

Chokes

The choke built into the muzzle of a shotgun is a feature that is unique to shotguns – it is not seen in either handguns or rifles. The choke is designed to control the spread of the shot cloud as it leaves the barrel. Properly designed, the choke can encourage the shot to begin spreading, creating a wider pattern, right away, or it can cause the shot to remain in a denser pattern, allowing the shotgun to be more effective on targets that are further from the shooter.

The choke is found inside the barrel of the shotgun, extending back from the muzzle. Some chokes are integral with the barrel – they were formed as the barrel was being made and they are not easily changed. These are typically referred to as “fixed” chokes. Fixed chokes were all that was available to shooters in the not-too distant past. If your gun came with a Full choke, then that was all you had unless you bought another barrel, or had a machinist remove some barrel material and change your choke.

Today, however, most shotguns offer the shooter interchangeable chokes – the muzzle of the shotgun is relieved and threaded, and the shooter can remove one choke tube and replace it with another, effectively changing what kind of pattern the gun will throw. Shotguns with interchangeable chokes likely make up over 99% of the new gun sales market in Canada today.

In North America, chokes are named based in their constriction of the bore. In all gauges, no choke is referred to as Cylinder. The chokes get progressively tighter, with Full choke typically being the tightest constriction. The following table illustrates the degree of constriction and the names associated with that choke. This table is for a nominal 12 gauge bore – the names are the same for the other gauges, but the constrictions are not the same.

Constriction in inches	North American name	British name
0.000”	Cylinder	Cylinder
0.005”	Skeet	
0.010”	Improved Cylinder	Quarter bore
0.015”	Light Modified	
0.020”	Modified	Half bore
0.025”	Improved Modified	
0.030”	Full	Full
0.035”	Extra Full	
0.040”	Super Extra Full	

You will note that the constrictions are in 0.005” increments – but chokes come in all sizes within this range. Perazzi, for instance, prefers to make their chokes in 0.004” increments, so a shooter cannot order a 0.025” constriction – instead, they will receive a 0.024” choke.

What chokes should I be using?

The choke is a primary means for the shooter to control the effective range of the shotgun. If the choke is too tight for a particular target presentation, the shooter is not able to take advantage of the spread of the pellet cloud, a huge advantage when shooting at moving targets. Conversely, if the choke is too open, it becomes difficult to consistently break targets at longer ranges. There are times when the shot cloud covers the target, but the pattern density is too low to ensure a broken target.

When all of the targets are relatively close, such as the game of skeet, Cylinder, Skeet or Improved Cylinder are more than adequate. As the distance to the target starts to increase, such as in sporting clays, Improved Cylinder will handle most targets on most ranges, but Light Modified and Modified are also good choices.

In the longer-range games, such as Trap, International Sporting or International Trap, chokes typically range from Modified to the Super Extra Full.

Most new guns with fixed chokes are typically in the middle of the road – from Light Modified through to Full.

To change or not to change, ...

Chokes can be somewhat controversial in the sporting clays games. There are those who will change chokes at every station, and others who never change chokes for years on end. Which one is right?

Those who change chokes all the time feel that they can tailor the pattern of the gun to match the target, and thereby increase the likelihood of them successfully breaking the target. They can, by changing choke tubes, control the size of the pattern at the range they expect to engage the target, thereby achieving what they consider to be the ideal pattern density.

On the other hand, those who don't change choke tubes argue that the choke in the muzzle is of no relevance if the target is centred in the pattern. They also argue that they have less stuff to pack around the course, and they don't have to think about anything other than breaking the target.

Both arguments have their merits, and the best shooters in the world belong to one group or the other. It would appear that this ultimately boils down to the personal choice of the shooter.