered in many weapons, most notably handguns like the Wildey, Coonan, and AMT Automag III, and single shot weapons like certain Thompson/Center handguns. It looks similar to the 9mm Mauser round, but is much bigger, and more powerful than even that round. Unfortunately, factory rounds are difficult to find today, though handloads can be made from .357 Magnum rounds.

Nominal Size: 9x29mm

Actual Size: 9.02x29.46mm

Case Type: Straight



Weight: 1.89 kg per box of 100; Price: \$60 per box

Magazines:

Per round: 0.015 kg	7-round box: 0.19 kg	8-round box: 0.22 kg	
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**10mm Colt**

Notes: This cartridge was developed in 1983 for the Bren-Ten pistol. The ammunition is literally chock-full of propellant and is almost like a wildcat round. The 10mm Colt rivals the power of the .41 Magnum, and even approaches the .357 Magnum under some circumstances. Stopping power and body armor penetration are excellent, but recoil with the round is typically high. In addition, the long round requires a handgun with a large grip, making things difficult for small hands.

Other Names: 10mm Automatic, 10mm Auto, 10mm Colt Automatic, 10mm Bren-Ten

Nominal Size: 10x25mm

Actual Size: 10.16x25.15mm

Case Type: Straight

Weight: 20.38 kg per case of 1000; Price: \$330 per case

Magazines:

Per round: 0.016 kg	7-round box: 0.21 kg	8-round box: 0.23 kg	9-round box: 0.26 kg
10-round box: 0.28 kg	11-round box: 0.31 kg	12-round box: 0.33 kg	14-round box: 0.38 kg
15-round box: 0.41 kg	17-round box: 0.46 kg	20-round box: 0.53 kg	28-round box: 0.73 kg
30-round box: 0.78 kg	32-round box: 0.83 kg		

**10.4mm Italian Ordnance**

Notes: Originally developed for the Model 1874 service revolver, the 10.4mm Italian Ordnance was also used in the Bodeo M-1889 (also known as the Glisenti Revolver). It was found as a blackpowder and a smokeless powder round. They were common war trophies in World Wars 1 and 2, along with the ammunition for them, but today, the ammunition is available only in small amounts from Fiocchi.

Other Names: 10.4mm Italian Revolver, 10.35mm Italian Revolver, 10.35mm Glisenti

Nominal Size: 10.4x23mm

Actual Size: 10.72x22.61mm

Case Type: Straight

Weight: 2.04 kg per box of 100; Price: \$66 per box

Magazines:

Per round: 0.016 kg			
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**.25 ACP**

Notes: This is one of the primary cartridges of those infamous "Saturday Night Specials" that criminals and punks like so much. It was introduced in 1908 with the Colt Vest Automatic Pistol, and in Europe with the FN-Browning Baby. Since then, over a dozen companies have made pistols chambered for this round. The velocity of the .25 ACP is surprising, however, it also has surprisingly little stopping power, due to the light weight of its bullet. Though it is good for little more than a backup or self-defense weapon, it is better than nothing at all.

Other Names: .250 Automatic Colt Projectile, .25 Auto, .25 Automatic, 6.35mm Auto

Nominal Size: 6.35x15.5mm

Actual Size: 6.38x15.75mm

Case Type: Straight

Weight: 5 kg per case of 1000; Price \$80 per case (C/S)

Magazines:

Per round: 0.004 kg	5-round box: 0.04 kg	6-round box: 0.05 kg	7-round box: 0.05 kg
8-round box: 0.06 kg	9-round box: 0.06 kg	10-round box: 0.07 kg	

**.25 NAA**

Notes: This round was designed in 1999 specifically for the North American Arms (NAA) Guardian series of pocket pistols. The idea was simple: to put more power into the .25 ACP cartridge. JB Wood therefore used a .32 ACP case and necked it down to take the .25 ACP's bullet. The result provides somewhat more power than a .25 ACP, but subtracts slightly from the range in the short barrels of the NAA Guardian. (A longer barrel might yield better results.) The ammunition is made by Cor-Bon, but was not produced commercially until 2002.

Twilight 2000 Notes: This cartridge is not available.

Nominal Size: 6.35x17mm

Actual Size: 6.38x17.27mm

Case Type: Necked

Weight: 6.88 kg per case of 1000; Price: \$110 per case

Magazines:

Per round: 0.006 kg	6-round box: 0.06 kg		
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**.32 H&R Magnum**

Notes: This round was introduced in 1984 for use in H&R's Model 504, 532, and 586 revolvers. It was soon followed by a number of other companies, and became popular. Though H&R went out of business in the late 1980s (it returned in 2000, but is not producing handguns), Federal produces factory loads for .32 H&R Magnum. The .32 H&R Magnum is basically longer version of the .32 Smith & Wesson Long. (Revolvers chambered for the .32 H&R Magnum will also accept .32 Smith & Wesson and .32 Smith & Wesson Long.) It is a decently-powered round, more powerful than the .38 Special round.

Other Names: .32 Harrington & Richardson Magnum

Nominal Size: 7.9x27mm

Actual Size: 7.92x27.43mm

Case Type: Straight

Weight: 13.5 kg per case of 1000; Price: \$220

Magazines:

Per round: 0.011 kg	4-round box: 0.09 kg		
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### **.32 Long Colt**

Notes: This is simply a longer version of the .32 Short Colt round, developed at the same time, and using the same bullet. The notes are basically the same as the .32 Short Colt, though it is a little more effective. Chilean and Indian police still use revolvers that fire this round.

Other Names: .320 Revolver

Nominal Size: 8x23mm

Actual Size: 7.95x23.37mm

Case Type: Straight

Weight: 11.63 per case of 1000; Price: \$190 per case

Magazines:

Per round: 0.009 kg			
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### **.32 NAA**

Notes: Similar in concept to the .25 NAA round, the .32 NAA is made by necking down a .380 ACP case to accept a .32 ACP bullet. It was made specifically for the NAA Guardian and has not as yet been chambered in any other weapons. The ammunition is made by Cor-Bon. It is a bit more powerful than the .32 ACP round, yet produces less recoil, and approaches the power of the .380 ACP cartridge.

Nominal Size: 7.65x17mm

Actual Size: 7.85x17.27mm

Case Type: Necked

Weight: 10.5 kg per case of 1000; Price: \$170 per case

Magazines:

Per round: 0.008 kg	6-round box: 0.09 kg		
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**.32 Short Colt**

Notes: This round was originally a blackpowder round introduced in 1875. The .32 Short Colt was actually more popular in Europe in its blackpowder form, where a large number of revolvers were chambered for it. The round has decent stopping power, but accuracy is not good. Winchester was still manufacturing this round until recently, though some Cowboy Shooting enthusiasts have demanded its return. It is easily handloaded starting with a number of similar rounds, like the .32 Smith & Wesson Short or .32 Smith & Wesson Long.

Other Names: .320 Revolver

Nominal Size: 8x16mm

Actual Size: 7.95x16mm

Case Type: Straight

Weight: 8 kg per case of 1000; Price: \$130 per case

Magazines:

Per round: 0.006 kg			
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**.32 Smith & Wesson**

Notes: This is a very old cartridge, originally a blackpowder round, which appeared in 1878. It is largely a revolver round, and is almost never found in other types of firearms. It is small, light, cheap, and, you basically get what you pay for, as it is considered minimal for self-defense.

Other Names: .32 Smith & Wesson Short, DWM202, GR930

Nominal Size: 7.65x16mm

Actual Size: 7.92x15.5mm

Case Type: Straight

Weight: 7.63 kg per case of 1000; Price: \$120 per case

Magazines:

Per round: 0.006 kg			
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**.32 Smith & Wesson Long**

Notes: This cartridge was designed as a revolver round in 1903. It then had a flat-nosed bullet, and was called the .32 Colt New Police. Later the bullet was given its present ogive profile. The primary use these days for the .32 Smith & Wesson Long cartridge is in free pistol target shooting. It is the smallest revolver cartridge that is considered adequate for US police officers.

Other Names: .32 Colt New Police, .32-44 Target, GR-391, 7.65x32mmR

Nominal Size: 7.65x24mm

Actual Size: 7.92x23.62mm

Case Type: Straight

Weight: 11.63 kg per case of 1000; Price: \$190 per case

Magazines:

Per round: 0.009 kg	5-round box: 0.09 kg	6-round box: 0.1 kg	10-round box: 0.16 kg
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**.320 Revolver**

Notes: Though the .32 Short and Long Colts are often called .320 Revolver in Britain, this .320 Revolver round is actually the round that inspired the .32 Short and Long Colt rounds, and is considered the *real* .320 Revolver cartridge. It was first used in the Webley revolver in 1870 as a blackpowder round, but was later chambered in several European pocket revolvers. It is no longer being manufactured by any big companies, though until recently Fiocchi offered it. It has ballistics and effects similar to the .32 Short Colt – reasonable for self-defense, but not accurate.

Nominal Size: 8x16mm

Actual Size: 8.05x15.75mm

Case Type: Straight

Weight: 0.8 kg per box of 100; Price: \$26 per box

Magazines:

Per round: 0.006 kg			
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**.38 Casull**

Notes: This round was designed to provide a cartridge equal to the .357 Magnum, while fitting in a 1911-type frame. In this case Dick Casull succeeded: in 1998, he created the .38 Casull round. It uses what looks like a .45 ACP case necked down to .38 caliber, but is actually a new case that takes advantage of the necked design. So far, only the CA-3900 fires the .38 Casull.

Nominal Size: 9x24mm

Actual Size: 9.09x23.88mm

Case Type: Necked

Weight: 1.55 kg per box of 100; Price: \$50 per box

Magazines:

Per round: 0.012 kg	8-round box: 0.18 kg		
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**.38 Long Centerfire**

Notes: This round began as a blackpowder rimfire cartridge that was quickly replaced by a centerfire round, and was therefore renamed .38 Long Centerfire. It was chambered in a number of single shot rifles and a few revolvers, but by 1900, was considered obsolete, even in its smokeless powder form. It began to be manufactured again in very small lots (at first after the 1993 film *Tombstone* for the reproduction of the 1873 Colt used in that movie), and is now still made (again, in very small lots) for the Cowboy Shooting crowd, mostly in the form of empty cases. The .38 Long Centerfire is also easily handloaded.

Other Names: .38 Long CF

Nominal Size: 9x26mm

Actual Size: 9.53x26.16mm

Case Type: Straight

Weight: 1.86 kg per box of 100; Price: \$60 per box

Magazines:

Per round: 0.015 kg			
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**.38 Long Colt**

Notes: The official US military handgun cartridge before the advent of the M-1911A1 and the .45 ACP round, the .38 Long Colt was also in common use by police forces in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. This means that quite a few weapons chambered for .38 Long Colt are still around. Ballistically, the .38 Long Colt is almost the equal of the .38 Special. Some old .38 Long Colt-firing revolvers will also chamber .38 Special or .357 Magnum cartridges, but this is a sign of extreme wear and these weapons should not be fired, especially with .357 Magnum ammunition. (This would probably destroy the revolver and injure the firer and anyone nearby.) Remington is now manufacturing .38 Long Colt ammunition again, as is Black Hills ammunition, in response to the demands of the Cowboy Shooting enthusiasts.

Nominal Size: 9x26mm

Actual Size: 9.07x26.16mm

Case Type: Straight

Weight: 16.88 per case of 1000; Price: \$270 per case

Magazines:

Per round: 0.014 kg			
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**.38 Smith & Wesson**

Notes: This old round was first designed for Smith & Wesson's hinged-frame revolvers in 1877. The .38 Smith & Wesson has been used all over the world, once being the most prevalent handgun cartridge in the world. It is well-suited to lightweight pocket revolvers, with relatively little recoil. At short range, the stopping power is excellent, but range falls off rapidly. Remington still manufactures .38 Smith & Wesson ammunition.



Other Names: .38 Colt New Police, .38 Super Police, .38 Smith & Wesson Short, DM203, GR932, .380/200

Nominal Size: 9x20mm

Actual Size: 9.12x19.81mm

Case Type: Straight

Weight: 13 kg per case of 1000; Price: \$210 per case

Magazines:

Per round: 0.01 kg			
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**.38 Special**

Notes: This round was developed for the Smith & Wesson Military & Police revolver of 1902. It was originally a military-only cartridge, replacing the unsatisfactory .38 Long Colt. The police soon picked up on it, and it became the most common police revolver round for many decades. It is considered one of the best handgun cartridges ever made, with a combination of range, low recoil, and with proper barrel length, ability to penetrate body armor. It should be noted that any revolver that is chambered for the .357 Magnum cartridge can also chamber and fire the .38 Special cartridge (but not vice versa); the bullets and shells are the same size, but shorter.

Other Names: .38-44 Target, .38-44 High Velocity, .38 Smith & Wesson Special, .38 Colt Special

Nominal Size: 9x29mm

Actual Size: 9.07x29.46mm

Case Type: Straight

Weight: 19 kg per case of 1000; Price: \$300 per case

Magazines:

Per round: 0.015 kg	10-round box: 0.27 kg	16-round box: 0.4 kg	33-round box: 0.8 kg
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**.38 Super**

Notes: This round was introduced in 1929 to improve upon the .38 Automatic round. It is almost identical to the older round, but uses a more powerful propellant loading. It was a curiosity for many decades, but then many manufacturers at once seemed to pick up on the virtues of the round and began chambering pistols for them. The .38 Super has a flat trajectory at most ranges and performs better than a 9mm Parabellum round at the same ranges. It penetrates body armor better than a .45 ACP, but has inferior stopping power in most cases.

Other Names: .38 Super Automatic, .38 Super ACP

Nominal Size: 9x23mm

Actual Size: 9.09x22.86mm

Case Type: Straight

Weight: 14.88 kg per case of 1000; Price: \$240 per case

Magazines:

Per round: 0.012 kg	7-round box: 0.15 kg	8-round box: 0.17 kg	9-round box: 0.19 kg
10-round box: 0.21 kg	12-round box: 0.24 kg	15-round box: 0.3 kg	16-round box: 0.32 kg
30-round box: 0.57 kg			

**.40 Smith & Wesson**

Notes: This round began as an experiment of a joint venture between Winchester and Smith & Wesson in 1989. The FBI was working with 10mm Colt-firing pistols and felt that while the stopping power and penetration of the 10mm cartridge was excellent, the round was too big and hot for everyday use, especially by female agents. They were therefore looking for a smaller round with comparable power. The power of the .40 Smith & Wesson rivals that of the .45 ACP, but the chamber pressures can be so great that a pistol has to be made especially to withstand it.

Other Names: .40 Smith & Wesson Auto

Nominal Size: 10x21mm

Actual Size: 10.16x21.59mm

Case Type: Straight

Weight: 17.5 kg per case of 1000; Price \$280 per case

Magazines:

Per round: 0.014 kg	5-round box: 0.14 kg	6-round box: 0.16 kg	7-round box: 0.18 kg
8-round box: 0.2 kg	9-round box: 0.22 kg	10-round box: 0.24 kg	11-round box: 0.27 kg
12-round box: 0.29 kg	13-round box: 0.31 kg	14-round box: 0.33 kg	15-round box: 0.35 kg
16-round box: 0.37 kg	22-round box: 0.5 kg	25-round box: 0.57 kg	30-round box: 0.67 kg
35-round box: 0.78 kg			

### **.41 Action Express**

Notes: The .41 Action Express round is a magnum-type round developed to give 9mm handguns much more power without having to do a large amount of modifications to them. The first factory loads were made in Israel in 1986. Handloading the .41 Action Express is difficult, since the case cannot be readily formed by modifying any other cases, though with extensive work, a .41 Magnum case can be used. The performance of the .41 Action Express round is similar to that of the .41 Magnum, though it is more pleasant to shoot and it is primarily a pistol rather than a revolver round.

Other Names: .41 AE, 10.4mm Action Express, 10.4mm AE

Nominal Size: 10.4x22mm

Actual Size: 10.41x22mm

Case Type: Straight

Weight: 18.75 kg per case of 1000; Price: \$300 per case

Magazines:

Per round: 0.015 kg	6-round box: 0.17 kg	7-round box: 0.19 kg	8-round box: 0.22 kg
9-round box: 0.24 kg	10-round box: 0.26 kg	11-round box: 0.28 kg	12-round box: 0.31 kg
15-round box: 0.38 kg	20-round box: 0.49 kg	28-round box: 0.67 kg	32-round box: 0.77 kg

**.41 Magnum**

Notes: This has been a controversial cartridge since its inception in 1964. Many wonder what the need is for this round, since we already have the .357 Magnum and .44 Magnum. Greater stopping power can be put into the .357 Magnum by using heavier bullets, and the .41 Magnum cannot hope to approach the .44 Magnum in power or range. However, some people want something bigger than the .357, but do not want to have to deal with the blast and recoil of the .44 Magnum. The .41 Magnum is for them. However, it was never a very popular round, and few guns chamber it today.

Other Names: .41 Remington Magnum

Nominal Size: 10.4x31.8mm

Actual Size: 10.41x32.51mm

Case Type: Straight

Weight: 27.63 kg per case of 1000; Price: \$440 per case

Magazines:

Per round: 0.022 kg	7-round box: 0.28 kg	9-round box: 0.35 kg	
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**.41 Short Colt**

Notes: This round was developed in 1877 for use in Colt's new double-action revolver, and it was later used in half a dozen other revolvers. It is basically a longer version of the .41 Short Colt, and was originally a blackpowder round. Conversion to smokeless powder came later. It was popular for many years, though it's performance is not that different from the .38 Special round, and it eventually became obsolete in favor of that round. Though Winchester produced a small run in 1970, there has been no large-scale manufacturing of the .41 Long colt in decades, and most such rounds today are handloaded. Some were produced in the mid-1990s after the movie *Tombstone*, but this was a very small number.

Nominal Size: 10.2x29mm

Actual Size: 10.19x28.7mm

Case Type: Straight

Weight: 2.34 kg per box of 100; Price: \$74

Magazines:

Per round: 0.019 kg			
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### **.44 AMP**

Notes: This round was developed in 1971 specifically for the AutoMag 44, later marketed by High Standard, then AMT. At the time, no one could figure out how to reliably make an automatic pistol function using .44 Magnum ammunition. This special round was therefore created; it was made by simply cutting off .30-06 or 7.62mm NATO cases until they were 1.3 inches and then trimming. After the demise of the pistol, ammunition was for a time made in Mexico, then in Sweden. However, no one now, other than handloaders, is making the .44 AMP (AutoMag Projectile) round.

Other Names: .44 AutoMag Projectile

Nominal Size: 10.9x32.9mm

Actual Size: 10.9x32.97mm

Case Type: Straight

Weight: 3.08 kg per box of 100; Price \$98 per box

Magazines:

Per round: 0.025 kg	7-round box: 0.32 kg		
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### **.44 Colt**

Notes: This was originally a blackpowder cartridge used as a standard service round by the US Army in the early 1870s. The round was later used with smokeless powder, and loaded commercially until 1940. The Revolvers that fire this round have become very rare, and original rounds in this caliber even rarer. Most rounds of this type are handloaded, usually for SASS shooters. It has pretty decent power for a handgun cartridge.

Nominal Size: 10.9x28mm

Actual Size: 11.25x27.94mm

Case Type: Straight

Weight: 2.78 kg per box of 100; Price: \$88 per box

Magazines:

Per round: 0.022 kg			
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**.44 Magnum**

Notes: This cartridge was a joint development of Smith & Wesson and Remington, designed for a new heavy-frame revolver. It was meant to beat the .357 Magnum in power, in a case of pure one-upsmanship. It proved to be enormously popular, and was for a while the most powerful handgun round. Police like it for its ability to penetrate body armor and vehicles, hunters like it (in rifles) for its range and ability to bring down big game. However, most police and civilians shy away from .44 Magnum handguns due to their power and recoil.

A subsonic version of the .44 Magnum cartridge is made. These rounds are for specialist applications with silenced rifles, and few guns use them. Triple all ammunition prices for these rounds.

Other Names: .44 Remington Magnum

Nominal Size: 11.2x32.8mm

Actual Size: 10.9x32.77mm

Case Type: Straight

Weight: 30.63 kg per case of 1000; Price \$490 per case

Magazines:

Per round: 0.025 kg	3-round box: 0.16 kg	8-round box: 0.35 kg	
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**.44 Smith & Wesson Russian**

Notes: This round was designed by Smith & Wesson for the revolvers it sold to the Russian military in 1870. A civilian version of this revolver was sold starting in 1878. It was originally a blackpowder round, but made the transition to smokeless powder. It was a favorite handgun round of Buffalo Bill Cody. It was a decent handgun round, but made obsolete by the .44 Special round, which is better suited to modern propellants. A weapon chambered for .44 Special or .44 Magnum will also fire the .44 Smith & Wesson Russian. It can be easily handloaded starting with .44 Special cases, and Fiocchi and Black Hills sell it.

Other Names: .44 Short, .44 Russian, DWM242, GR960

Nominal Size: 11.2x25mm

Actual Size: 10.9x24.64mm

Case Type: Straight

Weight: 2.3 kg per box of 100; Price: \$74 per box

Magazines:

Per round: 0.018 kg			
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**.44 Special**

Notes: The .44 Special round was originally a blackpowder cartridge, that went smokeless after the introduction of smokeless powder. The smokeless propellant, with its greater powder, enabled it to achieve greater power than the .44 Smith & Wesson Russian round it replaced. A variety of American, Spanish, and other European revolvers were chambered for the .44 Special shortly after its introduction in 1907, but interest waned until the past few decades. It is a very accurate cartridge, but was never developed to its potential until recently. A revolver that can fire .44 Magnum cartridges can also fire .44 Special cartridges (but not vice versa).

Other Names: .44 Smith & Wesson Special, GR-964

Nominal Size: 11.2x29.5mm

Actual Size: 10.9x29.46mm

Case Type: Straight

Weight: 27.5 kg per case of 1000; Price: \$440 per case

Magazines:

Per round: 0.022 kg			
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**.44 Webley**

Notes: This round was designed for the Webley RIC (Royal Irish Constabulary) revolver in 1868. As with many rounds of this period, it was originally designed to use blackpowder, but was later converted for use with smokeless powder. It was, for a time, quite popular for use in pocket revolvers and other self-defense weapons. It is a short-range round with decent stopping power due to its large, heavy bullet. The round is long obsolete, the original cartridges collectors' items, and any new rounds found today probably handloaded.

Other Names: .442 RIC, .442 Revolver Centerfire, 10.5x17Rmm, .442 Kurz, DWM 221

Nominal Size: 10.5x17mm

Actual Size: 11.07x17.53mm

Case Type: Straight

Weight: 1.69 kg per box of 100; Price: \$54 per box

Magazines:

Per round: 0.014 kg			
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**.45 ACP**

Notes: This round was developed by John Browning himself in 1905 and was adopted as the official US military pistol cartridge in 1911, along with the M-1911 pistol. Despite having fairly high recoil and being difficult to master, the .45 ACP round is the preferred pistol round of Western special operations forces, due to its knockdown power. It is, unfortunately, a heavy, slow round with little ability to penetrate body armor, but the even the blunt trauma will produce significant wounds. Lately, interest has spiked in revolvers firing the .45 ACP round.

The military uses several special versions of the .45 ACP round. The .45 High-Lethality Round is packed with a bit more propellant and has a pointed bullet for more range, power, and penetration. The .45 Extreme-Lethality Round is a virtual wildcat round packed with as much propellant at possible, using a lighter steel-cored bullet for even more increased power and penetration. The .45 High-Lethality Round costs 30 times normal; the .45 Extreme-Lethality Round costs 45 times normal.

