

Sonoran Desert Institute







Firearms Technology & Gunsmithing Glossary


Sonoran
Desert
Institute

Glossary

accurize – to improve the accuracy of (a firearm).

Acraglas – epoxy accurizing compound.

Allen wrench – a wrench for Allen screws, formed from a piece of hexagonal bar stock bent to a right angle.

autoloading – self-loading, semiautomatic.

back-boring – process of removing metal from the bore of a shotgun barrel to increase the bore diameter to a size larger than the muzzle diameter.

bakelite – any one of a class of thermosetting resins used as electric insulators and for making plastic ware, telephone receivers, etc.

ball bearing – a bearing consisting of a number of hard balls running in grooves in the surfaces of two concentric rings, one of which is mounted on a rotating or oscillating shaft or the like.

ball-peen hammer – a hammer having a hemispherical peen (ball peen) for beating metal.

barrel bedding tool – shaves out excess wood, leaves barrel channel smooth.

barrel channel rasp - used in inletting to scrape or abrade with a rough instrument.



barrel channel rasp

barrel crowning tool – muzzle crowning tool cuts a slight (less than square) target chamber on barrels.

bead blasting – (aka sand blasting) bead materials are blasted through a machine. Each bead type differs in its ability to remove deposits, and also with the finish it leaves behind.

benchrest – a tablelike support for a target rifle used in target practice.

black powder – an explosive powder consisting of saltpeter, sulfur, and charcoal, used chiefly in old guns fired for sport, in fireworks, and for spotting charges in practice bombs; black gunpowder.

blowback – the escape to the rear of gases formed during the firing of a weapon.

bluing – most commonly used by gun manufacturers, gunsmiths and gun owners to improve the cosmetic appearance of and provide a measure of corrosion resistance to their firearms.

bolt screw – screw with bolt head.

bolt-action – (of a rifle) equipped with a manually operated sliding bolt.

bolt face – that portion of a gun bolt that abuts the base of the cartridge case.

bore lapping – remove tooling marks left from the rifling process, ensure a dimensionally uniform bore, end to end

boresighting – The process by which the axis of a gun bore and the line of sight of a gunsight are made parallel or are made to converge on a point.

boxlock action – A type of action for a break-open gun where the lockwork is contained within a box-shaped housing.

break-open – means that the gun's barrel is (or barrels are) set on a hinge.



break-open

break action – A rifle mechanism lacking a magazine where separately carried ammunition must be manually placed in the rifles chamber or chambers for each firing.

breech bolt – A mechanism which opens and closes the breech in a carbine, machine gun, rifle, and the like; designed to push a cartridge into the chamber by sliding action.

breechblock – A movable steel block in the mechanism of a breech-loading gun that seals the breech opening of the barrel during firing.

bullet seat – overall length of finished loaded round with respect to the bullet touching the beginning of the rifling.

buttplate – metal plate on the butt end of a gunstock.

buttstock – the stock of a firearm in the rear of the breech mechanism.

caliber - The nominal diameter of a projectile of a rifled firearm or the diameter between lands in a rifled barrel.

caplock mechanism – was the final firing mechanism to be used for a musket; primary weapon ignition system used in rifles during the American Civil War.

carburized – to treat, combine, or impregnate with carbon, as when casehardening steel.

case-hardened – to make the outside surface of (an alloy having an iron base) hard by carburizing and heat treatment, leaving the interior tough and ductile.

cast-iron – an alloy of iron, carbon, and other elements, cast as a soft and strong, or as a hard and brittle, iron, depending on the mixture and methods of molding.

cast-off/cast-on – terms 'cast-off' and 'cast-on' are also used to describe stock configuration - refer to the deviation of the butt away from the center line of the gun. With cast-off, the center of the butt is moved in the direction of the shoulder of the shooter. The opposite is true of cast-on, the butt deviating toward the center of the shooter's chest.

centerfire – (of a cartridge) having the primer in the center of the base.

chatter mark – riblike marking on wood or metal, caused by vibration of a cutting tool.

cheekpiece – a smooth block fitted to the stock of a rifle or shotgun and resting against the face when aiming from the shoulder.

choke – the inside bore constriction at the muzzle end of a shotgun's barrel.

combination gun – A shoulder-held firearm that has two barrels; one rifle barrel and one shotgun barrel. Most combination guns are of an over/under design in which the two barrels are stacked vertically on top of each other, but some combination guns are of a side-by-side design in which the two barrels sit beside each other.