Other Names: .45 Automatic Colt Projectile, .45 Automatic, .45 Auto, .45 Auto Colt, 11.43x23mm Norwegian Colt

Nominal Size: 11.43x23mm

Actual Size: 11.48x22.81mm



Case Type: Straight

Weight: 23.63 kg per case of 1000; Price \$380 per case

Magazines:

Per round: 0.019 kg	5-round box: 0.18 kg	6-round box: 0.21 kg	7-round box: 0.24 kg
8-round box: 0.27 kg	9-round box: 0.3 kg	10-round box: 0.33 kg	12-round box: 0.39 kg
13-round box: 0.42 kg	14-round box: 0.44 kg	15-round box: 0.47 kg	16-round box: 0.5 kg
18-round box: 0.56 kg	20-round box: 0.62 kg	25-round box: 0.76 kg	27-round Taylor Drum: 0.82 kg
30-round box: 0.91 kg	36 round box: 1.08 kg	40-round drum: 1.2 kg	50-round drum: 1.49 kg
60-round drum: 1.78 kg	100-round drum: 2.93 kg	108-round drum: 3.16 kg	

### **.45 Long Colt**

Notes: This is a very old cartridge, introduced in 1873 for Colt's Peacemaker single-action revolver. The cartridge (and the revolver) were adopted by the US Army in 1875, and remained the official military handgun cartridge until 1892. The .45 Long Colt was originally a blackpowder cartridge that was later converted to smokeless powder. There is a certain amount of romance associated with the round, given its reputation as the round that "won the West." The .45 Long Colt is still a favorite of American revolver aficionados, especially in replicas of Old West revolvers. The stopping power of the cartridge is greater than that of the .45 ACP.

Other Names: .45 Colt

Nominal Size: 11.43x33mm

Actual Size: 11.53x32.77mm

Case Type: Straight

Weight: 34.25 kg per case of 1000; Price: \$550 per case

Magazines:

Per round: 0.027 kg			
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**.45 S&W Schofield**

Notes: This is a very old cartridge first developed for the US Army’s Smith & Wesson Schofield revolver. It was used until 1892, when replaced by a .38 Special-firing revolver. The round was loaded commercially until about 1940, then discontinued by virtually all manufacturers; in 1997, the cartridge was again loaded commercially by Black Hills Ammunition in response to demand from Cowboy Shooting enthusiasts. The .45 Smith & Wesson Schofield was designed because the .45 Long Colt did not fit into the new revolver (it was too long). Revolvers that fire .45 Long Colt can almost always fire .45 Smith & Wesson Schofield, but the reverse is almost never true. Handloaders who load the .45 Smith & Wesson cartridge should remember that the round was designed for blackpowder, so only a small amount of smokeless powder should be used in the .45 Smith & Wesson Schofield round.

Twilight 2000 Notes: Factory-made rounds are not available.

Other Names: .45 Smith & Wesson Schofield, .45 Smith & Wesson

Nominal Size: 11.5x28mm

Actual Size: 11.53x27.94mm

Case Type: Straight

Weight: 2.91 kg per box of 100; Price: \$94 per box

Magazines:

Per round: 0.023 kg			
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**.45 Webley**

Notes: The .45 Webley originated as a blackpowder round in about 1874, but did not appear in catalogs until 1876. It is similar to the .450 Revolver case, but is longer. A revolver designed for the .450 Revolver round will generally be able to fire .45 Webley ammunition (and vice versa). Late in the round’s history, it was changed to smokeless powder. The last known manufactured ammunition was made in 1939 by Winchester. Any present today is handloaded or a collector’s item.

Nominal Size: 11.5x21mm

Actual Size: 11.48x20.83mm

Case Type: Straight

Weight: 2.15 kg per box of 100; Price: \$68 per box

Magazines:

Per round: 0.017 kg			
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**.45 Winchester Magnum**

Notes: This cartridge was first introduced in 1979. Winchester didn't do anything with it, but Wildey chambered for its heavy Magnum semiautomatic pistol, and Thompson/Center put it in one of their Contender single-shot target/hunting pistols. The .45 Winchester Magnum is basically a long version of the .45 ACP round, with appropriate increases in power and penetration. It remains, however, a rare chambering.

Nominal Size: 11.6x30mm

Actual Size: 11.46x30.43mm

Case Type: Straight

Weight: 3.14 kg per box of 100; Price: \$100 per box

Magazines:

Per round: 0.025 kg	6-round box: 0.028 kg	8-round box: 0.36 kg	12-round box: 0.51 kg
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**.50 Action Express**

Notes: This round was developed in 1988 by Action Arms for a new version of the Desert Eagle heavy pistol. The round was designed to allow IMI to adapt the Desert Eagle to the new cartridge with as little modification of the pistol as possible, so it was based on the .44 Magnum round. It is a powerful magnum round that has almost too much power for a handgun; handguns chambered for .50 Action Express are necessarily huge.

Other Names: .50 AE

Nominal Size: 12.7x34mm

Actual Size: 12.7x32.64mm

Case Type: Straight

Weight: 41.38 kg per case of 1000; \$660 per case

Magazines:

Per round: 0.033 kg	5-round box: 0.32 kg	7-round box: 0.42 kg	10-round box: 0.58 kg
14-round box: 0.78 kg			

**.50 GI**

Notes: This round is an original design of Guncrafter industries, a relatively new firearms company in Huntsville, Arkansas. It was meant to bring .50-caliber performance to the M-1911-type weapon, and is therefore very close in size and shape to the .45 ACP round – short and fat. The .50 GI round was designed from the ground up, however, and is not just a sized-up .45 ACP round. The walls or the cartridge are thinner but made of stronger metal, and it was designed to operate at lower pressures and lower velocities than the .45 ACP round. It provides striking power slightly greater than the .45 ACP however. Right now, since the company is just starting up, the round and the pistol which fires it (the Guncrafter Industries Model 1) are relatively rare; time will tell whether this is just another interesting M-1911 variant, or something which is more widely accepted.

Twilight 2000 Notes: This round does not exist.

Other Names: .50 Guncrafter Industries

Nominal Size: 12.7x23mm

Actual Size: 13.08x22.81mm

Case Type: Straight

Weight: 3.06 kg per box of 100; Price: \$96 per box

Magazines:

Per round: 0.025 kg	7-round box: 0.31 kg		
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**.357 AMP**

Notes: This is a .44 AMP case necked down to .357 caliber. It was not as popular as the .44 AMP round-firing Automag, and it did not appear until 1973. The rounds were manufactured in the US for a while, then in Mexico and Sweden, but are now made only by handloaders or special orders. Like the .44 AMP, the .357 AMP is quite a bit more powerful than its .357 Magnum counterpart. As a pistol hunting round, the .357 AMP is pretty good, but it's a bit overpowered for self-defense (though it will bring a man down pretty easily).

Other Names: .357 Auto Magnum Projectile, .357 AutoMag, .357 Auto Magnum

Nominal Size: 9x33mm

Actual Size: 9.07x32.97mm

Case Type: Necked

Weight: 2.11 kg per box of 100; Price: \$68 per box

Magazines:

Per round: 0.017 kg	7-round box: 0.22 kg		
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**.357 Magnum**

Notes: This lengthened, hot-loaded .38 Special cartridge was introduced in 1935 by Smith & Wesson for its heavy-frame revolvers. It was the most powerful handgun cartridge in the world until the advent of the .44 Magnum in 1955. Virtually every revolver maker has chambered a revolver for the .357 Magnum round, and some semiautomatic pistols are also made to fire it. It rivals the .38 Special for ubiquity in police revolvers. It can also be used in rifles, where it has brought down game as big as grizzly bears. Some countries' special operations forces still use revolvers chambered for the .357 Magnum round, considering them to be superior to pistols.

Other Names: .357 Smith & Wesson Magnum

Nominal Size: 9x33mm

Actual Size: 9.07x32.77mm

Case Type: Straight

Weight: 21.13 kg per case of 1000; Price \$340 per case

Magazines:

Per round: 0.017 kg	5-round box: 0.16 kg	7-round box: 0.22 kg	9-round box: 0.27 kg
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**.357 Maximum**

Notes: This round is the result of a collaboration between Remington and Ruger in 1983. The first weapon to chamber the round was a modified Ruger Blackhawk revolver, followed by a Dan Wesson design and the Thompson/Center Contender single-shot target/hunting pistol. The .357 Maximum is basically a longer version of the .357 Magnum cartridge, with appropriate increases in propellant and power. The first weapons to fire the round were modified from .357 Magnum-firing weapons, but it was found that even these tough weapons could not handle the new round and wore out quickly. A weapon therefore has to be designed specifically to fire the .357 Maximum. It has been said that the best application of the .357 Maximum would be in a rifle, but none have as of yet been designed to fire it.

Other Names: .357 Remington Maximum

Nominal Size: 9x40mm

Actual Size: 9.07x40.39mm

Case Type: Straight

Weight: 2.61 kg per box of 100; Price: \$42 per box

Magazines:

Per round: 0.021 kg			
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**.357 SiG**

Notes: This is a .40 Smith & Wesson case necked down to accept a 9mm bullet. The idea was to achieve .357 Magnum ballistics (but not necessarily power) from semiautomatic pistols. It is a compact round that offers good performance in a small package. These rounds tend to be loaded with a large amount of propellant, and this gives them their high velocity. The .357 SiG round is slowly becoming more popular in the world, and some police departments have adopted it.

Nominal Size: 9x22mm

Actual Size: 9.07x21.97mm

Case Type: Necked

Weight: 14.25 kg per case of 1000; Price \$230 per case (S/R)

Magazines:

Per round: 0.011 kg	7-round box: 0.15 kg	9-round box: 0.18 kg	10-round box: 0.2 kg
12-round box: 0.23 kg	13-round box: 0.25 kg	14-round box: 0.27 kg	15-round box: 0.29 kg

**.380 ACP**

Notes: This round was introduced in the Colt Pocket Automatic series in 1908. Several governments have adopted it as their official military pistol cartridge, and many others have adopted it as a secondary standard. Virtually all pistol manufacturers have, at one time or another, chambered a pistol to fire the .380 ACP round. It has more stopping power and range than the .32 ACP, but is in essence an overgrown version of the .32 ACP. It is considered the minimum pistol cartridge for offensive work.

Other Names: 9mm Short, 9mm Kurz, 9x17mm, 9mm Browning Short, .380 Automatic Colt Projectile, .380 Auto, .380 Automatic

Nominal Size: 9x17mm

Actual Size: 9.04x17.27mm

Case Type: Straight

Weight: 11.13 kg per case of 1000; Price: \$180 per case

Magazines:

Per round: 0.009 kg	5-round box: 0.09 kg	6-round box: 0.1 kg	7-round box: 0.11 kg
8-round box: 0.13 kg	9-round box: 0.14 kg	10-round box: 0.16 kg	11-round box: 0.17 kg
12-round box: 0.18 kg	13-round box: 0.2 kg	14-round box: 0.21 kg	15-round box: 0.22 kg

16-round box: 0.24 kg	17-round box: 0.25 kg	18-round box: 0.26 kg	19-round box: 0.28 kg
20-round box: 0.29 kg	22-round box: 0.32 kg	30-round box: 0.43 kg	32-round box: 0.45 kg
36-round box: 0.51 kg	40-round box: 0.56 kg	60-round drum: 0.84 kg	108-round drum: 1.49 kg

### **.380 Revolver**

Notes: This round was designed for the Webley revolver after it was discovered that most people simply couldn't handle the recoil and power of the .455 Webley Mk I, and that such a powerful cartridge was not necessarily needed in a handgun cartridge (or so it was thought at the time). It was designed in 1868 as a blackpowder round, then changed to smokeless powder. The .38 Short Colt is largely a copy of the .380 Revolver round, and most revolvers designed for the .380 Revolver round will also chamber and fire the .38 Short Colt without a problem. Currently, the only company loading the .380 Revolver round is Fiocchi.

Other Names: .380 Webley Revolver

Nomimal Size: 9x18mm

Actual Size: 9.53x17.78mm

Case Type: Straight

Weight: 1.26 kg per box of 100; Price: \$40 per box

Magazines:

Per round: 0.01 kg			
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### **.400 Cor-Bon**

Notes: This is a .45 ACP cartridge necked down to 40 caliber. It was designed partially to boost .40-caliber performance; however, the main reason it was designed is that most existing .40 and .45 Caliber pistols can be modified to fire .400 Cor-Bon simply by changing the barrel and feed ramp. The .400 Cor-Bon produces a round of higher power than .40 caliber rounds, with less recoil than the .45 ACP. It is an excellent self-defense round, approaching the 10mm Colt in stopping power.

Nominal Size: 10x23mm



Actual Size: 10.1x22.8mm

Case Type: Necked

Weight: 18.25 per case of 1000; Price: \$290 per case

Magazines:

Per round: 0.015 kg	7-round box: 0.19 kg	10-round box: 0.26 kg	
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### **.440 Cor-Bon**

Notes: This relatively-new cartridge was designed in 1997 by necking down a .50 Action Express cartridge to .429 caliber. It is designed more for pistol hunting than anything else, but lends itself to self-defense in heavier weapons such as the Tromix Jackhammer due to the lower recoil than the .50 Action Express and superior stopping power than other pistol cartridges normally used in submachineguns. The ballistics are comparable to those of the .454 Casull.

Nominal Size: 10.9x33mm

Actual Size: 10.9x32.51mm

Case Type: Necked

Weight: 30.38 kg per case of 1000; Price: \$490 per case

Magazines:

Per round: 0.024 kg	7-round box: 0.31 kg	10-round box: 0.42 kg	15-round box: 0.61 kg
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### **.450 Revolver**

Notes: This was the British Army's first centerfire revolver cartridge, adopted in 1868. It was originally a blackpowder cartridge, but was later adapted for smokeless powder. It was never a satisfactory military round, but had a surprisingly long period of use, still being used in reserve weapons until World War 1. The .450 Revolver round can be fired from revolver designed for .455 Webley ammunition without a problem (but not vice versa). It has long been considered obsolete, but Fiocchi still makes lots of this ammunition from time to time.

Other Names: .450 Adams, .450 Webley Revolver, .450 Short, .450 Colt, .450 Mk III

Nominal Size: 11.5x17mm

Actual Size: 11.56x17.53mm

Case Type: Straight

Weight: 1.84 kg per box of 100; Price: \$58 per box

Magazines:

Per round: 0.015 kg			
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**.454 Casull**

Notes: This round was developed in 1957 for Dick Casull’s 454 Casull revolver. The round is essentially a stretched .45 Long Colt round. This round has not been chambered in many revolvers and is still a rather rare round. It is easily more powerful than the .45 Long Colt round, and is even more powerful than the .44 Magnum. The bullets are unusually hard and have good penetrative power. A revolver that is chambered for the .454 Casull round can also fire .45 Long Colt ammunition; however, the cylinders must be carefully cleaned before firing .454 Casull again, or the revolver can be damaged beyond repair due to fouling.

Nominal Size: 11.5x35mm

Actual Size: 11.48x35.31mm

Case Type: Straight

Weight: 3.65 kg per box of 100; Price: \$116 per box

Magazines:

Per round: 0.029 kg			
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**.455 Webley Automatic**

Notes: This is a semi-rimmed round adapted from the Webley revolver rounds, and first used in the 1912 Webley self-loading pistol. It is a low velocity round (even lower than that of the .45 ACP), and has a very blunt nose that cause it to lose speed quickly. It was retired from British service (along with the pistol that fired it) at the end of World War 1. Though many of the pistols were sold on the surplus

market all over the world, very little of the ammunition exists today, and most of it is handloaded.

Other Names: .455 Webley Auto

Nominal Size: 11.5x24mm

Actual Size: 11.56x23.62mm

Case Type: Straight

Weight: 2.48 kg per box of 100; Price: \$80 per box

Magazines:

Per round: 0.02 kg	7-round box: 0.25 kg		
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**.455 Webley Revolver Mk I**

Notes: This round was designed by the British in 1892 to replace several older revolver rounds. It was at first designed to be a blackpowder round, but in 1894 was re-designed to use smokeless powder. The last company to commercially load this round was Colt in 1930, until Fiocchi began offering the round again in recent years. As a revolver round, it has basically adequate stopping power despite its low velocity.

Twilight 2000 Notes: Factory-made rounds are not available.

Other Names: .455 Enfield, .455 Colt, .455 Revolver Mk I

Nominal Size: 11.5x22mm

Actual Size: 11.56x22.1mm

Case Type: Straight

Weight: 2.33 kg per box of 100; Price: \$74 per box

Magazines:

Per round: 0.019 kg			
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**.455 Webley Revolver Mk II**

Notes: This is an updated version of the .455 Webley Revolver Mk I (a round originally designed for blackpowder). It was used until World War 2, then the revolvers that fired them were sold on the open market at cut-rate prices. The .455 Webley Revolver Mk II is a very low-velocity round that does not have much striking power despite its large size. Fiocchi still makes the cartridge, but it is essentially obsolete except to collectors.

Other Names: .455 Revolver Mk II

Nominal Size: 11.5x19mm

Actual Size: 11.53x19.56mm

Case Type: Straight

Weight: 2.04 kg per box of 100; Price: \$66 per box

Magazines:

Per round: 0.016 kg			
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**.475 Linebaugh**

Notes: This round was produced by John Linebaugh in 1988 in the never-ending quest to develop the world's most powerful handgun cartridge. (It was, for a short time.) The .475 Linebaugh is based on a cut-down .45-70 Government cartridge, with a heavy bullet and chock-full of propellant. Its best use is hunting, self-defense against large animals, target shooting, and for bragging rights. Only the company of Buffalo Bore produces factory lots, but not in large quantities.

Nominal Size: 12x38mm

Actual Size: 12.07x38.1mm

Case Type: Straight

Weight: 4.36 kg per box of 100; Price: \$140 per box

Magazines:

Per round: 0.035 kg			
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### **.475 Wildey Magnum**

Notes: This round was the second cartridge designed to be chambered in the huge Wildey Magnum pistol, after the .45 Winchester Magnum. It is based on the .284 Winchester rifle cartridge, shortened greatly and necked out to handle the large-caliber bullet involved. The .475 Wildey Magnum is best used as a hunting and target-shooting cartridge; the heavy recoil and questionable accuracy unless carefully aimed mean that it is not truly useful as a defensive or offensive weapon, though the round could probably bring down Andre the Giant. Manufactured lots are available in the US, in small numbers.

Other Names: .475 Wildey

Nominal Size: 12x33mm

Actual Size: 12.07x32.89mm

Case Type: Straight

Weight: 3.76 kg per box of 100; Price: \$120 per box

Magazines:

Per round: 0.03 kg	8-round box: 0.43 kg		
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### **.476 Enfield**

Notes: This British military revolver round had a relatively short military history, from 1881 to 1891, when it was replaced by the first of the .455 Webley rounds. The Mk III version is the version of the .476 Revolver round that used smokeless powder; earlier marks used blackpowder. It too was an unsatisfactory round and quickly became obsolete, and the province of handloaders.

Other Names: .476 Enfield Mk III, .476 Eley, .455/476, .476 Revolver

Nominal Size: 12x22mm

Actual Size: 11.99x22.1mm

Case Type: Straight

Weight: 2.5 kg per box of 100; Price: \$80 per box

Magazines:

Per round: 0.02 kg			
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**.480 Ruger**

Notes: This round was originally designed to be chambered in a special 50<sup>th</sup>-anniversary Ruger Super Redhawk to bear Bill Ruger’s name. The round itself was an experiment and not intended to break any power records – it basically falls between the .44 Magnum and .454 Casull in terms of power. It was more intended to offer a power increase over the .44 Magnum, but without the recoil increase of the .454 Casull. The case is a cut-down and modified .45-70 round.

Twilight 2000 Notes: This round does not exist.

Nominal Size: 12x32mm

Actual Size: 12.07x32.64mm

Case Type: Straight

Weight: 37.38 kg per case of 1000; Price: \$600 per case

Magazine:

Per round: 0.03 kg			
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**.500 Linebaugh**

Notes: This was another result of John Linebaugh’s search for the most powerful handgun cartridge possible. It is based on the .348 Winchester case, cut down and necked up to .50 caliber. It was originally designed to be fired from a modified Ruger Bisley revolver, but has since been chambered in other revolvers. The .500 Linebaugh is so powerful that it can even take down African game with the proper revolver (and if you can get close enough). It will kill most North American animals straight away. Handloading this round can be a problem due to the dearth of .348 Winchester cartridges.

Nominal Size: 13x36mm

Actual Size: 12.95x35.81mm

Case Type: Straight

Weight: 4.72 per box of 100; Price: \$150 per box

Magazines:

Per round: 0.038 kg			
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The magazines presented here are based on *light alloy* magazines. For steel magazines, increase weight by 2%; for plastic or synthetic magazines; decrease weight by 8 percent.

**5.45mm Kalashnikov**

Notes: This cartridge was the subject of a great deal of controversy when first encountered during the Soviet invasion of Afghanistan. The bullet is designed to be unstable in flesh; underneath its highly-pointed jacket, there is a steel core with a short lead filler and an air space in the nose. The bullet is long and thin, and aerodynamically efficient, giving good range.

Other Names: 5.45mm Soviet, .21 Genghis

Nominal Size: 5.45x39mm (some sources say 5.45x39.5mm)

Actual Size: 5.61x39.65mm

Case Type: Necked

Weight: 12.25 kg per case of 1000; Price: \$200 per case

Magazines:

Per Round: 0.01 kg	5-round box: 0.1 kg	20-round box: 0.32 kg	30-round box: 0.47 kg
40-round box: 0.62 kg	45-round box: 0.7 kg	60-round box: 0.92 kg	75-round drum: 1.15 kg
90-round drum: 1.37 kg	96-round box: 1.46 kg		

**5.56mm NATO**

Notes: This cartridge first appeared in 1957 for use in the then-experimental AR-15. The round was meant to be approximately the same size and performance as the .222 Remington, but have a higher velocity, especially at long range. When the M-16 was forced upon us forces by Robert McNamara, the US then decided to introduce the cartridge to NATO and strongly urge its adoption as standard assault rifle cartridge for the alliance. There were teething problems with the cartridge, mainly because the US Department of Defense, in an attempted cost-saving gesture, used a cheaper propellant than was specified by Remington. This helped lead to extensive fouling problems with the then-new M-16. This was quickly rectified. The original military cartridge, the M-193, was replaced by the SS-109 round



which uses a fast-twist barrel and a heavier bullet with more propellant.

Other Names: .223 Remington

Nominal Size: 5.56x45mm

Actual Size: 5.69x44.7mm

Case Type: Necked

Weight: 14.25 kg per case of 1000; Price: \$230 per case

Magazines:

Per round: 0.011 kg	2-round box: 0.06 kg	3-round box: 0.08 kg	4-round box: 0.09 kg
5-round box: 0.11 kg	6-round box: 0.13 kg	7-round box: 0.15 kg	8-round box: 0.16 kg
9-round box: 0.18 kg	10-round box: 0.2 kg	12-round box: 0.23 kg	15-round box: 0.29 kg
20-round box: 0.37 kg	22-round box: 0.41 kg	25-round box: 0.46 kg	30-round box: 0.55 kg
30-round clip: 0.34 kg	35-round box: 0.64 kg	40-round box: 0.72 kg	42-round box: 0.76 kg
50-round box or drum: 0.9 kg	50-round belt: 0.57 kg	75-round drum: 1.33 kg	90-round drum or MWG: 1.59 kg
100-round drum or C- Mag: 1.77 kg	100-round belt: 1.14 kg	150-round belt: 1.71 kg	200-round belt: 2.28 kg
250-round belt: 2.85 kg	1000-round cassette: 11.4 kg		

### **5.6x50mm Magnum**

Notes: This is a European small-caliber magnum round developed in Germany in 1968. It is basically a rimmed version of the .222 Remington Magnum with a longer case, and has more power than that round. It is designed primarily for single-shot or double rifles, though Krico does make some bolt-action rifles that chamber it. The round was designed for deer hunting, but most Americans would consider it a varmint cartridge. The 5.6x50mm Magnum is rare outside of Europe.

Other Names: 5.6x50Rmm Magnum

Nominal Size: 5.6x50mm

Actual Size: 5.69x50.04mm

Case Type: Necked

Weight: 15.88 kg per case of 1000; Price: \$250 per case

Magazines:

Per round: 0.013 kg	3-round box: 0.09 kg		
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**5.6mm RWS**

Notes: This round was developed by RWS of Germany in 1964 for deer hunting. It was designed to satisfy the minimum legal requirements (in Germany) for remaining energy at 200 meters when hunting deer, but otherwise be a lightweight cartridge. It is in the same class as the .220 Swift round, and would be classed as a varmint round in the US. This round is reasonably popular in Europe, but almost unknown in North America or South America.

Other Names: 5.6x57mm RWS, 5.6x57Rmm RWS

Nominal Size: 5.6x57mm

Actual Size: 5.69x56.9mm

Case Type: Necked

Weight: 18.13 kg per case of 1000; Price: \$290 per case

Magazines:

Per round: 0.015 kg	3-round box: 0.1 kg	4-round box: 0.12 kg	5-round box: 0.14 kg
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**5.6mm Vom Hofe**

Notes: This round was introduced in 1937 by E.A. Vom Hofe for his line of Mauser-based rifles. Some of these rifles were exported to the US between World War 1 and 2, and Stoeger Arms made rifle in this chambering starting in 1962. The round is no longer made in Europe, but the cases and bullets are manufactured in the US by Old Western Scrounger and Huntington's Sporting Supply, and the bullets are also made by Hornady. Complete cartridges are not being manufactured right now. It is considered

a long-range varmint round in North America, but a medium-game round in Europe.

Other Names: 5.6mm Vom Hofe Super Express

Nominal Size: 5.6x61mm

Actual Size: 5.77x60.71mm

Case Type: Necked

Weight: 1.99 kg per box of 100; Price: \$64 per box

Magazines:

Per round: 0.016 kg			
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**6mm Freres**

Notes: This is a very recent German development. It appears to be a necked-down 9.3x62mm cartridge, all the way down to 6mm. It is the first new 6mm civilian round to appear in Europe in a long time, and is almost unknown in the US. It is a magnum round able to deliver a decent blow at long range, outperforming the .243 Winchester or even the 6mm Remington.

Twilight 2000 Notes: This round does not exist.

Other Names: 6mm Freres Magnum, 6x62mmR Freres

Nominal Size: 6x62mm

Actual Size: 6.17x61.47mm

Case Type: Necked

Weight: 23 kg per case of 1000; Price: \$370 per case

Magazines:

Per round: 0.018 kg	5-round box: 0.18 kg		
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**6mm Lee Navy**

Notes: This round was first introduced for use in the Winchester 1895 Lee Straight Pull bolt-action rifle used by the US Navy in the late 19<sup>th</sup> century and early 20<sup>th</sup> century. It was also used in the Colt-Browning M-1895 machinegun, also used by the US Navy (in this caliber). No 6mm Lee Navy ammunition has been factory-loaded since 1935; this is not so much a fault of the round as it is the propellant, which was not suited for such an advanced-design round.

Other Names: .236 Navy

Nominal Size: 6x60mm

Actual Size: 6.2x59.69mm

Case Type: Necked

Weight: 2.25 kg per box of 100, 5.63 kg per case of 250, belted; Price: \$72 per box, \$180 per 250-round belt

Magazines:

Per round: 0.018 kg	250-round belt: 4.5 kg		
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**6mm Mauser**

Notes: Despite having the same measurements, and being almost identical to the 6mm Remington, the two rounds are not interchangeable due to differences in the shoulder angle. The 6mm Mauser is basically a 7mm Mauser round necked down to take a 6.2mm bullet. The 6mm Remington is a fine hunting cartridge, provided you do not hunt anything heavier than medium game. As a military cartridge, it is unspectacular, but adequate, unless the opponent is wearing body armor.

Other Names: 6.2x57mm RWS

Nominal Size: 6x57mm

Actual Size: 6.17x56.64mm

Case Type: Necked

Weight: 21.13 per case of 1000; Price: \$340 per case

Magazines:

Per round: 0.017 kg			
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### **6mm Norma Benchrest**

Notes: This round is designed for bench rest shooting, where the rifle is locked into an ultra-stable mount and shot to achieve as much range and accuracy as possible. However, Norma quickly realized the long-range potential for the cartridge and some companies decided to chamber some rifle for it. It has basically failed as a bench rest round, but it is more popular as a long range game round, and the round retains a great amount of speed even after 1000 meters.

Other Names: 6mm Norma BR

Nominal Size: 6x39mm

Actual Size: 6.4x39.3mm

Case Type: Necked

Weight: 1.58 kg per box of 100; Price: \$50 per box

Magazines:

Per round: 0.013 kg	3-round box: 0.08 kg	10-round box: 0.22 kg	
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### **6mm PPC**

Notes: The 6mm PPC round is basically a larger version of the .22 PPC. The case is virtually the same, with the case necked out to 6mm and shortened somewhat. Like the .22 PPC, it is based on the .220 Russian cartridge, which is a necked-down 7.62mm Kalashnikov round. The 6mm PPC round is known for its uniform acceleration and velocity, which contributes to accuracy. It is currently not a common cartridge, but interest is picking up.

Nominal Size: 6x38mm

Actual Size: 6.17x38.1mm

Case Type: Necked

Weight: 1.43 kg per box of 100; Price: \$46 per box

Magazines:

Per round: 0.011 kg	6-round box: 0.13 kg	10-round box: 0.2 kg	
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**6mm Remington**

Notes: The 6mm Remington is a cartridge that was originally introduced as the .244 Remington in 1955. The .244 Remington used bullets of 55-90 grains and was designed for a weapon with rifling of a 1 in 12 twist. However, many shooters wanted to use heavier bullets of up to 105 grains, and the 1 in 12 twist would not properly stabilize those bullets for flight. The 100-grain-range, in particular, was a problem – sometimes the bullets properly stabilize with the 1 in 12 twist, sometimes not. Therefore, Remington designed a new round for use with a heavier bullet and a 1 in 9 twist in the rifling. To avoid confusion, these rounds were re-designated 6mm Remington. This change occurred in 1963, and the original .244 Remington rounds are a rarity these days, as are the rifles that fire them.

Other Names: .244 Remington (see Notes)

Nominal Size: 6x57mm

Actual Size: 6.17x56.64mm

Case Type: Necked

Weight: 21.13 kg per case of 1000; Price: \$340 per case

Magazines:

Per round: 0.017 kg	3-round box: 0.11 kg	4-round box: 0.14 kg	
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**6.5mm Arisaka**

Notes: This round was originally developed for an 1897 Japanese rifle that was found to be unsafe and was quickly discontinued. It only later that is was chambered in the 38<sup>th</sup> Year Rifle. This rifle was seized in large numbers during and after World War 2 as war trophies and also sold on the open market as a surplus rifle. Until recently, Norma sold ammunition for the rifle, and steel-cased ammunition of this type is still sold by China. The case is short and the powder charge small, but it is an efficient round. It is still quite a good killing round, whether against antelopes, deer, elk, or humans.

Other Names: 6.5x55mm Japanese, 6.5x55mm Arisaka

Nominal Size: 6.5x55mm

Actual Size: 6.65x50.8mm

Case Type: Necked

Weight: 22 kg per case of 1000; Price: \$350 per case

Magazines:

Per round: 0.018 kg	5-round clip: 0.09 kg	30-round box: 0.85 kg	40-round box: 1.11 kg
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**6.5-08 A-Square**

Notes: The story of this round involves a bit of politics. A-Square appears to be the first to invent this round, necking down the .308 Winchester (7.62mm NATO) round to approximately 6.5mm size. They submitted their new round to the appropriate agencies, but the paperwork dragged. A few months later, Remington came up with basically the same round, calling it the .260 Remington, and SAAMI (the ammunition governing body) decided to go with the Remington claim. This has gone back and forth through the years, but it does seem that A-Square had the round first. The 6.5-08 A-Square performs best in long-range target shooting, especially since such shooting requires a lot of practice and the 6.5-08 A-Square is known for less barrel wear than most equivalent cartridges. It is also quite appealing to those who hunt up to big North American game and prefer a light rifle with lower recoil.

Other Names: .260 Remington

Nominal Size: 6.5x64mm

Actual Size: 6.71x63.5mm

Case Type: Necked

Weight: 28.13 kg per case of 1000; Price: \$450 per case

Magazines:

Per round: 0.023 kg			
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**6.5mm Carcano**

Notes: This was one of the official Italian rifle and light/medium machinegun cartridges until the end of World War 2. I was first designed in 1891 for the Italian version of the Mannlicher rifle. It is similar to the 6.5mm Mannlicher-Shoenauer in ballistic performance, but does not quite have the same punch. These

cartridges are no longer mass-produced, but can be handloaded starting with 6.5mm Mannlicher-Schoenauer cases.

Other Names: 6.5x52mm Italian, 6.5x52mm Mannlicher-Carcano

Nominal Size: 6.5x52mm

Actual Size: 6.73x52.07mm

Case Type: Necked

Weight: 2.31 kg per box of 100; Price: \$74 per box

Magazines:

Per round: 0.019 kg	5-round clip: 0.09 kg	6-round clip: 0.11 kg	50-round strip-feed box: 1.52 kg
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**6.5mm Dutch Mannlicher**

Notes: This is basically an earlier, rimmed version of the 6.5mm Mannlicher-Schoenauer cartridge, used by the Dutch and Romanians in their Mannlicher rifles. Ballistically, it is virtually identical to the 6.5mm Mannlicher-Schoenauer, and it was once loaded by many companies in the US and Europe. It was dropped as a military cartridge after World War 2, and the rifles that fired it began showing up on the surplus market. However, no major company now makes this round.

Other Names: 6.5mm Romanian Mannlicher, 6.5x53mmRmm, .256 Mannlicher

Nominal Size: 6.5x53mm

Actual Size: 6.68x53.34mm

Case Type: Necked

Weight: 2.34 kg per box of 100; Price: \$74 per box

Magazines:

Per round: 0.019 kg	5 round clip: 0.09 kg	250-round belt: 4.68 kg	
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**6.5mm Mannlicher-Schoenauer**

Notes: This round was developed for use in the 1903 Greek version of the Mannlicher rifle. It was also a popular sporting cartridge, used in several rifles in the US and Europe. In fact, until about 1940, virtually every major US ammunition manufacturer made this round. It is now made only in Europe, particularly by RWS. It is a very good cartridge for hunting, as it is unusually quiet when fired despite its velocity.

Other Names: 6.5mm Greek Mannlicher, DWM477, Roth 632

Nominal Size: 6.5x55mm

Actual Size: 6.65x53.7mm

Case Type: Necked

Weight: 23.38 kg per case of 1000; Price: \$370 per case

Magazines:

Per round: 0.019 kg			
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**6.5x54mm Mauser**

Notes: This round was introduced in 1900 and was designed to be fired from short-action Mauser carbines of the period. It only enjoyed a short period of popularity, as the better 6.5x54mm Mannlicher-Shoenauer showed up soon afterward and displaced the 6.5x54mm Mauser cartridge and the rifles that fired it. Handloading is relatively simple, which is good, for it has been a while since it has been manufactured.

Nominal Size: 6.5x54mm

Actual Size: 6.71x53.85mm

Case Type: Necked

Weight: 2.38 kg per box of 100; Price: \$76 per box

Magazines:

Per round: 0.019 kg	10-round box: 0.33 kg		
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**6.5x57mm Mauser**

Notes: This is basically a necked down version of the 7mm Mauser round, developed in 1893. It was never used as a military cartridge, but was popular with hunters, and it influenced the design of many similar rounds of other countries, such as the 6.5mm Swedish. The round is still popular in Europe, but virtually unknown in North America.

Other Names: 6.5mm RWS, 6.5x57mm RWS, 6.5x57Rmm RWS, 6.5x57Rmm Mauser

Nominal Size: 6.5x57mm

Actual Size: 6.71x56.64mm

Case Type: Necked

Weight: 25 kg per case of 1000; Price: \$400 per case

Magazines:

Per round: 0.02 kg	3-round box: 0.13 kg	4-round box: 0.17 kg	5-round box: 0.2 kg
5-round clip: 0.1 kg			

**6.5mm Remington Magnum**

Notes: This round was an innovation when it was introduced in 1966; it may indeed may be one of the first "short magnum" type cartridges. It is a .350 Remington Magnum case necked down to .264 caliber, and was designed specifically for use in Remington's Model 600 bolt-action carbine. The problem was not the 6.5mm Remington Magnum cartridge; the problem was the Remington 600 carbine, whose 18-inch barrel did not utilize the power of the round properly. For a short time, the longer-barreled Ruger 77 was also chambered for this round, but the 6.5mm Remington Magnum has not been manufactured in a long time, and no current rifles chamber the round. In a proper-length barrel, the 6.5mm Remington Magnum is adequate for hunting all North American game.

Nominal Size: 6.5x55mm

Actual Size: 6.71x55.12mm

Case Type: Necked

Weight: 3.05 kg per box of 100; Price: \$78 per box

Magazines:

Per round: 0.025 kg			
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**6.5x68mm RWS**

Notes: This round was developed by RWS of Germany in 1939. It was originally chambered in Mauser-type rifles, but later was chambered in Mannlicher-Schoenauer-type rifles. It was also chambered in Vom Hofe rifles, as well as a few American-made rifles. It is a powerful round, close in performance to many magnum loads, but the bullet is light and this limits striking power. The speed of the round is such that it is capable of downing an animal as large as a grizzly bear if shot placement is right, but for the most part, it is best used as a long-range varmint round. Until recently, it was listed for sale in Hirtenberger and RWS catalogs.

Other Names: 6.5x68Rmm RWS, 6.5x68mm Schuler, 6.5mm Vom Hofe Express

Nominal Size: 6.5x68mm

Actual Size: 6.71x67.56mm

Case Type: Necked

Weight: 29.88 kg per case of 1000; Price: \$480 per case

Magazines:

Per round: 0.024 kg	3-round box: 0.16 kg	4-round box: 0.2 kg	5-round box: 0.23 kg
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**6.5mm Sauer**

Notes: This round was introduced before the turn of the 20<sup>th</sup> century as a blackpowder round, and was later made into a smokeless powder round. It was developed primarily for single-shot rifles, being rimmed, but was also chambered in a very few bolt-action weapons. It does not have a lot of power and is regarded as being best for target shooting or small-game hunting. It is no longer being manufactured, and finding or even making a suitable case and bullet is also problematic.

Nominal Size: 6.5x48mm

Actual Size: 6.6x47.75mm

Case Type: Necked (actually tapered)

Weight: 2.04 kg per box of 100; Price: \$66 per box

Magazines:

Per round: 0.016 kg			
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**6.5mm Swedish**

Notes: This round was developed in 1894 for use in Swedish versions of Mauser rifles and carbines. It is based on the 1893 Spanish Mauser round. The Swedes at one point chambered virtually all of its rifles and medium and light machineguns for this round, and it remained in active service until just a couple of decades ago. It was also a popular hunting round in Europe and the US, and remains so. The bullet is boat-tailed and of advanced design for its period, and its stopping power is excellent, more than adequate for medium game and people.

Other Names: 6.5x55mm Swedish. 6.5mm Swedish Mauser, 6.5mm Krag-Jorgensen, 6.5mm Norwegian,

Nominal Size: 6.5x55mm

Actual Size: 6.71x54.86mm

Case Type: Necked

Weight: 24.25 kg per case of 1000; Price: \$390 per case

Magazines:

Per round: 0.019 kg	3-round box: 0.13 kg	4-round box: 0.16 kg	5-round box: 0.19 kg
5-round clip: 0.1 kg	7-round box: 0.25 kg	10-round box: 0.34 kg	50-round belt: 0.97 kg
100-round belt: 1.94 kg	250-round belt: 4.85 kg		

**7x64mm Brenneke**

Notes: This is another old round, developed Wilhelm Brenneke in Germany in 1917. It is almost unknown in the US, but is a quite common civilian cartridge in Europe, taking the place of the 7mm Remington Magnum there. The 7x64mm Brenneke does not quite match the power of the 7mm Remington Magnum cartridge, however, and the 7x64mm Brenneke is best for hunting medium game

at long range.

Other Names: 7x64mm, 7mm Brenneke

Nominal Size: 7.21x63.75mm

Case Type: Necked

Weight: 32.5 kg per case of 1000; Price: \$520

Magazines:

Per round: 0.026 kg	2-round box: 0.14 kg	3-round box: 0.17 kg	4-round box: 0.21 kg
5-round box: 0.25 kg	5-round clip: 0.13 kg	7-round box: 0.33 kg	10-round box: 0.45 kg

**7mm Mauser**

Notes: This is one of the oldest cartridges still in use, being developed as a military round by Mauser in 1892. Since the Spanish military was the first to officially adopt the round, it is also commonly known as the Spanish Mauser round. Though a few American rifles chamber the 7mm Mauser round, the cartridge is much more common in European rifles. It proved to be a mediocre military round, but it has proved to be an excellent round for the hunting of small to medium game. It has had some success against bigger animals, but it considered inadequate for that purpose by most hunters. It was once discontinued by almost all major ammunition manufacturers, but the round came back after World War 2 due to the influx of surplus military rifles into the civilian market.

Other Names: 7x57mm, 7mm Spanish Mauser, 7mm M-1893

Nominal Size: 7x57mm

Actual Size: 7.21x56.9mm

Case Type: Necked

Weight: 29 kg per case of 1000; Price: \$460

Magazines:

Per round: 0.023 kg	3-round box: 0.16 kg	4-round box: 0.19 kg	5-round box: 0.23 kg

5-round clip: 0.12 kg	10-round box: 0.4 kg	10-round clip: 0.23 kg	20-round box: 0.76 kg
25-round box: 0.94 kg	30-round box: 1.11 kg	30-round strip: 0.9 kg	40-round box: 1.47 kg
249-round "belt": 6.35 kg			

**7mm-08 Remington**

Notes: This round was introduced in 1980; it is a 7.62mm NATO (.308 Winchester) case necked down to accept a 7mm bullet. The bullet is a direct copy of the 7mm/308, which was a wildcat round popular for many years before 1980. The more-pointed bullet design allows for more downrange velocity than the 7.62mm NATO round, and, in many cases, greater range.

Nominal Size: 7x51.69mm

Actual Size: 7.21x51.82mm

Case Type: Necked

Weight: 26.5 kg per case of 1000; Price: \$420 per case

Magazines:

Per round: 0.021 kg	4-round box: 0.17 kg	5-round box: 0.21 kg	10-round box: 0.37 kg
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**7mm Remington Magnum**

Notes: This cartridge was introduced in 1962 for the Remington 700 rifle. Several other rifle manufacturers picked it up also. The 7mm Remington Magnum has its roots in wildcat experimenting, especially with the .275 H&H Magnum cartridge. The 7mm Remington Magnum is considered a good big-game cartridge.

Nominal Size: 7x63mm

Actual Size: 7.21x63.5mm

Case Type: Necked

Weight: 32.38 kg per case of 1000; Price: \$520 per case

Magazines:

Per round: 0.026 kg	3-round box: 0.17 kg	4-round box: 0.21 kg	5-round box: 0.25 kg
6-round box: 0.29 kg	7-round box: 0.33 kg	10-round box: 0.45 kg	

**7mm STW**

Notes: This round was originally designed as a wildcat round by Layne Simpson of *Shooting Times* magazine. It is based on an 8mm Remington Magnum case, necked down, and allows for rechambering of existing 7mm Remington Magnum rifles to fire it. It was also designed to fit inside existing 7mm Remington Magnum internal magazines of Remington 700 rifles. It was adopted as a standard cartridge in 1996, and factory loadings commenced. The 7mm STW produces impressive velocities and power, but barrels firing 7mm STW can be quite limited in life.

Other Names: 7mm Shooting Times Westerner

Nominal Size: 7x72mm

Actual Size: 7.21x72.39mm

Case Type: Necked

Weight: 3.7 kg per box of 100; Price: \$118 per box

Magazines:

Per round: 0.03 kg			
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**7mm TCU**

Necked: This cartridge was developed by Wes Ugalde for Thompson/Center for use in the single-shot Contender pistol. It is basically a .223 Remington (5.56mm NATO) case necked up to .284-caliber. It is popular for target shooting, but is also a creditable varmint round, and in the right circumstances and with a good shot can bring down a deer. It is not recommended that military cases be used for handloading this round; only civilian .223 cases should be used.

Other Names: 7mm T/CU, 7mmx223

Nominal Size: 7x44mm

Actual Size: 7.21x44.2mm

Weight: 2.25 kg per box of 100; Price: \$72 per box

Magazines:

Per round: 0.018 kg			
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**7mm UltraMag**

Notes: Though similar in size to the 7mm STW (and identical in performance for game purposes), the 7mm UltraMag is a bit more hot-loaded than the 7mm STW and produces about 12% more power. It was introduced in 2000. The 7mm UltraMag is known for its flat trajectory and power at even long range. The 7mm UltraMag is basically a necked-down .300 Remington Ultra Magnum.

Twilight 2000 Notes: This round does not exist.

Other Names: 7mm Ultra Magnum, 7mm Remington Ultra Magnum

Nominal Size: 7x72mm

Actual Size: 7.21x72.39mm

Case Type: Necked

Weight: 3.7 kg per box of 100; Price \$118 per box

Magazines:

Per round: 0.03 kg			
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**7x66mm Vom Hofe**

Notes: This round was designed shortly after World War 2 for Swedish Vom Hofe rifles. It was once loaded by DWM of Germany, but is not now being commercially manufactured. Though the bullet is small, the velocity is extremely fast, and only its light weight prevents it from penetrating better. Nonetheless, the 7x66mm Vom Hofe is an excellent hunting cartridge for all but large game.

Other Names: 7x66mm Vom Hofe Super Express, 7mm Super Express, 7.6x66mm Vom Hofe

Nominal Size: 7x66mm



Actual Size: 7.21x65.53mm

Case Type: Necked

Weight: 3.35 kg per box of 100; Price: \$108 per box

Magazines:

Per round: 0.027 kg			
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**7-30 Waters**

Notes: This is a comparatively new cartridge, developed in 1984. It was designed for high-velocity, short-range lever-action rifles and carbines, and has a rounded nose to facilitate loading and chambering in such rifles. The rounded nose does spoil ballistics somewhat, though. It is also known for its light recoil.

Nominal Size: 7x52mm

Actual Size: 7.21x51.82mm

Case Type: Necked

Weight: 2.65 kg per box of 100; Price \$85 per box

Magazines:

Per round: 0.021 kg			
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**7mm Weatherby Magnum**

Notes: This round is based on the .300 H&H Magnum (like most Weatherby designs), actually being a .270 Weatherby Magnum necked up. Unlike most Weatherby cartridges, there is a good selection of factory loads and it is more common than most Weatherby ammunition. Like most high-velocity cartridges, the 7mm Weatherby Magnum can be hard on the barrel, and does not perform well in short barrels.

Nominal Size: 7x65mm

Actual Size: 7.21x64.77mm

Case Type: Necked

Weight: 3.3 kg per box of 100; Price: \$106 per box

Magazines:

Per round: 0.026 kg			
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**7mm Winchester Short Magnum**

Notes: This was introduced in 2001 to give those who prefer the 7mm cartridge Magnum performance in a short action rifle. It is basically a .300 Winchester Short Magnum case, necked down. It has ballistics basically similar to the 7mm Remington Magnum, but in a shorter cartridge.

Twilight 2000 Notes: This weapon does not exist.

Other Names: 7mm WSM

Nominal Size: 7x53mm

Actual Size: 7.21x53.34mm

Case Type: Necked

Weight: 34.06 kg per case of 1000; Price: \$550 per case

Magazines:

Per round: 0.027 kg	3-round box: 0.16 kg		
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**7.35mm Carcano**

Notes: This round was designed to replace the 6.5mm Carcano round, which had been found to be inadequate in World War 1. Unfortunately, the round was developed during a time before World War 2 when Italy was involved in various military adventures and converting all the Carcano rifles to use this round, as well as trying to supply the new round to troops, became a logistical nightmare, and it was quickly withdrawn from service. The Finns did use some of the rifles converted to the 7.35mm Carcano round against the Russians, and results were good. The rifles and ammunition eventually showed up as war surplus weapons and were sold on the civilian market. It's a decent hunting and man-killing round,

but it hasn't been manufactured in a while, and generally handloads are the best source.

Other Names: 7.35mm Italian Carcano

Nominal Size: 7.35x51mm

Actual Size: 7.57x51.05mm

Case Type: Necked

Weight: 2.88 kg per box of 100; Price: \$92 per box

Magazines:

Per round: 0.023 kg	6-round clip: 0.14 kg		
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**.17 Remington**

Notes: Introduced in 1971 for Remington's Model 700 series, the .17 Remington is one of the smallest centerfire rounds produced in commercial lots. The .17 Remington is basically a 5.56mm NATO (.223 Remington) round necked down to accept the smaller bullet; the shoulder is also moved back slightly. It is basically a varmint round, and not very useful for larger game. It does, however, offer a very flat trajectory as well as minimal ricocheting and recoil. The high velocity and large amount of propellant (relative to the bullet) tend to lead to rapid barrel wear and fouling.

Nominal Size: 4.4x46mm

Actual Size: 4.37x45.47mm

Case Type: Necked

Weight: 8.5 kg per case of 1000; Price \$140 per case

Magazines:

Per round: 0.007 kg			
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**.22 Hornet**

Notes: This round was based on the black powder .22 Winchester Centerfire round. It is a high-velocity round designed for varmint and small game shooting. The Hornet tends to be the subject of a lot of

"wildcatting" (custom loadings for conventional rounds). Due to the amount of powder that is in a standard loading, the Hornet does not do well with heavy bullets.

Other Names: 5.6x35mmR, 5.6x36mmR, .22 M-65

Nominal Size: 5.6x36mm

Actual Size: 5.66x35.56mm

Case Type: Necked

Weight: 11.13 kg per case of 1000; Price \$180 per case

Magazines:

Per round: 0.009 kg	3-round box: 0.06 kg	4-round box: 0.07 kg	5-round box: 0.09 kg
10-round box: 0.16 kg			

**.22 PPC**

Notes: This round was developed in 1974 as a wildcat benchrest round based on the .220 Russian round (itself a necked-down version of the 7.62mm Kalashnikov round). It remained a wildcat round for almost 15 years, but in 1987 Sako developed a rifle and commercial loads, and in 1993, Norma also developed manufactured loads in .22 PPC. Ruger also chambered versions of its M-77 series for .22 PPC in 1993. The combination of a large case and small bullet produce a high-velocity round with good range.

Nominal Size: 5.7x39mm

Actual Size: 5.69x38.61mm

Case Type: Necked

Weight: 12.25 kg per case of 1000; Price: \$200 per case

Magazines:

Per round: 0.01 kg	5-round box: 0.1 kg	6-round box: 0.11 kg	
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**.22-250 Remington**

Notes: This cartridge was developed in 1965 to be one of the calibers for the Remington 700 rifle. The .22-250 actually began life as a wildcat round, based on the .250 Savage, but it became so popular so fast that it became a de facto standard rifle round. It is a well-balanced round that has a reputation for great accuracy.

Other Names: .22 Varminter, .22 Wotkyns Original Swift

Nominal Size: 5.7x49mm

Actual Size: 5.69x48.51mm

Case Type: Necked

Weight: 15.38 kg per case of 1000; Price \$250 per case

Magazines:

Per round: 0.01 kg	3-round box: 0.08 kg	4-round box: 0.1 kg	5-round box: 0.12 kg
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**.22 Remington Auto**

Notes: Virtually identical to the .22 Winchester Auto, this round was first designed for the Remington Model 16 semiautomatic rifle. It has been described by ammunition expert Frank Barnes as "an example of senseless jealous rivalry;" it was designed for the same purpose as the .22 Winchester Auto and for the same type of weapon, and was used only in the Model 16. The round was discontinued in 1928, and is very hard to find these days.

Other Names: .22 Remington Automatic

Nominal Size: 5.6x17mm

Actual Size: 5.66x16.84mm

Case Type: Straight Rimfire

Weight: 4.25 kg per box of 100; Price: \$14 per box

Magazines:

Per round: 0.0034 kg			
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**.22 Remington Jet**

Notes: This round was developed from wildcat rounds such as the Harvey .22 Kay-Chuk and others that were based on the .22 Hornet. It was developed for revolvers, but the only revolver ever chambered for it was the Smith & Wesson 53. Occasionally, rifles are found chambered for the .22 Remington Jet (normally lever-action or break-open rifles). The .22 Remington Jet is designed for hunting and to provide a flat trajectory for at least 100 meters. This round is no longer commercially manufactured, but can be handloaded using .357 Magnum rounds as a starting point.

Other Names: .22 Remington Jet Magnum, .22 Centerfire Magnum, .22 Jet

Nominal Size: 5.6x32mm

Actual Size: 5.66x32.51mm

Case Type: Necked

Weight: 10.25 kg per box of 100; Price: \$32 per box

Magazines:

Per round: 0.008 kg			
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**.22 Savage High-Power**

Notes: This round was designed by Charles Newton in 1912 and at first called the .22 Imp. Only one rifle by Savage was chambered in the US for the round, though it had somewhat more success in England, as well in various custom-made rifles, especially shotgun-rifle combinations. The .22 Savage High Power is basically a necked-down .25-35 case. No rifle has been produced in North America to chamber this round since 1930, though the occasional European rifle can still be found for it, and Norma still produces .22 Savage High-Power ammunition. Complaints about the round include low accuracy against small game and poor penetration against larger game, but this may be due to the poor quality of ammunition in the early part of the 20<sup>th</sup> century. The .22 Savage High-Power round has been rendered obsolete by rounds such as the .222 Remington and .225 Winchester.

Other Names: .22 High-Power, .22 Imp, 5.6x52Rmm

Nominal Size: 5.6x52mm

Actual Size: 5.79x52.07mm

Case Type: Necked

Weight: 1.71 kg per box of 100; Price \$54 per box

Magazines:

Per round: 0.014 kg			
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**.22 Winchester Auto**

Notes: This round was used only in the Winchester M-1903 semiautomatic rifle. It had a long life, but was finally dropped from production in the 1970s, even though it was pronounced obsolete in 1932. It was designed at a time when blackpowder rounds were still somewhat common, and meant to be able to be used with nothing but the then-new smokeless powder. It is roughly the same in power with the .22 Long Rifle, but never really offered more than the fact that it used exclusively smokeless powder. It is now almost impossible to find, and the rifle that fires it is a collector's item.

Other Names: .22 Winchester Automatic, .22 Winchester Auto Smokeless

Nominal Size: 5.6x17mm

Actual Size: 5.64x16.89mm

Case Type: Straight Rimfire

Weight: 4.25 kg per box of 100; Price: \$14 per box

Magazines:

Per round: 0.0034 kg			
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**.25 Remington**

Notes: This round is basically a rimless version of the .25-35 Remington cartridge, designed for use in semiautomatic rifles, but later used in all types of rifles except single-shot and double rifles. It was introduced in 1906, but no major company has produced it since 1950, and no rifles have been chambered for it since 1942. The .25 Remington is barely adequate for medium game, but is a decent varmint cartridge. It does suffer from a range problem due to its round-nosed bullet.

Other Names: .25-30 Remington

Nominal Size: 6.5x52mm

Actual Size: 6.53x51.82mm

Case Type: Necked

Weight: 2.18 kg per box of 100; Price: \$70 per box

Magazines:

Per round: 0.017 kg	5-round box: 0.17 kg		
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**.25-20 Winchester**

Notes: This is a very old cartridge, developed for the original Winchester M-1892 lever-action rifle. It is basically a necked-down .32-20 Winchester round. It achieved quick popularity. It was once the most popular of varmint and small-game cartridges, until introduction of rounds like the .22 Hornet and .218 Bee. With the growing interest in the Old West and Cowboy Shooting, the .25-20 is again growing in popularity. The flat-nosed bullet, though it feeds well in lever-action rifles, has serious range limitations due to poor aerodynamics, and bullet expansion can ruin the meat of small game.

Other Names: .25-20 Winchester Centerfire

Nominal Size: 6.35x33.78mm

Actual Size: 6.53x33.78mm

Case Type: Necked

Weight: 14.13 kg per case of 1000; Price: \$230 per case

Magazines:

Per round: 0.011 kg	3-round box: 0.07 kg	4-round box: 0.09 kg	10-round box: 0.2 kg
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**.26 BSA**

Notes: The Birmingham Small Arms company introduced this proprietary round for its bolt-action rifles based on the 1914 Enfield military rifle in 1921. It was a relatively advanced design for its time, putting a relatively small bullet into a large case. The round has very high velocity, but the light bullet tends to overpenetrate and therefore is not really suitable for hunting. Today, the round is considered obsolete



and though the cases are relatively easy for handloaders to make from existing cases, the bullets usually have to be custom cast.

Other Names: .26 Rimless Belted Nitro Express

Nominal Size: 6.6x60mm

Actual Size: 6.78x66.04mm

Case Type: Necked

Weight: 2.98 kg per box of 100; Price: \$96 per box

Magazines:

Per round: 0.024 kg	5-round clip: 0.12 kg		
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**.218 Bee**

Notes: Originally designed for use in the Winchester Model 65 lever-action rifle, the .218 Bee was at first hailed for its superior striking power and range to the .22 Hornet. The problem with the round is that striking power, however; when used against its intended targets (small game), it can ruin much of the meat upon a hit, especially when non-jacketed rounds are used. It can also be inaccurate, especially when handloaded or used with non-manufactured quality rounds: due to the small size of the bullet and heavy propellant load, small imperfections can have drastic results. The .218 Bee has, for the most part, been replaced by superior cartridges like the .223 Remington (5.56mm NATO) and .22-250 Remington.

Nominal Size: 5.7x35mm

Actual Size: 5.69x34.29mm

Case Type: Necked

Weight: 10.88 kg per case of 1000; Price: \$170 per case

Magazines:

Per round: 0.009 kg	3-round box: 0.06 kg	5-round box: 0.08 kg	
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**.219 Zipper**

Notes: This round was introduced in 1937, but never gained any real popularity, and Winchester and Remington, the last two companies making the .219 Zipper, finally dropped manufacture of the round in 1962. The .219 Zipper is a rimmed cartridge designed primarily for lever-action rifles, but it is not an accurate round without the use of a telescopic sight, and it loses velocity fast due to the round-nosed bullet. There is some controversy as to whether Winchester ever really put in the work necessary to make the .219 Zipper a truly effective round, but this is moot now.

Nominal Size: 5.7x49mm

Actual Size: 5.69x49.28mm

Case Type: Necked

Weight: 1.56 kg per box of 100; Price: \$50 per box

Magazines:

Per round: 0.013 kg			
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**.220 Swift**

Notes: This cartridge was introduced in 1935 as a new chambering for the Winchester Model 54 rifle. Winchester no longer makes rifles in this chambering, but several others do, including Savage, and Ruger. The .220 Swift began as a .250-3000 Savage round necked down to .22 caliber, but final production was based on the 6mm Lee Navy cartridge. The .220 Swift round is one of the highest velocity rounds in the world, capable of as much as 1340 meters per second depending upon the bullet and propellant used. During much the .220 Swift's early history, this high velocity tended to wear out barrels fast, but since World War 2, barrels have been getting better, and this is not much of a problem any more. The wound track of a .220 Swift can be erratic, however, and many US states will not allow the .220 Swift to be used on big game on the grounds of cruelty.

Nominal Size: 5.7x56mm

Actual Size: 5.69x55.88mm

Case Type: Necked

Weight: 1.78 kg per box of 100; Price: \$56 per box

Magazines:

Per round: 0.014 kg			
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### **.221 Fireball**

Notes: This round was designed specifically for the Remington XP-100 target pistol. It is still largely used by single-shot target pistols, but was briefly considered for the abortive "Arm Gun" submachinegun. It is basically a shortened version of the .222 Remington, and is designed to expand quickly upon impact with flesh.

Other Names: .221 Remington Fireball

Nominal Size: 5.56x31mm

Actual Size: 5.69x35.56mm

Case Type: Necked

Weight: 11.25 kg per case of 1000; Price \$180 per case

Magazines:

Per round: 0.009 kg	20-round box: 0.3 kg	30-round box: 0.43 kg	
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### **.222 Remington**

Notes: The .222 Remington was originally developed in 1950 for the Remington 722 bolt-action rifle. It quickly became popular with target shooters and varmint hunters, though by the early 1990s it had lost most of that popularity to the .223 Remington (civilian version of the 5.56mm NATO) round. It is basically a scaled-down .30-06 Springfield round. In many countries where civilian use of military rounds is prohibited, the .222 Remington round often stands in for the 5.56mm NATO round in civilian rifles and civilianized military rifles.

Nominal Size: 5.56x43mm

Actual Size: 5.69x43.18mm

Case Type: Necked

Weight: 13.75 kg per case of 1000; Price: \$220 per case

Magazines:

Per round: 0.011 kg	3-round box: 0.07 kg	4-round box: 0.09 kg	5-round box: 0.11 kg
6-round box: 0.12 kg	10-round box: 0.19 kg	25-round box: 0.44 kg	

**.222 Remington Magnum**

Notes: Now considered obsolete, the .222 Remington Magnum began as an experimental military cartridge in the mid-1950s. The US military found it unsatisfactory, but Remington marketed it for a short time as a commercial cartridge for the Model 722 and Model 700 rifles. This round also did not find favor with the shooting public, and at present, no major company makes the .222 Remington cartridge. (Most .222 Remington Magnum rounds found today are either very old or handloaded.) It should be noted that a 5.56mm NATO round can be chambered and fired in a rifle designed for .222 Remington Magnum, but the gap in headspace can result in a chamber explosion.

Nominal Size: 5.7x47mm

Actual Size: 5.69x46.99mm

Case Type: Necked

Weight: 1.49 kg per box of 100; Price: \$48 per box

Magazines:

Per round: 0.012 kg	3-round box: 0.08 kg	6-round box: 0.13 kg	
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**.223 Winchester Super Short Magnum**

Notes: This cartridge was introduced in 2002 as a solution to the problem of putting Magnum power into a short-action rifle. It is a short cartridge, but it is also a very fat one; this allows the use of Magnum-levels of propellant, but keeps the round short. This produces a round with a lot of power for the size of its bullet.

Twilight 2000 Notes: This round does not exist.

Other Names: .223 WSSM

Nominal Size: 5.7x42mm

Actual Size: 5.69x42.42mm

Case Type: Necked

Weight: 20.25 kg per case of 1000; Price: \$330 per case

Magazines:

Per round: 0.016 kg	10-round box: 0.24 kg		
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### **.224 Weatherby Magnum**

Notes: This round was the product of a long research process, beginning with the .220 Weatherby Rocket wildcat round, progressing to the .224 Varmintmaster, and ending up with the .224 Weatherby Magnum. The main delay in introduction of the round was the lack of a suitable rifle to fire the round. It eventually ended up in a reduced-action Weatherby Mark V, but this rifle is no longer built, and the .224 Weatherby Magnum basically died with it. The .224 Weatherby Magnum is a varmint cartridge with excellent range and a case that stands up to repeated reloading, but the Weatherby Mark V was an expensive rifle and one could buy rifles chambered for rounds with comparable performance and costing much less.

Nominal Size: 5.7x49mm

Actual Size: 5.69x48.77mm

Case Type: Necked

Weight: 1.55 kg per box of 100; Price: \$50 per box

Magazines:

Per round: 0.012 kg			
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### **.225 Winchester**

Notes: The .225 Winchester was introduced in 1964. Versions of the Winchester Model 70 were chambered to fire the .225 Winchester (replacing the .220 Swift in the Winchester Model 70), but the .225 Winchester simply did not gain any real popularity in a time where the .22-250 Remington round produced nearly identical performance and was already firmly established. Only Winchester still makes this round in small amounts, but the rifle it was designed for was only on the market for 8 years. Handloaders can easily make this round by necking down a .30-30 Winchester case to the dimensions of the .225 Winchester bullet and shortening it somewhat.

Nominal Size: 5.7x49mm

Actual Size: 5.69x49.02mm

Case Type: Necked

Weight: 1.56 kg per box of 100; Price: \$50 per box

Magazines:

Per round: 0.013 kg	4-round box: 0.1 kg		
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**.240 Weatherby Magnum**

Notes: This cartridge was added to Weatherby’s ammunition line to provide a 6mm-range cartridge and round out the line. It uses a belted case, a rarity these days, and is fired only from the Weatherby Mark V rifle or custom rifles. It is a fast round with excellent striking power. The ammunition, however, is difficult to find and is hard to handload.

Nominal Size: 6x64mm

Actual Size: 6.17x63.5mm

Case Type: Necked

Weight: 2.38 kg per box of 100; Price: \$76 per box

Magazines:

Per round: 0.019 kg			
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**.243 Winchester**

Notes: This round was developed in 1955 by Winchester for their M-70 and M-88 rifles. The popularity of the new round quickly took off and a large number of companies began chambering rifles for it, and it is now chambered for more rifles than any other with the exception of the .30-06 Springfield round. The round can be used for anything from varmints to medium game such as deer and antelopes. The .243 Winchester does, however, have a reputation for erratic performance, especially when handloaded.

Nominal Size: 6.17x52mm

Actual Size: 6.17x52.07mm

Case Type: Necked

Weight: 19.5 kg per case of 1000; Price: \$310 per case

Magazines:

Per round: 0.016 kg	3-round box: 0.1 kg	4-round box: 0.13 kg	5-round box: 0.15 kg
6-round box: 0.18 kg	10-round box: 0.27 kg	20-round box: 0.51 kg	

**.243 Winchester Super Short Magnum**

Notes: Like the .223 Winchester Super Short Magnum, this round was designed to solve the problem of putting Magnum loads into rifles with short actions. It was introduced in 2002, and brings a new level of accuracy and range to the .243 Winchester round. It was designed for long-range varmint hunting, but has enough power to bring down much larger game.

Twilight 2000 Notes: This round does not exist.

Other Names: .243 WSSM

Nominal Size: 6x42mm

Actual Size: 6.17x42.42mm

Case Type: Necked

Weight: 23.82 kg per case of 1000; Price: \$375 per case

Magazines:

Per round: 0.019 kg	10-round box: 0.28 kg		
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**.250 Savage**

Notes: This was designed as a high-velocity round for the Model 99 lever-action rifle. It was introduced in 1915, and at that time, the 3000 feet per second velocity was truly phenomenal. The cartridge is known for its flat trajectory, outstanding accuracy, and stopping power. Though it has since been largely

replaced by newer rounds, many maintain that the .250 Savage is superior to most of the rounds in its size that came later.

Other Names: .250-3000 Savage

Nominal Size: 6.35x49mm

Actual Size: 6.53x48.51mm

Case Type: Necked\_

Weight: 20.25 kg per case of 1000; Price: \$320 per case

Magazines:

Per round: 0.016 kg	4-round box: 0.13 kg	5-round box: 0.16 kg	
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**.256 Newton**

Notes: This round was designed by Charles Newton for use in his bolt-action rifle line. It was introduced in 1913, manufactured by Western Cartridge for Newton, but the cartridge failed when his company did, and by 1938, the .256 Newton was no longer being manufactured. The .256 Newton is based on a necked-down .30-06 case, and can be easily handloaded, if you can find a rifle to shoot it out of. Today, the .256 Newton is largely a wildcat round, with a few custom rifles chambered for it. It is adequate for small and medium game, but cannot match most modern cartridges in the same size range.

Other Names: 6.5mm Newton

Nominal Size: 6.5x62mm

Actual Size: 6.71x62mm

Case Type: Necked

Weight: 2.74 kg per box of 100; Price: \$88 per box

Magazines:

Per round: 0.022 kg	5-round clip: 0.11 kg		
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**.256 Winchester Magnum**



Notes: Though this was announced as a handgun cartridge, it was used only in one handgun, a single-shot Ruger Hawkeye in 1961. It was thereafter used as a rifle cartridge, but not many weapons actually use the round. The .256 Winchester Magnum is actually a necked-down .357 Magnum round. It is far more effective than most rounds of its size, but it was nonetheless discontinued in the early 1990s by Winchester.

Nominal Size: 6.5x33mm

Actual Size: 6.53x33.02mm

Case Type: Necked

Weight: 13.88 kg per case of 1000; Price: \$220 per case

Magazines:

Per round: 0.011 kg	7-round box: 0.14 kg	15-round box: 0.29 kg	30-round box: 0.53 kg
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**.257 Roberts**

Notes: This cartridge was introduced by Remington in its Model 30 bolt-action rifle. It was quickly picked up by Winchester and several other companies for their rifles. Though as of late most US manufacturers have ceased making rifles for it, Ruger continues to chamber the Model 77 for the .257 Roberts. It is basically a necked-down 7mm Mauser cartridge. The .257 Roberts is praised for being useful for anything from varminting to medium game hunting; it has even been known to take down the occasional bear. Most manufacturers tend to under-load the .257 Roberts, however, and this limits its velocity at longer ranges.

Nominal Size: 6.5x57mm

Actual Size: 6.53x56.64mm

Case Type: Necked

Weight: 23.75 kg per case of 1000; Price \$380 per case

Magazines:

Per round: 0.019 kg	4-round box: 0.16 kg	5-round box: 0.19 kg	
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**.257 Weatherby Magnum**

Notes: This round was one of the first designed by Roy Weatherby, designed in 1944 (a year before he went into the firearms business). He began manufacturing the round commercially in 1948. It is especially useful for long-range varmint hunting, but also has the power to bring down most North American big game, up to animals the size of an antelope or black bear. However, successful hunting of larger animals with the .257 Weatherby Magnum generally requires heavier bullets, which can lead to premature barrel wear. The .257 Weatherby Magnum also loses velocity quickly when fired from barrels shorter than 26 inches (660mm).

Nominal Size: 6.5x65mm

Actual Size: 6.53x64.77mm

Case Type: Necked

Weight: 2.71 kg per box of 100; Price: \$86 per box

Magazines:

Per round: 0.022 kg	3-round box: 0.15 kg		
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**.264 Winchester Magnum**

Notes: Introduced by Winchester in 1958, the .264 Winchester Magnum is basically a smaller version of the .458 Winchester Magnum round. It was the first North American 6.5mm round manufactured since 1913. The .264 Winchester Magnum is not a common chambering, however, and is only found in a few rifles, such as the Winchester M-70, Remington 700, and Ruger M-77. The .264 Winchester Magnum is a fast, powerful round, but the rifling twist rate recommended by Winchester is not fast enough to stabilize bullets of more than 140 grains weight, so most rounds of this chambering are lighter. The .264 Winchester can also be very hard on a barrel, like most high-velocity rounds, and does not work well in shorter barrels.

Other Names: 6.5mm Winchester Magnum

Nominal Size: 6.5x64mm

Actual Size: 6.71x64.01mm

Case Type: Necked

Weight: 28.25 kg per case of 1000; Price: \$450 per case

Magazines:

Per round: 0.023 kg			
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**.270 Weatherby Magnum**

Notes: Though many think that the .270 Weatherby Magnum was developed from the .300 Weatherby Magnum, it was actually the .270 that came first, in 1943. It is based on a necked-down .300 H&H Magnum case. The .270 Weatherby Magnum simply did not become well-known until after the .300 Weatherby Magnum. The .270 Weatherby Magnum is useful against both North American and African big game. However, like all high-velocity cartridges, it can be hard on the barrel, and time should be given for barrel cooling after several shots.

Nominal Size: 7x65mm

Actual Size: 7.04x64.77mm

Case Type: Necked

Weight: 3.15 kg per box of 100; Price: \$100 per box

Magazines:

Per round: 0.025 kg	5-round box: 0.025 kg		
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**.270 Winchester**

Notes: Introduced in 1925 for the Model 54 bolt-action rifle, the .270 Winchester quickly became wildly popular. The .270 Winchester is basically a .30-06 Springfield case necked down to a smaller bullet. It remains one of the most popular civilian rounds in the world. The .270 Winchester is known for a combination of range and stopping power, and can be even be used for varmint hunting when loaded with a light bullet. One criticism of the round is that the gunshots produced are very loud, scaring game for follow-up shots or shots at second targets.

Nominal Size: 6.9x64mm

Actual Size: 7.04x64.52mm

Case Type: Necked

Weight: 31.38 kg per case of 1000; Price: \$500 per case

Magazines:

Per round: 0.025 kg	3-round box: 0.17 kg	4-round box: 0.21 kg	4-round clip: 0.1 kg
5-round box: 0.25 kg	7-round box: 0.32 kg		

**.270 Winchester Short Magnum**

Notes: This round was introduced in 2001 to provide Magnum performance in a short action rifle. It is basically a smaller version of the .300 Winchester Short Magnum (in fact, it is a .300 Winchester Short Magnum necked down to .277 caliber). It is a short, fat case containing Magnum levels of propellant, with excellent striking power and range.

Twilight 2000 Notes: This round does not exist.

Other Names: .270 WSM

Nominal Size: 6.9x53mm

Actual Size: 7.04x53.34mm

Case Type: Necked

Weight: 32.5 kg per case of 1000; Price: \$525 per case

Magazines:

Per round: 0.026 kg	3-round box: 0.16 kg		
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**.280 British**

Notes: This was an experimental round designed for the post-World War 2 British service rifle competition. Work began on the round shortly after the end of World War 2 in 1945, and continued until 1951. The .280 British round is a very good round, with excellent range and ballistic properties and good damaging and armor-penetrating properties. The leading rifle developed for it, the EM-2, was also a sound design. However, the round and rifles developed for it (there was even a version of the FAL experimentally chambered for the .280 British), were eventually rejected due to political pressure from the United states, who wanted a common round for all NATO rifles and light machineguns, and decided that the 7.62x51mm round was the only acceptable round for the purpose (at the time). This round is virtually unknown these days, as are the weapons that fire it.

Nominal Size: 7x43mm

Actual Size: 7.19x43.43mm

Case Type: Necked

Weight: 2.2 kg per box of 100; Price: \$70 per box

Magazines:

Per round: 0.018 kg	20-round box: 0.58 kg		
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**.280 Remington**

Notes: This round was introduced in 1957. Sales of the round and the rifles chambered for it did not take off as well as expected, and in 1979 Remington changed the name to something it hoped was more catchy – 7mm Express Remington. This name change only confused consumers, and Remington went back to the .280 Remington name in 1980. The .280 Remington is a necked down .30-06 with some other changes in the brass, very similar to the wildcat 7mm-06 round. The .280 Remington is a bit more powerful than the .270 Winchester, and a little more versatile, but not as popular.

Other Names: 7mm Express Remington

Nominal Size: 7x65mm

Actual Size: 7.21x64.52mm

Case Type: Necked

Weight: 32.88 kg per case of 1000; Price: \$530

Magazines:

Per round: 0.026 kg	4-round box: 0.22 kg	5-round box: 0.26 kg	10-round box: 0.46 kg
20-round box: 0.86 kg			

**.284 Winchester**

Notes: This round was introduced in 1963 by Winchester for its Model 88 and Model 100 rifles, both of

which were discontinued long ago. For a short time, Savage and Browning also offered rifles in this chambering, but they too have been discontinued. No major ammunition manufacturers now make the .284 Winchester round. The .284 Winchester basically duplicates the ballistics of the .280 Remington round in a shorter cartridge, and has decent range and striking power.

Nominal Size: 7x55mm

Actual Size: 7.21x55.12mm

Case Type: Necked

Weight: 2.81 kg per box of 100; Price: \$90 per case

Magazines:

Per round: 0.023 kg	3-round box: 0.15 kg	4-round box: 0.19 kg	
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The magazines presented here are based on *light alloy* magazines. For steel magazines, increase weight by 2%; for plastic or synthetic magazines; decrease weight by 8 percent.

**7.5mm MAS**

Notes: This cartridge was adopted by the French in 1929 after the shortcomings of the 8mm Lebel round became obvious to even the most thick-headed French military officials. It was originally designed for use in light machineguns and semiautomatic rifles, but was eventually type-standardized in French service for use in sniper rifles and bolt-action rifles. Several civilian rifles are also chambered for it. Most 7.5mm MAS ammunition is military surplus; civilian loads were never manufactured in great quantity. The 7.5mm MAS round is basically in the same class as the 7.62mm NATO round and offers similar performance.

Other Names: 7.5x54mm French MAS, 7.5mm French, 7.5mm Mle 1929

Nominal Size: 7.5x54mm

Actual Size: 7.82x53.59mm

Case Type: Necked

Weight: 32.13 kg per case of 1000; Price \$510 per case

Magazines:

Per round: 0.026 kg	4-round box: 0.21 kg	5-round clip: 0.13 kg	25-round box: 1.04 kg
100-round belt: 2.57 kg	250-round belt: 6.43 kg		

**7.5mm Swiss**

Notes: This is a very old cartridge, one of the oldest still in military use. The original 7.5mm Swiss round was designed in 1889 to use semi-smokeless powder, but was later modified to use increasingly modern propellants. The round is still being manufactured in Switzerland as well as by Norma, and has been in the past manufactured in several places in the world as diverse as the US and Japan. Ballistically, it performs similarly to the 7.62mm NATO round, and is a decent military round as well as civilian hunting round.

Other Names: 7.5mm Swiss Service, 7.5mm Schmidt-Rubin, 7.5mm M-1911

Nominal Size: 7.5x55mm

Actual Size: 7.81x55.4mm

Case Type: Necked

Weight: 33.13 kg per case of 1000; Price: \$530 per case

Magazines:

Per round: 0.027 kg	3-round box: 0.18 kg	4-round box: 0.22 kg	5-round box: 0.26 kg
6-round box: 0.3 kg	10-round box: 0.46 kg	12-round box: 0.54 kg	20-round box: 0.87 kg
24-round box: 1.03 kg	30-round box: 1.27 kg	50-round belt: 1.33 kg	250-round belt: 6.63 kg

### **7.62mm Kalashnikov**

Notes: This is perhaps the most ubiquitous assault rifle cartridge in the world. It was developed in 1943, but did not come into widespread use until the advent of the AK-47 assault rifle. It is also used in literally hundreds of AK clones, light machineguns and squad automatic weapons, and even a few civilian rifles. Most 7.62mm Kalashnikov ammunition has a steel case and a corrosive Berdan primer, making reloading close to impossible. Western and some Eastern-manufactured ammunition is made to more advanced standards and can be reloaded. Today, 7.62mm Kalashnikov is manufactured all over the world, even in the US. It is a round of decent killing power, but penetration can be lacking and accuracy at long range iffy. This round was replaced in the Russian military by the 5.45mm Kalashnikov, but many units of late have begun switching back to the 7.62mm Kalashnikov for its greater damaging potential.

A subsonic version of the 7.62mm Kalashnikov round exists. Triple the ammunition cost.

Other Names: 7.62x39mm Russian, 7.62mm Russian Short, 7.62mm Soviet M-43, 7.62mm obr 43 g

Nominal Size: 7.62x39mm

Actual Size: 7.9x38.65mm

Case Type: Necked

Weight: 23.63 kg per case of 1000; Price: \$380 per case



Magazines:

Per round: 0.019 kg	5-round box: 0.18 kg	10-round box: 0.33 kg	10-round clip: 0.19 kg
15-round box: 0.47 kg	20-round box: 0.62 kg	25-round box: 0.76 kg	30-round box: 0.91 kg
40-round box: 1.2 kg	45-round box: 1.34 kg	60-round box: 1.78 kg	75-round drum: 2.21 kg
90-round box: 2.64 kg	100-round belt: 1.89 kg	100-round drum: 2.93 kg	101-round drum: 2.96 kg

### **7.62mm Czech**

Notes: This round was developed by Czechoslovakia shortly after World War 2 for use in the CZ-52 assault rifle and the M-52 light machinegun. It was used for a number of years, but the Russians forced the 7.62mm Kalashnikov and 7.62mm Nagant rounds on the Czechs in the 1960s and they re-chambered the M-52 assault rifle to use the 7.62mm Kalashnikov round. The chances of finding a 7.62mm Czech round outside of a museum or collector's hands is virtually nil today.

Other Names: 7.62mm Czech Short, 7.62mm M-52

Nominal Size: 7.62x45mm

Actual Size: 7.81x44.92mm

Case Type: Necked

Weight: 2.69 kg per box of 100; Price: \$86 per box

Magazines:

Per round: 0.022 kg	10-round box: 0.38 kg		
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### **7.62mm Nagant**

Notes: This rifle was adopted for Russian service along with the M-1891 Mosin-Nagant rifle. It has been standard issue among the Russian military and former Russian client states for over a century. Its primary use today is in medium machineguns and sniper rifles, though some civilian rifles are chambered for it. Like many Russian rounds, the 7.62mm Nagant Rifle round uses a steel case and a corrosive Berdan primer, making reloading the spent case almost impossible. However, more standard

cases were made by Remington until about 1950, and more recently by Norma and Lapua. The 7.62mm Nagant round is roughly in the same class as the .30-06 Springfield, but offers somewhat better range. It remains one of the few rimmed military cartridges in standard issue by any military.

Other Names: 7.62x54Rmm Russian, 7.62x53Rmm Russian, 7.62mm Mosin-Nagant, 7.62mm Russian Rimmed, 7.62mm M-1891, 7.62mm Nagant Rifle

Nominal Size: 7.62x54mm

Actual Size: 7.87x53.6mm

Case Type: Necked

Weight: 32.63 kg per case of 1000; Price: \$520 per case

Magazines:

Per round: 0.03 kg	5-round box: 0.25 kg	5-round clip: 0.13 kg	10-round box: 0.45 kg
15-round box: 0.65 kg	20-round box: 0.85 kg	47-round pan: 1.93 kg	50-round drum: 2.05 kg
50-round belt: 1.31 kg	75-round drum: 3.05 kg	100-round belt: 2.61 kg	200-round belt: 5.22 kg
250-round belt: 6.53 kg			

## **7.62mm NATO**

Notes: This cartridge began as the round submitted by the US for the NATO Small Arms Trials in the early 1950s. It is basically a shortened version of the .30-06 Springfield cartridge, but without taking out much of the propellant. Though other countries submitted ammunition which was sometimes more advanced than the 7.62mm NATO round, the US basically used its influence to bully the rest of NATO into submission to accept the 7.62mm NATO round (then called the T-65). The 7.62mm NATO is no longer the standard NATO rifle cartridge, but remains a standard in medium machineguns and sniper rifles worldwide. It has also become a popular hunting round, able to take down medium and sometimes large game at fairly long ranges.

A SLAP (Saboted Light Armor Penetrator) version of the 7.62mm NATO round exists; double all costs of the ammunition. A subsonic version of this round also exists; triple all costs of ammunition for the subsonic version.

Other Names: .308 Winchester

Nominal Size: 7.62x51mm

Actual Size: 7.82x51.05mm

Case Type: Necked

Weight: 30.63 kg per case of 1000; Price: \$490 per case of 1000, \$735 per 1500-round belt, \$1960 per 4000-round

belt

Magazines:

Per round: 0.025 kg	2-round box: 0.13 kg	3-round box: 0.16 kg	4-round box: 0.2 kg
5-round box: 0.24 kg	6-round box: 0.28 kg	7-round box: 0.31 kg	8-round clip: 0.2 kg
9-round box: 0.39 kg	10-round box: 0.43 kg	12-round box: 0.5 kg	15-round box: 0.61 kg
20-round box: 0.8 kg	25-round box: 0.99 kg	30-round box: 1.18 kg	49-round belt: 1.2 kg
50-round box or drum: 1.93 kg	50-round belt: 1.23 kg	70-round drum: 2.68 kg	100-round belt: 2.45 kg
125-round drum: 4.74 kg	200-round belt: 4.9 kg	250-round belt: 6.13 kg	1000-round belt: 24.5 kg
1500-round belt: 36.75 kg	4000-round belt: 98 kg		

## **7.65mm Mauser**

Notes: Originally designed in 1889 for the Belgian-pattern Mauser, this round was later for use in Turkey. However, its widest use was in South America, particularly Argentina, where it was chambered in their Mauser rifles and some machineguns. Some sporting rifles were also designed to fire this caliber in the US, South America, and Europe. The round was once very popular, but that popularity faded after World War 2. Recently, a lot of Argentine-pattern Mausers have shown up on the world surplus market, and the cartridge is having some renewed success. The 7.65mm Mauser is regarded as one of the best Mauser cartridges, and is an excellent hunting cartridge for up to medium game. Cases are made by several American manufacturers, primers by a few more, and complete cartridges by some European manufacturers.

Other Names: 7.65mm Argentine Mauser, 7.65mm Belgian Mauser, 7.65mm Turkish Mauser

Nominal Size: 7.65x53mm

Actual Size: 7.9x53.1mm

Case Type: Necked

Weight: 32.5 kg per case of 1000; Price: \$520 per case

Magazines:

Per round: 0.026 kg	5-round box: 0.25 kg	5-round clip: 0.13 kg	25-round box: 1.05 kg
30-round box: 1.25 kg	40-round box: 1.65 kg		

### **8mm Austrian Service**

Notes: This cartridge was originally designed for the 1888 Mannlicher straight-pull rifle, and later used for other such rifles and the Austrian version of the Schwarzlose machinegun. It was also a popular hunting round in Europe at one point, with some Mauser and Mannlicher-Schoenauer rifles being chambered for it. It has always been uncommon in North America, however, and virtually unknown anywhere else. The round is still being commercially manufactured in Europe by Hirtenberger. It has good power for use against most medium game as well as people.

Other Names: 8x50mmR, 8mm Austrian Mannlicher

Nominal Size: 8x50mm

Actual Size: 8.2x50.29mm

Case Type: Necked

Weight: 33.25 kg per case of 1000; Price: 530 per case

Magazines:

Per round: 0.027 kg	5-round clip: 0.13 kg	250-round belt: 6.65 kg	
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**8mm Breda**

Notes: This round was designed for use by a few World War 2 Italian machineguns, such as the Breda Model 35 and Fiat-Revelli Model 1935 and was never used for anything else. It was designed mainly to replace the 6.5mm Carcano in machineguns, as that light rifle round was inadequate for machineguns. It is a significantly better round than the 6.5mm Carcano, and comes close in power to the .300 Winchester Magnum. It has not been manufactured since World War 2, and as no rifles were ever chambered for it, is of little interest to handloaders, so the ammunition is virtually impossible to find today.

Nominal Size: 8x59mm

Actual Size: 8.28x59.18mm

Case Type: Necked

Weight: 3.99 kg per box of 100; Price: \$128 per box

Magazines:

Per round: 0.032 kg	20-round strip: 0.84 kg	50-round belt: 1.6 kg	
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**8mm Brenneke**

Notes: These rounds were developed in 1912 by Wilhelm Brenneke himself, for use in Mauser-pattern rifles. The 8mm Brenneke is basically a smaller version of the 9.3x62mm Brenneke round. The round has plenty of punch and can handle most medium game, and some large game.

Other Names: 8x64mmJ Brenneke, 8x64mmS Brenneke

Nominal Size: 8x64mm

Actual Size: 8.2x65.02mm

Case Type: Necked

Weight: 42.88 kg per case of 1000; Price: \$690 per case

Magazines:

Per round: 0.034 kg	5-round box: 0.33 kg		
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**8mm Danish Krag**

Notes: This round was designed for use in the 1889 Danish version of the Krag-Jorgensen rifle. It originally used a much heavier bullet when the cartridge used a round-nosed bullet, but a lighter bullet was designed when the round was switched to a spitzer (pointed-nosed) bullet. It was once a popular civilian hunting cartridge as well as a common military round in Scandinavia, and was regarded as one of the better military rounds of the time. It has not, however, been commercially loaded in about a half a century and even handloads are scarce these days.

Other Names: 8x58mmR

Nominal Size: 8x58mm

Actual Size: 8.18x57.91mm

Case Type: Necked

Weight: 3.8 kg per box of 100; Price: \$122 per box

Magazines:

Per round: 0.03 kg			
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**8mm Hungarian Mannlicher**

Notes: Originally developed in 1930 for the Solothurn machinegun, design of this round actually started back in the mid-1920s to replace the somewhat-deficient 8mm Austrian Service round. The Hungarians also chambered their pre-World War 2 service rifles for it. It was never used in any sporting rifles, and it virtually disappeared after World War 2, since the Nazis forced the 8mm Mauser round on the Hungarians starting in 1940. Handloading is problematic since bullets of this size are not generally available and usually must be custom-cast.

Other Names: 8x56Rmm, 8mm Austrian-Hungarian Mannlicher, 8mm M-1931, 8mm Solothurn, 8mm Hungarian M-31

Nominal Size: 8x56mm

Actual Size: 8.33x56.13mm

Case Type: Necked

Weight: 3.83 per box of 100; Price: \$122 per box

Magazines:

Per round: 0.031 kg	5-round clip: 0.15 kg		
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**8mm Kurz**

Notes: This was the first assault rifle round, an intermediate-sized rifle round for use in what was then the new weapon class of assault rifles. It had a long development for ammunition, taking nearly a year starting in 1940, and was first used in combat on the Russian Front in 1942. The advent of this round and the rifles that fired it had a profound effect on weapon development; virtually all infantry rifles now issued are assault rifles. Unfortunately, no weapons to fire the 8mm Kurz round were built after World War 2, and ammunition was made for only a few years after that war in East Germany. The 8mm Kurz is basically a chopped version of the standard 8mm Mauser round.

Other Names: 7.92mm Kurz

Nominal Size: 7.92x33mm

Actual Size: 8.2x33.02mm

Case Type: Necked

Weight: 2.18 kg per box of 100; Price: \$70 per box

Magazines:

Per round: 0.017 kg	30-round box: 0.84 kg		
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**8mm Lebel**

Notes: This round, though the same size as the 8mm Austrian Service, will not fit in rifles chambered for the 8mm Austrian service (and vice versa), due to the great differences in case shape. It originally used a round-nosed heavy bullet when introduced in 1886, but was switched to a spitzer bullet in 1898. Though inadequacies of the widely-rimmed round showed up as early as World War 1 (particularly in semiautomatic and automatic weapons), it was used until shortly after World War 2 as a military round, and as a hunting round even after that. The shape of the cartridge makes it difficult to manufacture, and even more difficult for handloaders to make from scratch. Today, the 8mm Lebel round is difficult

to find.

Other Names: 8x50mmR Lebel, 8mm Lebel Rifle

Nominal Size: 8x50mm

Actual Size: 8.2x50.29mm

Case Type: Necked

Weight: 3.33 kg per box of 100; Price: \$106 per box

Magazines:

Per round: 0.027 kg	3-round clip: 0.08 kg	5-round clip: 0.13 kg	20-round box: 0.87 kg
24-round strip: 0.84 kg	30-round strip: 1.04 kg	100-round belt: 2.66 kg	249-round "belt": 6.62 kg
250-round belt: 6.65 kg			

**8mm Mauser**

Notes: This is one of the world's great rifle cartridges, having been used by dozens of countries, including Germany, Czechoslovakia, Poland, and China. Although it is almost universally known as the 8mm Mauser or 7.92mm Mauser cartridge, it is not in fact a Mauser design, having been designed by the German Infantry Board Commission at Spandau Arsenal. It was not even actually designed for a Mauser rifle; the Gew 88 is actually a modified Mannlicher design. The original bullet had a rounded nose; when this was changed to a pointed nose, velocity of the round jumped and it began to outperform comparable rounds of the time. Due to the vast numbers of rifles (mostly civilian today) that fire this round, the 8mm Mauser is still being produced worldwide.

Other Names: 7.92mm Mauser, 7.9x57mmJ, 7.9x57mmJS, 8mm German Mauser, 7.92x57mm, 8x57mm, 8x57mml, 8x57mmS

Nominal Size: 7.92x57mm

Actual Size: 8.2x57mm

Case Type: Necked



Weight: 37.63 kg per case of 1000; Price: \$600 per case

Magazines:

Per round: 0.03 kg	2-round box: 0.16 kg	3-round box: 0.2 kg	5-round box: 0.29 kg
5-round clip: 0.15 kg	10-round box: 0.52 kg	10-round clip: 0.3 kg	20-round box: 0.98 kg
25-round box: 1.21 kg	25-round strip: 0.98 kg	30-round box: 1.45 kg	40-round box: 1.91 kg
50-round belt: 1.51 kg	75-round drum: 3.52 kg	100-round belt: 3.01 kg	200-round belt: 6.02 kg
250-round belt: 7.53 kg			

### **8x51mm Mauser**

Notes: This round was introduced in 1888, and designed for the short-action Mauser rifles of the period. It is basically a shorter version of the standard 8mm Mauser round. It was popular at the time, but was replaced by the 8x56mm Mannlicher Schoenauer, and later other rounds, reaching the peak of its popularity before World War 1. It was not well known in North America. It is about in the same class as the .30-30 Winchester. It is not now being produced commercially.

Nominal Size: 8x51mm

Actual Size: 8.03x50.29mm

Case Type: Necked

Weight: 3.19 kg per box of 100; Price: \$102 per box

Magazines:

Per round: 0.026 kg	4-round clip: 0.1 kg	5-round box: 0.25 kg	
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### **8mm Remington Magnum**

Notes: This round was developed in 1978 as a chambering for the Remington 700 BDL rifle. It is based on a blown-out version of the .375 H&H Magnum case, and required that the Remington 700 BDL be redesigned for the chambering. The 8mm Magnum is similar to several other designs of the period and

earlier, ranging from 8x68mmS to 8mm PMM, as well as several wildcat cartridges. It was the first 8mm Magnum cartridge developed by an American company, however. It is easy for handloaders to produce the 8mm Remington Magnum using any one of several existing cases. Unfortunately, the results produced by the 8mm Remington Magnum do not really justify the extra weight and recoil, when the .338 Winchester Magnum or .340 Weatherby Magnum will produce similar results. The 8mm Remington Magnum was not, therefore, a very successful round.

Nominal Size: 8x72mm

Actual Size: 8.2x72.39mm

Case Type: Necked

Weight: 4.78 kg per box of 100; Price: \$152 per box

Magazines:

Per round: 0.038 kg			
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**8x60mm RWS**

Notes: After World War 1, German civilians were forbidden by the Treaty of Versailles to own hunting weapons in a military caliber (such as 8mm Mauser). A new round with similar ballistics was therefore devised by RWS, and the rifles modified in a simple procedure to take the new round. Later, it became an popular hunting round in Europe., outclassing the 8mm Mauser and .30-06 Springfield. It is still manufactured by RWS.

Other Names: 8x60mmJ Mauser, 8x60mmS Mauser

Nominal Size: 8x60mm

Actual Size: 8.08x60.07mm

Case Type: Necked

Weight: 38.5 kg per case of 1000; Price: \$620 per case

Magazines:

Per round: 0.031 kg	4-round box: 0.25 kg	5-round box: 0.3 kg	5-round clip: 0.15 kg
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**8x68mm RWS**

Notes: This round was first designed in late 1938. It is basically a "sub-magnum" cartridge, not quite as powerful as an actual magnum round, but still plenty powerful. It actually outclasses rounds such as the .300 H&H Magnum, .300 Weatherby, or .300 Winchester Magnum. It is quite popular in Europe, but almost unknown in North or South America.

Other Names: 8x68mmS RWS

Nominal Size: 8x68mm

Actual Size: 8.2x67.31mm

Case Type: Necked

Weight: 44.38 kg per case of 1000; Price: \$710 per case

Magazines:

Per round: 0.036 kg	3-round box: 0.24 kg	4-round box: 0.29 kg	5-round box: 0.35 kg
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**9.3mm Brenneke**

Notes: This was Wilhelm Brenneke's largest and most powerful cartridge. Brenneke was a designer of high-velocity ammunition for rifles in the early 20<sup>th</sup> century, and many of his cartridges are similar to those of his contemporary, Charles Newton. Brenneke's rounds have been much more long lived, however, and many rifles are still chambered for them to this day. The 9.3mm Brenneke is a large cartridge which propels a bullet that is heavy and has a lot of power, almost magnum-class.

Other Names: 9.3x64mm Brenneke

Nominal Size: 9.3x64mm

Actual Size: 9.27x64mm

Case Type: Necked

Weight: 5.4 kg per box of 100; Price: \$172 per box

Magazines:

Per round: 0.043 kg	3-round box: 0.31 kg	4-round box: 0.36 kg	5-round box: 0.42 kg
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**9.3x62mm Mauser**

Notes: This round dates from 1905, developed by Otto Bock to give Mauser users an adequate cartridge for African game, though it was soon being used on larger European game. Rifles were chambered in this caliber in the US until about 1940, but no major US manufacturer makes rifles for it now (though some smaller manufacturers, such as A-Square do). It is a quite common chambering in Europe, and many European rifle manufacturers make rifles for the 9.3x62mm Mauser. Ammunition is easy to find in Europe, and somewhat less easy in North America.

Other Names: 9.3mm Mauser

Nominal Size: 9.3x62mm

Actual Size: 9.27x61.47mm

Case Type: Necked

Weight: 51.88 kg per case of 1000; Price: \$830 per case

Magazines:

Per round: 0.042 kg	2-round box: 0.23 kg	3-round box: 0.3 kg	4-round box: 0.37 kg
5-round box: 0.43 kg	10-round box: 0.76 kg		

**9.3x74Rmm**

Notes: This rimmed rifle round was Germany’s answer to high-power cartridges in the early 1900s such as some of the Nitro Express rounds. It is a powerful round that has performance similar to the .375 Flanged Nitro Express round – good for virtually any game on Earth, including elephants with a well-placed shot. Rifles are still made for this round (typically single-shot or double-barreled rifles due to the rimmed round), and ammunition is still made by RWS and Norma.

Nominal Size: 9.3x74mm

Actual Size: 9.27x74.42mm

Case Type: Necked

Weight: 62.75 kg per case of 1000; Price: \$1000 per case

Magazines:

Per round: 0.052 kg			
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**9.3mm Sauer**

Notes: This is a rimmed round designed for use in single-shot and double-barreled rifles. Very little is known about this round and its history today, and it is a very rare round today. The round has good stopping power, but only average penetration. Rifles that fire this round are scarce; casings are largely handmade, though bullets suitable for this round are made by Barnes and Speer.

Other Names: 9.3x72Rmm

Nominal Size: 9.3x72mm

Actual Size: 9.27x71.88mm

Case Type: Straight

Weight: 4.88 kg per box of 100; Price: \$156 per box

Per round: 0.039 kg			
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**9.3mm Swiss**

Notes: Primarily a round meant for target shooting, the 9.3mm Swiss round is known for its sharply pointed bullet. The chambering is rare in the US, but better-known in Europe. However, the 9.3mm Swiss is still mostly the province of collectors and they are not manufactured by any large companies at present, though Barnes and Speer make the bullets and some other small companies still make the cases.

Nominal Size: 9.3x53mm

Actual Size: 9.27x53.34mm

Case Type: Necked

Weight: 4.5 kg per box of 100; Price: \$144 per box

Magazines:

Per round: 0.036 kg			
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**9.5mm Mannlicher**

Notes: This round was introduced in 1910 for the Mannlicher-Schoenauer rifle of the period. No current rifles are chambered for this round, since the round is difficult to handload or even machine-manufacture due to the strange headspace, and mistakes are easy to make (and can be fatal to the shooter). Nonetheless, the round performs well on thick-skinned game, as long as the game is not too dangerous (due to short range). The round was an almost exclusively European round and was seldom seen in North America, though it could be encountered in Africa in the hands of European hunters. It is rarely found today, and there are no major manufacturers making it.

Other Names: 9.5mm Mannlicher-Schoenauer, 9.5x57mm MS, .375 Rimless Nitro Express, 9.5x56mm, 9.5x56.7mm

Nominal Size: 9.5x57mm

Actual Size: 9.63x57.15mm

Case Type: Necked

Weight: 5.2 kg per box of 100; Price: \$166 per box

Magazines:

Per round: 0.042 kg			
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**.30 Blaser**

Notes: This is a magnum round designed in 1990 by Blaser Rifle Works and RWS for use in single-shot and double-barreled break-open rifles. It is rimmed, so it is not really meant for other types of rifles. It uses fairly heavy bullets and has velocity that falls between the .30-06 Springfield and .300 H&H Magnum. This makes it good for most game of up large size as well as a good man-stopper.

Other Names: .30R Blaser

Nominal Size: 7.62x68mm

Actual Size: 7.82x68.07mm

Case Type: Necked

Weight: 40.88 kg per case of 1000; Price: \$650 per case

Magazines:

Per round: 0.033 kg			
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**.30 Carbine**

Notes: This cartridge grew out of the 1940 recommendation by the US Ordnance Department that a light carbine would have great advantages over the M-1911 pistol in some circumstances. This led to the M-1 Carbine series, and the ammunition developed for it, the .30 Carbine cartridge. It is a modification of the .32 Winchester Self Loading design. The best use for the .30 Carbine cartridge turns out to be not killing people, but varminting and small game hunting.

Other Names: .30 M-1 Carbine

Nominal Size: 7.62x33mm

Actual Size: 7.82x32.08mm

Case Type: Straight

Weight: 15.38 kg per case of 1000; Price: \$250 per case

Magazines:

Per round: 0.012 kg	7-round box: 0.16 kg	15-round box: 0.31 kg	30-round box: 0.59 kg
40-round box: 0.78 kg			

**.30-06 JDJ**

Notes: This is basically a .30-06 Springfield round redesigned for use in the Thompson/Center Encore single-shot pistol. It has since been chambered in a few custom rifles and at least one commercial rifle, but its primary use is still in the Encore. The .30-06 JDJ actually holds more powder than the .30-06 Springfield due to the case design. It is an excellent hunting round, slightly better than comparable rounds, but takes a specially-modified or designed weapon to fire it due to the neck design.

Nominal Size: 7.62x62mm

Actual Size: 7.82x62.36mm

Case Type: Necked

Weight: 3.75 kg per box of 100; Price: \$120 per box

Magazines:

Per round: 0.03 kg			
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**.30-40 Krag**

Notes: This round was the first "small-bore" cartridge used by the US military, being adopted in 1892. It was also one of the first military rounds to use modern (i.e. smokeless) propellant. The cartridge virtually disappeared after 1936, until 1973, when Ruger began chambering some of its falling-block single-shot rifles for .30-40 Krag. This stimulated new interest in the round, but it remains a relatively rare round these days.

Other Names: .30 Army

Nominal Size: 7.62x59mm

Actual Size: 7.82x58.67mm

Case Type: Necked

Weight: 3.53 kg per box of 100; Price: \$112 per box

Magazines:

Per round: 0.028 kg	4-round box: 0.23 kg	5-round clip: 0.14 kg	250-round belt: 7.05 kg
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**.30 Newton**

Notes: Originally designed in 1913 for Fred Adolph, the .30 Newton was at first called the Adolph Express. When Charles Newton began producing his own rifles, he changed the name to .30 Newton.



The rounds were manufactured for Newton by Western Cartridge. Unfortunately, when Newton's company failed, the cartridge did too, and Western Cartridge did not make any .30 Newton cartridges after 1938. Richard Speer made cases for the round for a time after World War 2, but also stopped. The round is adequate for virtually any sort of North American game, if you can find it or a rifle firing it.

Other Names: .30 Adolph Express

Nominal Size: 7.8x64mm

Actual Size: 7.82x64mm

Case Type: Necked

Weight: 3.84 kg per box of 100; Price: \$122 per box

Magazines:

Per round: 0.031 kg	5-round clip: 0.15 kg		
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**.30 Remington**

Notes: This round is basically a rimless version of the .30-30 Winchester round, designed for use in Remington's Model 8 semiautomatic rifle in 1906. It was later chambered in several other rifles as well. Though no rifles have been chambered for the .30 Remington cartridge since shortly after World War 2, a few companies still manufactured the round until recently. Originally known as the .30-30 Remington, this nomenclature caused considerable confusion among shooters and ammunition dealers as well, and Remington changed the name to satisfy them. The .30 Remington is basically identical to the .30-30 Winchester in performance.

Other Names: .30-30 Remington

Nominal Size: 7.62x51mm

Actual Size: 7.8x51.56mm

Case Type: Necked

Weight: 3.08 kg per box of 100; Price: \$98 per box

Magazines:

Per round: 0.025 kg	5-round box: 0.24 kg		
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**.30-03 Springfield**

Notes: This round was designed to replace the .30-40 Krag as standard US military cartridge when the Krag rifle was replaced by the M-1903. The .30-03 Springfield featured a longer case than the .30-40 Krag with more modern propellant and more velocity than the .30-40 Krag. It is based on Mauser round designs of the period. However, the US military was slow to modernize, with the .30-03 Springfield and the M-1903 rifle being adopted slowly. Meanwhile, the rest of the world was moving to pointed, aerodynamic spitzer bullets (the .30-03 Springfield uses a round-nosed bullet), and even better propellant. The .30-03 Springfield thus became rapidly obsolete for military purposes, replaced by the .30-06 Springfield only three years later. It was however, for a time, chambered in a version of Winchester's Model 1895 lever-action rifle, the blunt-nosed bullet being ideal for a lever-action weapon. Nowadays, .30-03 Springfield is quite rare; the round is very difficult to handload due to the lack of suitable cases to modify (a .30-06 Springfield case will not work for this purpose).

Nominal Size: 7.62x64mm

Actual Size: 7.82x64.52mm

Case Type: Necked

Weight: 3.88 kg per box of 100; Price: \$124 per box

Magazines:

Per round: 0.031 kg	5-round clip: 0.16 kg		
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**.30-06 Springfield**

Notes: This round is a modification of the earlier .30-03 Springfield cartridge. The biggest change in producing the .30-06 was the new, streamlined, lightweight spitzer bullet. The first rifle to be chambered for the .30-06 was the Springfield M-1903 military rifle, and its use grew by leaps and bounds, eventually becoming the standard US military rifle and light machinegun round as well as a wildly popular civilian round both in the US and other parts of the world. It is one of the most versatile rounds in the world, with the ability to take down everything from small game to medium-large game to of course, man.

Other Names: 7.62x63mm, .30 Government M'06, .30 US Service, .30 Browning

Nominal Size: 7.62x63mm

Actual Size: 7.82x63.2mm

Case Type: Necked\_

Weight: 38 kg per case of 1000; Price: \$610 per case

Magazines:

Per round: 0.03 kg	2-round box: 0.16 kg	3-round box: 0.2 kg	4-round box: 0.25 kg
4-round clip: 0.12 kg	5-round box: 0.3 kg	5-round clip: 0.15 kg	7-round box: 0.39 kg
8-round clip: 0.24 kg	10-round box: 0.53 kg	10-round clip: 0.3 kg	20-round box: 0.99 kg
30-round box: 1.46 kg	30-round strip: 1.19 kg	32-round box: 1.55 kg	47-round pan: 2.25 kg
100-round belt: 3.04 kg	250-round belt: 7.6 kg		

### **.30-378 Weatherby Magnum**

Notes: This round was originally developed specifically for 1000-yard benchrest competitions. It was created by necking down the .378 Weatherby to .30 caliber. The round was manufactured in very small amounts until 1996, when Weatherby asked Norma to manufacture the round, and it was factory-standardized in 1998. The .30-378 Weatherby Magnum is very handloader-friendly, easy to produce and wildcat. Though light bullets exist for this cartridge, the .30-378 does best with bullets greater than 200 grains in weight. The round is, however, known to wear out barrels very fast.

Other Names: .30-378 Weatherby

Nominal Size: 7.8x74mm

Actual Size: 7.82x73.66mm

Case Type: Necked

Weight: 4.46 kg per box of 100; Price: \$138 per box

Magazines:

Per round: 0.035 kg			
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**.30-30 Winchester**

Notes: This round was the first small-bore smokeless powder cartridge; it was designed for the original Winchester 1894 lever-action rifle. Many other companies have picked up on it over the years; it is very nearly the ideal lever-action rifle centerfire cartridge, and also works well in bolt-action, break-open, pump-action, and even some semiautomatic rifles. One of the attractions of the .30-30 Winchester is that it performs well in short carbines and light rifles. It is a good round for use against medium game as well as people, but the velocity can fall off dramatically due to its blunt-nosed design.

Other Names: .30-30 Winchester Centerfire, .30 Winchester, 7.62x51Rmm

Nominal Size: 7.62x51mm

Actual size: 7.82x51.56mm

Case Type: Necked

Weight: 31 kg per case of 1000; Price \$500 per case

Magazines:

Per round: 0.025 kg	3-round box: 0.17 kg	4-round box: 0.2 kg	5-round box: 0.24 kg
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**.30-338 Winchester Magnum**

Notes: Originally a wildcat round developed specifically for 1000-yard benchrest competitions, the .30-338 Winchester Magnum has recently been used in a number of custom and semi-commercial rifles. It is a .338 Winchester Magnum necked down to accept a .30-caliber bullet. It almost exactly duplicates the ballistics of the .308 Norma Magnum, and it is possible that Winchester would have offered the .30-338 Winchester Magnum as a mainstream round if Norma hadn't beaten them to it. It is a quite powerful round for its size.

Nominal Size: 7.62x64mm

Actual Size: 7.82x63.5mm

Case Type: Necked

Weight: 3.81 kg per box of 100; Price: \$122 per box

Magazines:

Per round: 0.031 kg			
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### **.32 Remington**

Notes: This round was introduced specifically for the Remington Model 8 semiautomatic rifle, and is basically a rimless version of the .32 Winchester Special. It was later chambered in a variety of Remington pump-action and bolt-action rifles, but it was discontinued long ago. It basically duplicates the .32 Winchester Special's ballistics and damaging potential.

Nominal Size: 8x52mm

Actual Size: 8.13x51.82mm

Case Type: Necked

Weight: 3.36 kg per box of 100; Price: \$108

Magazines:

Per round: 0.027 kg	5-round box: 0.26 kg		
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### **.32-20 Winchester**

Notes: This very old round was introduced in 1882 by Winchester for its Model 73 lever-action rifle. It quickly gained popularity both as a rifle and revolver round. Most American firearms manufacturers have probably chambered a rifle or revolver for the round at one point or another in their history. The .32-20 Winchester successfully made the leap to modern propellants, Remington and Winchester still offer both cases and manufactured ammunition. The .32-30 is not a very powerful round, but is popular with farmers, ranchers, trappers, and varmint hunters. One can hunt small game with the round while being reasonably sure that you will not destroy too much meat.

Other Names: .32-20 Winchester Centerfire, .32-20 WCF, .32 Winchester

Nominal Size: 8x34mm

Actual Size: 7.92x33.53mm

Case Type: Straight

Weight: 16.5 kg per case of 1000; Price: \$260 per case

Magazines:

Per round: 0.013 kg	3-round box: 0.09 kg		
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**.32-40 Winchester**

Notes: This round was introduced in 1884 as a blackpowder match-quality round. It later made the jump to smokeless powder, but was never really popular except as a starting point for wildcatters. The .32-40 Winchester has been long out of production by most major companies, but Winchester manufactured a few lots temporarily in early 1980s for its John Wayne Commemorative Rifle. Today, few manufactured rounds exist, though handloading is fairly easy using a number of cases as a starting point.

Other Names: .32-40, .32-40 Ballard

Nominal Size: 8x54mm

Actual Size: 8.13x54.1mm

Case Type: Necked

Weight: 3.51 per box of 100; Price: \$112 per box

Magazines:

Per round: 0.028 kg	5-round box: 0.27 kg		
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**.32 Winchester Self-Loading**

Names: The fortunes of this round rose and fell with the Winchester Model 1905 semiautomatic rifle for which it was designed – the rifle was discontinued in 1920, and the .32 Winchester Self-Loading round with it. It is probably a smaller version of the .35 Winchester Self-Loading round (though this is not certain). .32 Winchester Self-Loading round’s main claim to fame however, is that it was the cartridge upon which the .30 Carbine round was based. The .32 Winchester Self-Loading is virtually impossible to find these days, and can probably be found only in handloaded form. The round was never popular; neither range nor damaging potential are exceptional.

Other Names: .32 Winchester Self-Loading Rifle, .32 WSL

Nominal Size: 8x33mm

Actual Size: 8.13x32.51mm

Case Type: Straight

Weight: 1.69 kg per box of 100; Price: \$54 per box

Magazines:

Per round: 0.014 kg	5-round box: 0.13 kg	10-round box: 0.24 kg	
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**.32 Winchester Special**

Notes: This round was one of the original smokeless powder designs. It was introduced in 1902 for the Winchester 1894 lever-action rifle. Because of the rimmed design, it has never been used in anything but lever-action and single-shot rifles. Until recently, Federal, Remington, and Winchester made factory loads in .32 Winchester Special, but this has since stopped. The flat-nosed bullet does not lend itself well to ballistics, and the case design does not allow much variation in propellant load, but modern loads can easily beat out the .30-30. It can also be used as a blackpowder cartridge.

Nominal Size: 8x52mm

Actual Size: 8.15x51.82mm

Case Type: Necked

Weight: 33.75 kg per case of 1000; Price: \$540

Magazines:

Per round: 0.027 kg			
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**.33 BSA**

Notes: This round was introduced in 1921 by Birmingham Small Arms company for its sporting rifle based on the 1914 Enfield rifle. It was not a popular cartridge, and it was quickly discontinued. The problem with the round is its light bullet; it tends to lose velocity rapidly and fail to penetrate properly on

heavy and even medium game. Handloaders using heavier bullets had better luck, but this was a rare modification that tended to rapidly wear out the rifle. This is now an extremely rare cartridge, the province of a few handloaders.

Other Names: .33 Belted Rimless, .330 BSA

Nominal Size: 8.38x61mm

Actual Size: 8.59x60.96mm

Case Type: Necked

Weight: 4.41 kg per box of 100; Price: \$142 per box

Magazine:

Per round: 0.035 kg	5-round clip: 0.18 kg		
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**.35 Newton**

Notes: This is another proprietary cartridge used by Charles Newton for his short-lived rifles. It was introduced in 1915 (manufactured for Newton by Western Cartridge), but withdrawn in 1936 after Newton went out of business for the last time. It is basically a necked-up .30 Newton. The .35 Newton round is really too powerful for hunting in North America, and is better used against African game. The Newton rifles were also too light for the power of the cartridge. Virtually the only way to get a .35 Newton round these days is through handloading, which is described as extremely difficult.

Nominal Size: 9x64mm

Actual Size: 9.09x64mm

Case Type: Necked

Weight: 5.19 kg per box of 100; Price: \$166 per box

Magazines:

Per round: 0.042 kg	5-round clip: 0.21 kg		
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**.35 Remington**



Notes: This is an old round first introduced for the Remington 8 semiautomatic rifle in 1906. For a while, it was a rather popular round, with about a dozen rifles chambered for it. However, Marlin is currently the only company that chambers rifles for it, and Remington's XP-100 and Thompson/Center's single-shot handguns also fire the .35 Remington. .35 Remington ammunition is still being made, but not in the numbers it once was. The .35 Remington has better striking power than the .30-30 Winchester, due to the heavier bullet, but the range is not exceptional.

Other Names: .35-30 Remington

Nominal Size: 9x49mm

Actual Size: 9.09x48.77mm

Case Type: Necked

Weight: 3.95 per box of 100; Price: \$126 per box

Magazines:

Per round: 0.032 kg	4-round box: 0.26 kg	5-round box: 0.31 kg	
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**.35 Whelan**

Notes: There is some controversy as to whether Colonel Townsend Whelan actually was involved in the creation of this round, or James Howe simply named the round after Colonel Whelan, who was a noted gun authority at the time. It began as a wildcat round that was simply a necked up .30-06 Springfield round, without any other significant changes. Ackley later improved the round, changing the case to eliminate headspace problems, underpowering in the propellant charge, and poor ballistics. Though Remington chose to manufacture the earlier, inferior version in 1987, they later switched to the improved version. The .35 Whelan is good for hunting game on the smallish-side of medium up to large North American game, and is easily handloaded.

Nominal Size: 9x64mm

Actual Size: 9.09x63.5mm

Case Type: Necked

Weight: 5.15 kg per box of 100; Price: \$164 per box

Magazines:

Per round: 0.041 kg			
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**.35 Winchester**

Notes: This round was introduced in 1903 as a new chambering for Winchester’s Model 1895 lever-action rifle. It was later put into some bolt-action rifles. Winchester discontinued manufacture of the round in 1936, but it was listed for sale as late as 1962 in a British ammunition catalog. The .35 Winchester is based on a necked-up version of the .30-40 Krag case. The round is useful against almost all North American game, but many newer cartridges are better in range and stopping power.

Nominal Size: 9x61mm

Actual Size: 9.09x61.21mm

Case Type: Necked

Weight: 4.96 kg per box of 100; Price: \$158 per box

Magazines:

Per round: 0.004 kg	5-round clip: 0.2 kg		
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**.35 Winchester Self-Loading**

Notes: This round was designed for use in the Winchester Model 1905 semiautomatic rifle. The Model 1905 was the only firearm to use the .35 Winchester Self-loading round, and the round is so poor that when the round was discontinued in 1920, with the rifle itself following soon thereafter. It is effective against small game, and marginally effective against medium game, but only at short ranges. It is underpowered and it was also too expensive at the time it was offered for sale. It is an interesting note that most revolvers chambered for .357 Magnum/.38 Special can also chamber and fire the .35 Winchester Self-Loading round without a problem, though why one would want to do this is unknown since the .357 Magnum and .38 Special rounds are both more effective. Any .35 Winchester Self-Loading rounds in existence today are probably handloads.

Other Names: .35 WSL, .35 Winchester Auto

Nominal Size: 9x29mm

Actual Size: 8.92x28.96mm

Case Type: Straight

Weight: 1.81 kg per box of 100; Price: \$58 per box

Magazines:

Per round: 0.015 kg	5-round box: 0.14 kg	10-round box: 0.25 kg	
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**.38-72 Winchester**

Notes: This round was designed specifically for the Winchester Model 1895 lever-action rifle. The cartridge was considered obsolete along with the rifle and discontinued in 1936. It was never really a popular cartridge. It was advertised by Winchester as being a very powerful .38 caliber cartridge; it was, in fact, only moderately powerful, and is ballistically only a mediocre round. Handloading is very difficult, and very few cartridges of this type exist today.

Nominal Size: 9.5x65mm

Actual Size: 9.6x65.53mm

Case Type: Straight

Weight: 4.74 kg per box of 100; Price: \$152 per box

Magazines:

Per round: 0.038 kg	5-round clip: 0.19 kg		
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**.300 Dakota**

Notes: This round is based on the .404 Jeffrey case, shortened to crease a cartridge of .30-06 length, and a large rim. It is, of course, necked down to 7.62mm. The result is a relatively short magnum cartridge that duplicates the performance of some longer magnums.

Nominal Size: 7.62x65mm

Actual Size: 7.82x64.77mm

Case Type: Necked

Weight: 3.89 kg per box of 100; Price: \$124 per box

Magazines:

Per round: 0.031 kg			
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**.300 H&H Magnum**

Notes: This round was introduced by Holland & Holland in 1925 as Holland's Super 30, and it was quickly picked up by the US firm of Western Cartridge Co. It remained, however, a rare and exotic round until about 1935, when Ben Comfort won the Wimbledon Cup Match with a rifle chambered for the .300 H&H Magnum, and it then became an "overnight" sensation. British, American, and European rifles chambered for the cartridge proliferated, and it is still one of the standard chamberings for European rifles, though it is now a rather rare American chambering. The .300 H&H Magnum has a lot of power and is not generally used for game smaller than antelope. It has suffered in comparison to the .300 Winchester Magnum and .300 Weatherby Magnum, due to the heavier weight of the ammunition and similar striking power.

Other Names: .300 Holland & Holland Magnum, .300 H&H Super, Holland's Super 30

Nominal Size: 7.8x72mm

Actual Size: 7.82x72.39mm

Case Type: Necked

Weight: 43.5 kg per case of 1000; Price: \$700 per case

Magazines:

Per round: 0.035 kg	4-round box: 0.29 kg	5-round box: 0.34 kg	
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**.300 RSAUM**

Notes: This round was introduced in 2001 as a competitor to Winchester's .300 Short Magnum. It is the same basic idea, being a short, fat cartridge with much more propellant than is normal for a cartridge of its length. It is uses a bullet similar to that of the .308 Winchester (7.62mm NATO), and may be thought of as a "wildcat" 7.62mm NATO cartridge. Right now, not many rifles chamber it, but popularity is growing.

Twilight 2000 Notes: This round does not exist.

Other Names: .300 Remington Short Action Ultra Mag, .300 Short Action Ultra Mag

Nominal Size: 7.62x51mm

Actual Size: 7.82x51.18mm

Case Type: Necked

Weight: 3.84 kg per box of 100; Price: \$98 per box

Magazines:

Per round: 0.031 kg	5-round box: 0.27 kg	9-round box: 0.39 kg	
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**.300 Savage**

Notes: Once a very popular cartridge, the .300 Savage was introduced in 1920 for the Savage 99 lever-action rifle. The .300 Savage was meant to produce ballistics similar to that of the .30-06 Springfield, but in a medium-length cartridge. Savage and Remington chambered several rifles for the .300 Savage over the years, but it fell out of favor when the .308 Winchester (7.62mm NATO) cartridge was introduced. However, since so many rifles chambered for the .300 Savage cartridge still exist, ammunition is still being made.

Nominal Size: 7.62x48mm

Actual Size: 7.82x47.5mm

Case Type: Necked

Weight: 28.5 kg per case of 1000; Price: \$460 per case

Magazines:

Per round: 0.023 kg	4-round box: 0.19 kg	5-round box: 0.22 kg	
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**.300 UltraMag**

Notes: This round was introduced in 1999. It began a trend towards big, beltless magnum rounds. The .300 UltraMag retains more energy throughout its flight than either the .300 Weatherby Magnum or the .300 Winchester Magnum. The case is based on a necked-down .404 Jeffreys case, with a rebated

rim. It has been known to achieve a 100% kill rate against game as big as moose.

Twilight 2000 Notes: This round does not exist.

Other Names: .300 Remington UltraMag(num), .300 Ultra Magnum, .300 Remington Ultra Magnum

Nominal Size: 7.8x72mm

Actual Size: 7.82x72.26mm

Case Type: Necked

Weight: 4.34 kg per box of 100; Price: \$138 per box

Magazines:

Per round: 0.035 kg	3-round box: 0.23 kg		
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**.300 Weatherby Magnum**

Notes: This round is Weatherby's most popular cartridge. It was developed in 1944, and first sold commercially in 1948. The .300 Weatherby Magnum is one of the most popular chamberings for custom rifle makers, and other rifle manufacturers have offered the chambering on and off, but only Weatherby offers rifles chambered for the .300 Weatherby Magnum on a regular basis. Ammunition is a bit easier to find, being made by Weatherby, Norma, Remington, and PMC. The .300 Weatherby Magnum can be difficult to work with; it's high-velocity round leads to a lot of barrel wear, it doesn't function well in shorter barrels, and recoil can be stiff. It is, however, a powerful and effective cartridge.

Nominal Size: 7.8x72mm

Actual Size: 7.82x71.76mm

Case Type: Necked

Weight: 43.13 kg per case of 1000; Price: \$690 per case

Magazines:

Per round: 0.035 kg	3-round box: 0.23 kg	4-round box: 0.28 kg	5-round box: 0.34 kg
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### **.300 Winchester Magnum**

Notes: This round was first introduced in 1963 for the Winchester M-70 bolt-action rifle, and most American and European sporting rifle manufacturers have since chambered rifles for it. It is also slowly becoming a replacement round in some countries for the 7.62mm NATO round for sniping purposes. It is a round with excellent range and decent hitting power, though some studies suggest that it is not the best round for penetrating body armor.

Nominal Size: 7.62x66mm

Actual Size: 7.82x66.55mm

Case Type: Necked\_

Weight: 40 kg per case of 1000; Price: \$640 per case

Magazines:

Per round: 0.032 kg	2-round box: 0.17 kg	3-round box: 0.21 kg	4-round box: 0.26 kg
5-round box: 0.31 kg	6-round box: 0.36 kg	7-round box: 0.41 kg	8-round box: 0.46 kg
9-round box: 0.51 kg	10-round box: 0.56 kg	20-round box: 1.05 kg	

### **.300 Winchester Short Magnum**

Notes: This round, introduced in 2000, was one of the first rounds to feature the short, fat case to allow magnum performance in a short-action rifle. It virtually duplicates the velocity of a .300 Winchester Magnum round while delivering somewhat better performance and utilizing some 10% less propellant. The cartridge draws upon decades of wilcat experiments, but is an original Winchester design. It should be noted that while the .300 Winchester Short Magnum will sometimes chamber in a rifle designed to fire .300 RSAUM ammunition, doing so will almost invariably lead to a chamber explosion, as the headspace is different.

Other Names: .300 WSM

Nominal Size: 7.62x53mm

Actual Size: 7.82x53.34mm

Case Type: Necked

Weight: 4 kg per box of 100; Price: \$102 per box

Magazines:

Per round: 0.03 kg	3-round box: 0.19 kg	5-round box: 0.28 kg	10-round box: 0.51 kg
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**.303 British**

Necked: One of the longest-lived military cartridges in history, the .303 British round was adopted in 1888 and remained in British military service until replaced by the 7.62mm NATO round in 1957. Originally a blackpowder round, the .303 British successfully made the leap to smokeless powder. The .303 British is the round that gave rise to the term "Dum-Dum Bullet;" a British Army captain perfected an expanding for use against Indian tribesmen, primarily by cutting away the bullet jacket to expose the lead core. When this was declared illegal for war use, the bullet was changed so that it was literally too long for its weight, so it would tumble upon impact with flesh. The jacketed bullets still tend to break up on impact, causing further damage to an enemy or game. The .303 British round is still being made in the US and by Norma of Sweden.

Other Names: 7.7x56Rmm, .303 Lee-Enfield, 7mm Type 897, 7mm Arisaka

Nominal Size: 7.7x56mm

Actual Size: 7.9x56.13mm

Case Type: Necked

Weight: 34.38 kg per case of 1000; Price: \$550 per case

Magazines:

Per round: 0.028 kg	5-round box: 0.27 kg	5-round clip: 0.14 kg	10-round box: 0.48 kg
25-round box: 1.11 kg	30-round box: 1.32 kg	40-round box: 1.74 kg	47-round pan: 2.04 kg
97-round pan: 4.14 kg	250-round belt: 6.88 kg		

**.303 Savage**

Notes: The .303 Savage was originally designed for a military cartridge competition in 1895. It failed in that regard, but it was used as one of the chamberings for the Savage Model 1899 lever-action rifle,



and was later chambered in the Savage 99 rifle. After World War 2, Savage decided to drop this round, and production has never resumed commercially. The .303 Savage is similar in appearance to the .30-30 Winchester, but they are not interchangeable, and the .303 Savage round is more powerful than the .30-30 Winchester. The .303 Savage is, however, ballistically quite inferior to the .30-30 Winchester due to its blunt nose; Savage never tried pointed bullets in the round, though many wildcatters have in the intervening years. The British call this round the .301 Savage.

Other Names: .301 Savage

Nominal Size: 7.62x51mm

Actual Size: 7.9x51.18mm

Case Type: Necked

Weight: 3.14 kg per box of 100; Price: \$100 per box

Magazines:

Per round: 0.025 kg			
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**.307 Winchester**

Notes: This cartridge was developed in 1980, made for the Winchester M-94XTR rifle. The ".307" measurement is somewhat of a misnomer; the .307 Winchester round is actually a rimmed version of the .308 Winchester (7.62mm NATO in the Twilight 2000 game) with a slight difference in cartridge length. The rimmed cartridge works better than the 7.62mm NATO round in a lever-action rifle. It is actually possible to chamber and fire 7.62mm NATO cartridges in some rifles designed for the .307 Winchester round; however, this is considered a dangerous and unsafe practice.

Nominal Size: 7.6x51mm

Actual Size: 7.82x51.31mm

Case Type: Necked

Weight: 30.75 kg per case of 1000; Price: \$490 per case

Magazines:

Per round: 0.025 kg			
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**.308 Norma Magnum**

Notes: The .308 Norma Magnum was introduced in Sweden in 1960; it was basically a commercial version of a wildcat round, and at the time no commercially-manufactured rifles were chambered for it. Manufactured rifles came later, but today, the .308 Norma Magnum is largely a round for custom rifles (though a few commercial rifles are chambered for it). It is ballistically almost identical to the .30-338 wildcat round (a necked-down .338 Winchester Magnum). The .308 Norma Magnum is adequate for most North American and European game and does well against most African game as well.

Nominal Size: 7.62x65mm

Actual Size: 7.82x65mm

Case Type: Necked

Weight: 39 kg per case of 1000; Price: \$620 per case

Magazines:

Per round: 0.031 kg	3-round box: 0.21 kg	4-round box: 0.26 kg	5-round box: 0.3 kg
10-round box: 0.54 kg			

**.330 Dakota**

Notes: This is basically a necked-down and shortened .404 Jeffrey case, to accept a .338 bullet. It is, however, more effective than the .338 Winchester Magnum, and most rifles that are chambered for the .338 Winchester Magnum can be converted to fire .330 Dakota.

Nominal Size: 8.38x65mm

Actual Size: 8.61x65.28mm

Case Type: Necked

Weight: 4.75 kg per box of 100; Price: \$76 per box

Magazines:

Per round: 0.038 kg			
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**.338 A-Square**

Notes: This design was created in 1978 by necking down a .378 Weatherby Magnum to take a .338 caliber bullet. The idea was to produce a medium game cartridge with a flat trajectory at most ranges. Most rifles with 3.65-inch bolt actions can be easily modified to accept this cartridge. The ballistics are good, but the .338 A-Square does have some difficulty at feeding from all but specially-modified magazines. The round is normally manufactured only by A-Square, and only in small numbers.

Nominal Size: 8.6x72mm

Actual Size: 8.58x72.39mm

Case Type: Necked

Weight: 5.24 kg per box of 100; Price: \$168 per box

Magazines:

Per round: 0.042 kg			
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**.338 Lapua Magnum**

Notes: Though perfected by Lapua of Finland, the development of this round actually began in 1983 with experiments by the Research Armament Company in the US to develop a new, long-range sniping round. The round is essentially a necked-down .416 Rigby case to accept a .338 bullet, and hot-loaded to produce high velocities. The round is very effective in penetrating both body armor and light vehicle armor, and has a satisfying range, and more military and police agencies are picking up rifles chambered for the .338 Lapua Magnum than ever before.

Other Names: 8.58x71mm Finnish

Nominal Size: 8.6x71mm

Actual Size: 8.61x69.2mm

Case Type: Necked

Weight: 50.38 kg per case of 1000; Price: \$810 per case

Magazines:

Per round: 0.04 kg	3-round box: 0.27 kg	4-round box: 0.33 kg	5-round box: 0.39 kg
8-round box: 0.58 kg	10-round box: 0.7 kg		

### **.338 Winchester Magnum**

Notes: This round is basically a .458 Winchester Magnum round necked down to .338. It was introduced for Winchester's Model 70 Alaskan rifle, but has since been picked up for chambering in several other rifles. It is a very flat-shooting round, and can take down something as big as a grizzly bear or a moose. Though it is not as popular as other Magnum loads, it is nonetheless fairly common worldwide.

Nominal Size: 8.58x63mm

Actual Size: 8.58x63.25mm

Case Type: Necked

Weight: 45.75 kg per case of 1000; Price: \$730 per case

Magazines:

Per round: 0.037 kg	3-round box: 0.25 kg	4-round box: 0.3 kg	5-round box: 0.36 kg
5-round clip: 0.18 kg	8-round box: 0.53 kg		

### **.340 Weatherby Magnum**

Notes: This round was developed to compete with the .338 Winchester Magnum in 1962. It has a larger case and higher velocity than the .338 Winchester Magnum, and the striking power is impressive. Like most Weatherby Magnums, barrel wear can be a problem and the round performs best in barrels of at least 26 inches. The .340 Weatherby Magnum can handle all North American game and most African game as well. However, the cases wear out fast and are good only for a few reloads.

Nominal Size: 8.5x72mm

Actual Size: 8.59x71.63mm

Case Type: Necked

Weight: 5.19 kg per box of 100; Price: \$166 per box

Magazines:

Per round: 0.042 kg			
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**.348 Winchester**

Notes: This round was developed for the Model 71 lever-action rifle in 1936. No other commercially-made rifle was ever chambered for this cartridge, and the cartridge and rifle stopped manufacture in 1958. This might have doomed the cartridge, but public interest kept it alive in small amounts, and then in 1987 the Japanese marketed a reproduction of the Winchester Model 71, and Remington decided to manufacture the .348 Winchester round again in small numbers. The .348 Winchester was basically made obsolete by later cartridges, particularly the .358 Winchester, and the .348 Winchester also formed the basis for several improved cartridges.

Nominal Size: 8.8x57mm

Actual Size: 8.84x57.4mm

Case Type: Necked

Weight: 4.4 kg per box of 100; Price: \$140 per box

Magazines:

Per round: 0.035 kg			
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**.350 Remington Magnum**

Notes: The .350 Remington Magnum was introduced in 1965, but by 1971, manufacture of the round had been discontinued by Remington as it was none too popular. However, Remington decided to re-introduce the round in 2002 for its Model 673 bolt-action rifle, but this rifle is no longer manufactured. The round has had a sort of checkered sales history, but is still being manufactured by Remington. The case is only medium sized, but is a bit fat, allowing for magnum performance. The round is able to duplicate .35 Whelan ballistics, but from a much shorter barrel, and is therefore useful in carbine-sized rifles. Its large cross-section limits magazine capacities, however.

Nominal Size: 9x55mm

Actual Size: 9.09x55.12mm

Case Type: Necked

Weight: 5.59 kg per box of 100; Price: \$144 per box

Magazines:

Per round: 0.038 kg			
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**.351 Winchester Self-Loading**

Notes: This round was designed to replace the deficient .35 Winchester Self-Loading cartridge when the Model 1905 rifle was upgraded to the Model 1907 rifle. It was also used, to a very limited extent, as a military round by the French in World Wars 1 and 2. The Model 1907 and the .351 Winchester Self-Loading cartridge were discontinued in 1957. The .351 Winchester Self-Loading cartridge has more power than the .357 Magnum, but the blunt-nosed bullet limits its range in a rifle. Most .351 Winchester Self-Loading rounds found today are probably handloads, though some carefully stored original rounds may exist, and it is still being loaded by local ammunition makers in Latin America.

Other Names: .351 WSL, .351 Winchester Auto

Nominal Size: 9x35mm

Actual Size: 8.91x35.05mm

Case Type: Straight

Weight: 2.19 kg per box of 100; Price: \$70 per box

Magazines:

Per round: 0.018 kg	5-round box: 0.17 kg	10-round box: 0.31 kg	
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**.356 Winchester**

Notes: This was another cartridge developed by Winchester for use with its Model 94XTR lever-action carbine. The round was introduced in 1983. It was named so to eliminate confusion with the .358 Winchester, but the .356 Winchester is a similar, though rimmed round. It is possible to chamber and

fire .358 Winchester ammunition from rifles designed for the .356 Winchester, but this is considered unsafe and dangerous.

Nominal Size: 9x51mm

Actual Size: 9.09x51.31mm

Case Type: Necked

Weight: 4.16 kg per box of 100; Price \$134 per box

Magazines:

Per round: 0.033 kg			
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**.358 Winchester**

Notes: This predecessor of the .356 Winchester is basically necked-up 7.62mm NATO case. Though many European rifles are built to chamber the round, few American rifles do anymore, though rifles chambering the .358 Winchester round were once more common. Though it is considered by many to be one of the best non-magnum rifle rounds ever designed, it can be inaccurate at short ranges.

Nominal Size: 9.09x51mm

Actual Size: 9.09x51.05mm

Case Type: Necked

Weight: 4.14 kg per box of 100; Price: \$132 per box

Magazines:

Per round: 0.033 kg	4-round box: 0.27 kg		
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**.358 Norma Magnum**

Notes: This round was developed by Norma of Sweden in 1959, but first introduced in the US. It was sort of a quasi-wildcat round at first; no rifles were manufactured to chamber the round, but several custom rifles were, and it was a year later before manufactured rifles were available to take the .358 Norma Magnum. It is nearly identical in performance to the wildcat .35-338 round (a .338 Winchester

Magnum necked up to .35 caliber), though it is not related to that round. It delivers performance comparable to the .375 H&H Magnum. It is overpowered for the North American hunting market, except perhaps against the Kodiak Bears of Alaska. The .358 Norma Magnum simply lost out to other rounds, particularly newer ones, delivering better performance or were not so overpowered.

Nominal Size: 9x64mm

Actual Size: 9.09x64mm

Case Type: Necked

Weight: 5.19 kg per box of 100; Price: \$166 per box

Magazines:

Per round: 0.042 kg	5-round box: 0.41 kg		
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**.375 A-Square**

Notes: This modified .378 Weatherby Magnum was designed to allow .378 Weatherby Magnum performance in a bolt action of 3.65 inches length. The result was successful at duplicating the .378 Weatherby Magnum for the most part, with only a modest loss of performance. It is easily handloaded, and is capable of handling most of the world's medium to large game.

Nominal Size: 9.5x73mm

Actual Size: 9.53x72.39mm

Case Type: Necked

Weight: 6.45 kg per box of 100; Price: \$206 per box

Magazines:

Per round: 0.052 kg			
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**.375 Flanged Nitro Express**

Notes: This round was introduced in 1899 primarily for use in single-shot and double-barreled break-open rifles, though BSA did make a variation of the Lee-Enfield Mk I chambering the .375 Flanged



Nitro Express round. It should not be confused with the similarly-named .375 Flanged Magnum round. The round is easily handloaded; this is good, because it has not been manufactured in a very long time. The round does have good striking power, and is adequate for game up to North American big game size.

Other Names: .375 Flanged Nitro Express 2 1/2", .370 Flanged

Nominal Size: 9.5x63.5mm

Actual Size: 9.53x63.5mm

Case Type: Straight

Weight: 4.53 kg per box of 100; Price \$144 per box

Magazines:

Per round: 0.036 kg	4-round box: 0.3 kg		
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**.375 H&H Magnum**

Notes: This was originally developed by the British firm of Holland & Holland in 1912. It is a belted, magnum cartridge that has formed the basis of endless wildcat cartridges and handloadings. It is now fired by many American and European rifles, especially those made for big game. It has long been considered the best cartridge for hunting in Africa, being powerful without producing an enormously heavy weapon to fire it. It is also popular with Alaskan hunters and wilderness guides.

Other Names: .375 Holland & Holland Magnum, .375 Flanged Magnum, .375 Belted Rimless Magnum, .38-55 Winchester

Nominal Size: 9.5x73mm

Actual Size: 9.53x72.39mm

Case Type: Necked

Weight: 6.45 kg per box of 100; Price: \$206 per box

Magazines:

Per round: 0.052 kg	3-round box: 0.35 kg	4-round box: 0.43 kg	4-round clip: 0.21 kg
5-round box: 0.5 kg			

**.375 JRS**

Notes: This round is an 8mm Remington Magnum necked up to .375 caliber. It is easily handloaded, using a variety of cases; this is good, because the .375 JRS has been for many years the province of wildcatters, with A-Square only since 1990 offering commercial loads. The .375 JRS is a bit more powerful than the .375 H&H Magnum, and the .375 JRS is ballistically most similar to the .375 Weatherby Magnum.

Other Names: .375 JRS Magnum

Nominal Size: 9.5x72mm

Actual Size: 9.53x72.14mm

Case Type: Necked

Weight: 6.44 kg per box of 100; Price: \$206 per box

Magazines:

Per round: 0.052 kg			
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**.375 Weatherby Magnum**

Notes: This round was developed in 1944 and was first chambered in a rifle in 1945. There are several similar rounds, both wildcat and commercial, but this does not mean that the .375 Weatherby Magnum can be loaded into rifles not designed for it. Manufacture continued until about 1953, but Weatherby no longer makes this round. It has slightly more power than the .375 H&H Magnum, but is identical for Twilight 2000 purposes. The .375 Weatherby Magnum is, in fact, a blown out .375 H&H Magnum case with a bit more propellant. The .375 Weatherby Magnum was re-introduced in Finland in 2001, and limited quantities are being manufactured again.

Nominal Size: 9.5x73mm

Actual Size: 9.53x72.39mm

Case Type: Necked

Weight: 6.45 kg per box of 100; Price: \$206 per box

Magazines:

Per round: 0.052 kg			
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**.375 Winchester**

Notes: This round was introduced in 1978 as a new round for the Model 94 Big Bore lever-action carbine. The case is based on the .38-55 case, though it is shorter and the case is stronger and heavier. The bullets are large and heavy, as is the propellant charge. The .375 Winchester is designed for hunting in heavy cover and vegetation and is also designed to compete with rounds like the .35 Remington and .444 Marlin in lever-action rifles. The .375 Winchester uses a large, flat-nosed bullet that has poor aerodynamics, and the velocity tends to fall off fast.

Nominal Size: 9.5x51mm

Actual Size: 9.53x51.31mm

Case Type: Straight

Weight: 3.66 kg per box of 100; Price: \$118 per box

Magazines:

Per round: 0.029 kg			
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**.378 Weatherby Magnum**

Notes: This round was introduced in 1953 to replace the .375 Weatherby Magnum. Despite the similarity to the .375 Weatherby Magnum, and several other rounds, most notably the .416 Rigby), the .378 Weatherby is a belted round not related to any other round of the time. In its first field testing in 1953, Roy Weatherby himself killed an elephant with the .378 Weatherby Magnum in one shot. The .378 Weatherby Magnum is noted for its penetration and damaging potential; it is even capable of penetrating light armored vehicles.

Nominal Size: 9.5x74mm

Actual Size: 9.53x74.17mm

Case Type: Necked

Weight: 6.61 kg per box of 100; Price: \$212 per box

Magazines:

Per round: 0.053 kg			
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The magazines presented here are based on *light alloy* magazines. For steel magazines, increase weight by 2%; for plastic or synthetic magazines; decrease weight by 8 percent.

**10.75x68mm Mauser**

Notes: This is a magnum Mauser rifle round that was introduced in the early 1920s and is still listed in RWS catalogs. The round was also once made by Kynoch of England, and rifles were made by Mauser, Browning, and Dumoulin for the 10.75x68mm Mauser. Old Western Scrounger and Barnes make bullets for the round. It is a fairly powerful round, but due to the blunt-nosed shape, penetration is only average. The round is also a softpoint, and cannot be counted upon to hold together inside the target; this is another strike against it as far as hunters are concerned (though it may be a plus when used on people).

Nominal Size: 10.75x68mm

Actual Size: 10.77x67.82mm

Case Type: Necked

Weight: 77.25 kg per case of 1000; Price: \$1240 per case

Magazines:

Per round: 0.062 kg	4-round box: 0.51 kg		
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**.38-40 Winchester**

Notes: This round was developed way back in 1874 as a blackpowder round. It made the jump to modern propellants shortly thereafter. It is a .44-40 round necked down to a bullet that is actually .401 caliber. It is primarily a round for lever-action rifles and revolvers. No rifles have been chambered for this caliber by major manufacturers since 1937, though it was once a very popular medium-power cartridge. Present factory loads are designed for revolvers, and handloading is necessary for full performance in rifles. The .38-40 Winchester is best used as a varmint round, as its range is unspectacular and its striking power not great.

Other Names: .38-40 Winchester Centerfire, .38-40 WCF

Nominal Size: 10x33mm

Actual Size: 10.18x33.02mm

Case Type: Necked

Weight: 3.36 kg per box of 100; Price: \$108 per box

Magazines:

Per round: 0.027 kg			
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**.40-72 Winchester**

Notes: This was another round specifically designed for the Winchester 1895 lever-action rifle, and it was discontinued when the rifle was in 1936. It was never a popular round, and not nearly as powerful as company literature would seem to indicate. Like the .38-72, it is very difficult to handload, and very rare these days.

Nominal Size: 10.3x66mm

Actual Size: 10.31x66.04mm

Case Type: Straight:

Weight: 5.51 kg per box of 100; Price: \$176 per box

Magazines:

Per round: 0.044 kg	5-round clip: 0.22 kg		
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**.44-40 Winchester**

Notes: This is a very old cartridge that was originally designed for the Winchester Model 1873 lever-action rifle. Virtually every American firearms manufacturer has offered a weapon in this caliber at some point in its history. It is said that the round has killed more game and people than any other in American history. This round was originally a blackpowder round, but it has not been loaded with black powder in some time (except by certain firearms enthusiasts). The round has decent range, but the trajectory is not very flat at ranges above 100 meters.

Other Names: .44 Winchester Centerfire, .44 Winchester

Nominal Size: 10.8x33.8mm

Actual Size: 10.9x33.27mm

Case Type: Straight

Weight: 31 kg per case of 1000; Price: \$500 per case

Magazines:

Per round: 0.025 kg			
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**.45-70 Government**

Notes: This round was developed for the US military and adopted by them in 1873. After its replacement by the .30-40 Krag in 1892, its popularity took off as a civilian cartridge, especially in single-shot rolling-block-type rifles. The .45-70 also continued in US military service well beyond 1900. American companies stopped producing the .45-70 in the 1930s, leaving it in the hands of handloaders, but recently it has staged a comeback with the popularity of Cowboy shooting, and factory loads are being made again. The unfortunate problem with the .45-70 is range and its curving trajectory beyond 150 meters.

Other Names: .45 Government, .45-70-330, .45-70-350, .45-70-405, .45-70-500

Nominal Size: 11.6x54mm

Actual Size: 11.63x53.47mm

Case Type: Straight

Weight: 56.75 kg per case of 1000; Price: \$910 per case

Magazines:

Per round: 0.045 kg			
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**.45-90 Sharps**

Notes: This is one of several rounds developed for .45-caliber Sharps rifles, in various case lengths. The .45 Sharps rounds typically used soft lead bullets and blackpowder charges; however, more modern bullets and loads were developed later on at various points in history. This round is primarily used today by the Cowboy Shooting enthusiasts; most are handloaded, though every so often some company makes some factory loads.

Other Names: .45-90 Sharps (Straight)

Nominal Size: 11.6x53mm

Actual Size: 11.63x53.34mm

Case Type: Straight

Weight: 5.66 kg per box of 100; Price: \$182 per box

Magazines:

Per round: 0.045 kg			
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**.45-100 Sharps**

Notes: This is basically a longer version of the .45-90 Sharps round, and the comments for the .45-90 Sharps apply to the .45-100.

Other Names: .45-100 Sharps (Straight)

Nominal Size: 11.6x66mm

Actual Size: 11.63x66.04mm

Case Type: Straight

Weight: 7.01 kg per box of 100; Price: \$224 per box

Magazines:

Per round: 0.056 kg			
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**.45-110 Sharps**

Notes: This is basically a longer version of the .45-90 Sharps round, and the comments for the .45-90 Sharps apply to the .45-110.

Other Names: .45-110 Sharps (Straight)



Nominal Size: 11.6x70mm

Actual Size: 11.63x69.85mm

Case Type: Straight

Weight: 7.43 kg per box of 100; Price: \$238 per box

Magazines:

Per round: 0.059 kg			
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**.45-120 Sharps**

Notes: Though in some ways this round may be thought of as a longer version of the .45-90 Sharps, the .45-120 actually has thicker walls to contain the much more powerful propellant charge. The round did not have a particularly long lifetime, since the Sharps Rifle Company failed in 1881, though several other rifles were chambered for the round. Most rounds after that point were handloaded, but in 1991-1992 the Eldorado Cartridge Company made a run of cases and factory loads, primarily for the Cowboy Shooting enthusiasts. It is rare to find a .45-120 Sharps round using modern propellants, though it is not unknown. Even in blackpowder form, it is a quite powerful round for a straight-walled cartridge.

Other Names: .45-120 Sharps (Straight), .45-120 Sharps 3 1/4"

Nominal Size: 11.6x82mm

Actual Size: 11.63x82.55mm

Case Type: Straight

Weight: 8.78 kg per box of 100; Price: \$280 per box

Magazines:

Per round: 0.07 kg			
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**.50 Browning Machinegun**

Notes: This round was originally designed as an antitank rifle round in 1918. The antitank rifle was quickly dropped, but John Browning designed a heavy machinegun around it instead. This weapon and several other companion pieces, as well as several other machineguns firing the same round, have formed the mainstay of Western heavy machineguns ever since. The .50 Browning Machinegun round is a huge, cigar-sized round that is effective against personnel and light armored vehicles. Recently, the round has been used in heavy sniper and antimaterial rifles, to great effect. It is also regarded as a quasi-sporting round, normally used in long-range target competitions. It can be used to take down everything from people to aircraft.

A SLAP (Saboted Light Armor Penetrator) version of the .50 Browning Machinegun round is available. Double all prices for this round. A match-quality round is also available; multiply all prices for this round by five. A subsonic version of this cartridge is available; triple all prices.

Other Names: .50 M-2, 12.7x99mm

Nominal Size: 12.7x99mm

Actual Size: 12.96x99.1mm

Case Type: Necked

Weight: 163.38 kg per case of 1000; Price: \$6450 per case, \$9675 per 1500-round belt

Magazines:

Per round: 0.131 kg	2-round box: 0.68 kg	3-round box: 0.88 kg	5-round box: 1.28 kg
7-round box: 1.68 kg	10-round box or drum: 2.28 kg	16-round box: 3.48 kg	20-round box: 4.28 kg
105-round belt: 13.72 kg	110-round belt: 14.38 kg	300-round belt: 39.21 kg	400-round belt: 52.28 kg
1500-round belt: 196.05 kg			

### **.401 Winchester Self-Loading**

Notes: This round was developed to be fired from the Winchester Model 1910 rifle, a modification of the Model 1907. The cartridge was discontinued by Winchester in 1936, but other companies continued to make the .401 Winchester Self-Loading until after World War 2. The .401 Winchester Self-Loading is the most powerful of Winchester's "Self-Loading" line of cartridges, and the only one of them useful against medium game. It can be a bit tricky to handload, but not too difficult.

Other Names: .401 WSL, .401 Winchester Auto

Nominal Size: 10.3x63mm

Actual Size: 10.31x63.5mm

Case Type: Straight

Weight: 5.3 kg per box of 100; Price: \$170 per box

Magazines:

Per round: 0.042 kg	4-round box: 0.35 kg		
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**.404 Jeffery**

Notes: This round was introduced in 1909, and was extremely popular for decades. It slowly declined in popularity over more decades, and almost disappeared completely. In 1993, Dynamit Nobel decided to manufacture the .404 Jeffrey again, and Ruger chambered a version of its M-77 rifle for it. A Canadian company named NASS also announced plans to manufacture the .404 Jeffery, along with Dakota Arms in the US, and with Norma, RWS, and Bertram making cases. The .404 Jeffery was designed specifically for bolt-action rifles. Modern loads generally use heavier bullets and more propellant than the original specifications called for. It is a good general purpose game cartridge, able to take down medium and heavy game, but is overpowered for light game.

Other Names: .404 Rimless Nitro Express, 10.75x73mm

Nominal Size: 10.75x73mm

Actual Size: 10.72x72.9mm

Case Type: Necked

Weight: 81.63 kg per case of 1000; Price: \$3270 per case

Magazines:

Per round: 0.065 kg	5-round box: 0.64 kg		
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**.405 Winchester**

Notes: This round was developed for the Winchester Model 1895 lever-action rifle, and that rifle was first chambered for the .405 Winchester in 1904. It was also chambered in a few other rifles, and Theodore Roosevelt was said to be quite fond of this round and Model 1895 rifle. Winchester stopped producing the round in 1936, but A-Square recently began producing it in small amounts. The .405 Winchester is perhaps the most powerful rimmed cartridge ever produced, and one of the most powerful straight-walled cartridges. The bullet is short, fat, and round-nosed, and loses velocity rapidly, making for poor range and penetration relative to its size. Handloading is said to be very difficult.

Nominal Size: 10.5x65mm

Actual Size: 10.46x65.53mm

Case Type: Straight

Weight: 5.63 kg per box of 100; Price: \$180 per box

Magazines:

Per round: 0.045 kg	5-round clip: 0.23 kg		
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**.416 Hoffman**

Notes: This round began as a wildcat round in the late 1970s, and was later adopted by A-Square as a proprietary cartridge. It is based on a necked-up and improved .375 H&H Magnum case. It basically duplicates the .416 Taylor and .416 Rigby, having the same weight of bullet and fractionally more powder, though the case in not as wide as those two rounds.

Nominal Size: 10.6x72mm

Actual Size: 10.57x72.39mm

Case Type: Necked

Weight: 7.94 per box of 100; Price: \$636 per box

Magazines:

Per round: 0.064 kg			
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**.416 Remington Magnum**

Notes: This round was introduced in 1988, and was the first American dangerous game cartridge since the .458 Winchester Magnum. It is basically an 8mm Remington Magnum necked up to .416 caliber, and uses very heavy bullets of 300-400 grains. (One unusual bullet for the .416 Remington Magnum is the 400-grain solid; it is literally a solid brass bullet instead of being a lead bullet with a brass jacket.) The .416 Remington has proved to be an unexpectedly popular round, and is produced in large numbers for a surprising amount of rifles. The power and penetration of a rifle firing .416 Remington Magnum is exceptional, but the recoil is too.

Nominal Size: 10.6x72mm

Actual Size: 10.57x72.39mm

Case Type: Necked

Weight: 79.38 kg per case of 1000; Price: \$3230 per case

Magazines:

Per round: 0.064 kg	5-round box: 0.62 kg		
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**.416 Rigby**

Notes: Until recently, only about 10,000 rifles total had been made to chamber this exotic cartridge – that’s 10,000 rifles, not 10,000 types of rifles. In 1992, Ruger added a .416 Rigby-firing rifle to its product line, and then some other companies took up the cartridge. The cartridge was designed with African hunting in mind, and despite its blunt-nosed profile, it is capable of taking down large animals and even penetrating light armor.

Other Names: .416 Rigby Magnum

Nominal Size: 10.2x74mm

Actual Size: 10.57x73.66mm

Case Type: Necked

Weight: 8.08 kg per box of 100; Price: \$646 per box

Magazines:

Per round: 0.065 kg	5-round box: 0.63 kg		
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**.416 Taylor**

Notes: This round, introduced in 1972, is a .458 Winchester Magnum round necked down to .416 caliber, or a .338 Winchester Magnum necked up to .416 caliber. It was rumored that Remington would make the first commercial lots, but A-Square did that instead. It is ballistically similar to the .416 Rigby cartridge, and can handle the same sort of game – able to handle most African game, and blow away most North American or European game.

Other Names: .416 Taylor Magnum

Nominal Size: 10.6x64mm

Actual Size: 10.57x63.5mm

Case Type: Necked

Weight: 69.63 kg per case of 1000; Price: \$1110 per case

Magazines:

Per round: 0.056 kg			
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**.416 Weatherby Magnum**

Notes: This is a relatively recent Weatherby development, being introduced in 1989 on the heels of the .416 Remington Magnum. The .416 Weatherby Magnum is based on a larger version of the .378 Weatherby Magnum case, and of course, has more propellant and power than the .416 Remington Magnum (but not enough to really show up in game terms in most cases, except as more recoil).

Nominal Size: 10.6x74mm

Actual Size: 10.57x74.17mm

Case Type: Necked

Weight: 8.14 per box of 100; Price: \$652 per box

Magazines:

Per round: 0.065 kg			
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### **.444 Marlin**

Notes: The .444 Marlin round was introduced in 1964. The first rifle to chamber it was the Marlin 336 lever-action rifle, but the Marlin 444 is where it got its fame. The .444 Marlin is basically a stretched .44 Magnum round. At short ranges, the .444 Marlin can be quite powerful, but the straight-walled cartridge and the flat nosed-profile do not lend it to long range.

Nominal Size: 11.28x56.5mm

Actual Size: 10.9x54.86mm

Case Type: Straight

Weight: 51.25 kg per case of 1000; Price \$820 per case

Magazines:

Per round: 0.041 kg			
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### **.450 Ackley Magnum**

Notes: This round was one of the largest cartridges that Parker Ackley ever designed. He used a full-length H&H case and necked it up to .45 caliber. The resulting case carries a large amount of propellant and a heavy, round-nosed bullet, but the necking-up process resulted in an almost-straight case with a very miniscule neck. Ackley produced the cartridges in his own company for a while, but in 1995, factory loads became available from A-Square. The round is powerful enough, and the case shaping process weakens the case enough, so that reloading the case is often impossible or even dangerous.

Nominal Size: 11.6x72mm

Actual Size: 11.63x72.39mm

Case Type: Straight

Weight: 76.88 kg per case of 1000; Price: \$1230 per case

Magazines:

Per round: 0.062 kg			
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**.458 Lott**

Notes: This round was developed after Jack Lott, armed with a .458 Winchester Magnum-firing rifle, was rammed (non-fatally) by an African buffalo after he had already shot it twice. In 1971, he designed what was essentially an improved version of the .458 Winchester Magnum, with a longer case containing more propellant and a heavier bullet. The .458 Lott was considered a wildcat round until 2002, when Hornady began manufacturing factory loads. Before that point, most rifles firing .458 Lott were hand-made or modified from existing rifles. It should be noted that most rifles that are chambered for .458 Lott can also fire .458 Winchester Magnum ammunition. The .458 Lott is a hard hitting round with excellent penetration, though range suffers from its round-nosed bullet.

Twilight 2000 Notes: Factory loads are not available; all .458 Lott ammunition is handloaded.

Nominal Size: 11.6x71mm

Actual Size: 11.63x71.12mm

Case Type: Straight

Weight: 7.55 per box of 100; Price: \$242 per box

Magazines:

Per round: 0.06 kg			
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**.458 Winchester Magnum**

Notes: This round was introduced in 1956 for a version of the M-70 called the African. It has since become a very popular cartridge, though limited by its size and power and the rifles necessary to chamber it. Though round-nosed, it is capable of taking down elephants and penetrating light armored vehicles and engine blocks.

Other Names: .458 Winchester Belted Magnum

Nominal Size: 11.6x63.5mm

Actual Size: 11.63x63.5mm



Case Type: Straight

Weight: 6.75 kg per box of 100; Price: \$216 per box

Magazines:

Per round: 0.054 kg	4-round box: 0.45 kg	5-round box: 0.53 kg	
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**.460 A-Square Short**

Notes: This is another of the Cartridges that Colonel Arthur Alphin developed after his run-in with a Cape Buffalo in Africa. This round is based on the .460 Weatherby case, with a slight neck. The cartridge is the same length as the .458 Winchester Magnum, but has better ballistics and power. Bullets are heavy and round-nosed, but achieve terrific velocities. However, recoil can be brutal.

Nominal Size: 11.6x64mm

Actual Size: 11.63x63.5mm

Case Type: Necked

Weight: 8.44 kg per box of 100; Price: \$676 per box

Magazines:

Per round: 0.068 kg			
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**.460 Weatherby Magnum**

Notes: This round was designed in 1958 to be the most powerful commercial rifle cartridge. It was made by necking up the .378 Weatherby case to accept a larger bullet. It was, until the commercial availability of .50-caliber-class rounds, the most powerful one you could find on a regular basis, though limited production rounds that are more powerful have been available for some time.

Nominal Size: 11.6x74mm

Actual Size: 11.62x73.91mm

Case Type: Necked

Weight: 9.8 kg per box of 100; Price \$784 per box

Magazines:

Per round: 0.078 kg			
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**.470 Nitro Express**

Notes: This round, first introduced in 1907, is one of the most long-lived of the Nitro Express cartridges. Rifles chambered for this round are not as heavy and do not have as heavy recoil as the heavier Nitro Express cartridges, yet still pack a pretty good wallop. Virtually all rifles chambered for this are double rifles, and are generally pretty expensive. The bullets are very heavy (500-600 grains), and though blunt-nosed, have excellent penetration, and they can bring down virtually any sort of game in the world, as well as penetrate light armored vehicles and bring down the occasional helicopter.

Other Names: .470 NE

Nominal Size: 12x83mm

Actual Size: 12.07x82.55mm

Case Type: Necked

Weight: 11.84 kg per box of 100; Price: \$948 per box

Magazines:

Per round: 0.095 kg			
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**.475 A&M Magnum**

Notes: This massive round was developed in 1958 by the Atkinson and Marquart Rifle Company. It is a .378 Weatherby Magnum case necked up to .475 caliber. It is a very powerful round, but not widely known; only a few custom rifles and even fewer commercial rifles have been chambered for .475 A&M Magnum. It is basically overpowered for North American game, and almost overpowered for all but the largest African animals. Recoil is brutal; Frank Barnes, a noted ammunition expert and author of *Cartridges of the World*, compares firing a magazine of .475 A&M ammunition to "going a couple of rounds with the world's heavyweight boxing champ."

Nominal Size: 12x74mm

Actual Size: 12.07x73.66mm

Case Type: Necked

Weight: 10.54 kg per box of 100; Price: \$844 per box

Magazines:

Per round: 0.084 kg			
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**.495 A-Square**

Notes: This is another one of Col. Arthur Alphin’s cartridges designed after his run-in with a Cape Buffalo. The original .495 A-Square cartridges were based on necked-up .460 Weatherby Magnum cases, but they are now commercially loaded by A-Square. The bullet is quite heavy at 600 grains, but velocity is only average, and recoil is relatively low. The heavy bullet, however, make for a hard-hitting round.

Nominal Size: 13x71mm

Actual Size: 12.95x71.12mm

Case Type: Straight

Weight: 93.63 kg per case of 1000; Price: \$1500 per case

Magazines:

Per round: 0.075 kg			
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**.500 A-Square**

Notes: This round was actually Col. Alphin’s first design in 1974, using the modified .460 Weatherby Magnum case. The .500 A-Square is the backbone of the A-Square cartridge line and the reason for forming the company. The recoil can be quite stiff, but stopping power is incredible.

Nominal Size: 13x74mm

Actual Size: 12.95x73.66mm

Case Type: Necked

Weight: 121.25 kg per case of 1000; Price: \$4850 per case

Magazines:

Per round: 0.097 kg			
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**.600 Nitro Express**

Notes: This round was the largest and most powerful of the English "elephant gun" cartridges until 1988. Despite its power, only a very small number of rifles have been chambered for this huge cartridge, which is the size of a small cigar. The .600 Nitro Express was designed specifically for hunting elephants, but is quite adequate for other game – humans, light armor, helicopters, etc.

Nominal Size: 15.24x76mm

Actual Size: 15.75x76.2mm

Case Type: Straight

Weight: 14.85 kg per box of 100; Price: \$476 per box

Magazines:

Per round: 0.119 kg			
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