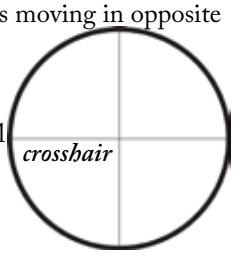
collet – is a holding device—that forms a collar around the object to be held and exerts a strong clamping force on the object when it is tightened.

collimator – used as gun sights in the collimator sight, which is a simple optical collimator with a cross hair or some other reticle at its focus.

counterboring – a tool for enlarging a drilled hole for a portion of its length, as to permit sinking a screw head.

crossbolt lock -a lock controlling two bolts moving in opposite directions.

crosshair – one of the fine wires or fibers, crossing in a focal plane of an optical instrument to center a target or object or to define a line of sight.



crosshair

cross-hatching – to mark or shade with two or more intersecting series of parallel lines.

crossover stock – gun mounted on the right-hand shoulder but sighted with the left eye.

cross-peen hammer – A hammer with a wedge-shaped surface at one end of the head.



cross-peen hammer

double-action – A double action revolver can fire the first round and then multiple rounds just by pulling the trigger; one does not have to cock anything first.

drift punch – is the name for a tool used for enlarging holes, or aligning holes prior to bolting or riveting metal parts together

drill press – a fixed style of drill that may be mounted on a stand or bolted to the floor or workbench.

dry firing – the practice of "firing" a firearm without ammunition.

electroless – being or involving deposition of metal by chemical means.

exploded view – a diagram, picture or technical drawing of an object, that shows the relationship or order of assembly of various parts.

extractor rod head – machined aluminum clamp maintains a secure hold of the extractor rod for fast, easy removal

faceplate – (on a lathe) a perforated plate, mounted on the live spindle, to which the work is attached.

falling-block – A falling-block action (aka sliding-block action) is a single-shot firearm action in which a solid metal breechblock slides vertically in grooves cut into the breech of the weapon and actuated by a lever.

fiddleback – (in wood stock) having close, fine, dark stripes.

field stripping – to take apart (a weapon) to the extent authorized for routine cleaning, lubrication, and minor repairs.

firing pin – the pin that strikes the cartridge primer in the breech mechanism of a firearm.

flintlock mechanism– has a piece of flint which is held in place in between a set of jaws on the end of a short hammer. This hammer is pulled back into the "cocked" position. When released by the trigger, the spring-loaded hammer moves forward, causing the flint to strike a piece of steel called the "frizzen".

florentining – pertaining to or designating the style of art developed in Florence during the late 13th to 15th centuries.

forcing cone – the tapered section at the rear of the barrel of a revolver that eases the entry of the bullet into the bore.

free boring – the area ahead of the bullet ogive in a rifle barrel to which there is no rifling, once the cartridge is fired the bullet travels freely in the barrel until the bullets ogive contacts the rifling

front sight – the sight of a weapon nearest the muzzle.

fouling – the accumulation of unwanted material on solid surfaces. The fouling material can consist of either powder, lubrication residue, or bullet material such as lead or copper.

gauge – a unit of measurement used to express the diameter of the barrel.

gunstock – the stock or support in which the barrel of a shoulder weapon is fixed.

hammer – strikes the firing pin in a firearm, which in turn detonates the impact-sensitive cartridge primer.

handguard – is a guard attached to the front of a firearm to grip the weapon from the front. It allows the user protection from the barrel, which may become very hot when firing.

headstamp – the markings on the bottom of a cartridge case designed for a firearm, tells who manufactured the case.



headstamp

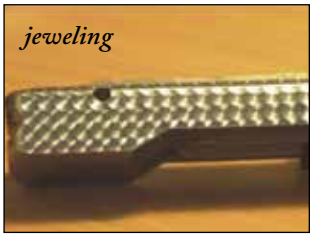
headspace – the distance measured from the part of the chamber that stops forward motion of the cartridge to the face of the bolt.

headstock –part of a lathe, contains high-precision spinning bearings.

inlett – refers to a hollowed or otherwise empty portion of a gun stock in which some portion of the gun, such as the lock or trigger guard, may be installed.

jacket – metal, usually copper, wrapped around a lead core to form a bullet.

jeweling – a cosmetic process to enhance the looks of firearm parts, such as the bolt. The look is created with an abrasive brush and compound that roughs the surface of the metal in a circular pattern.


jeweling

lapping – a machining operation, in which two surfaces are rubbed together with an abrasive between them, by hand movement or by way of a machine.

length of pull – distance between the trigger and the butt end of the stock of a rifle or shotgun.

lever-action – A rifle mechanism activated by manual operation of a lever.

lin-speed – (type of oil) composed of specially treated and highly refined linseed oil for finishing gunstocks.

lock washers – washer that prevents the nut from loosening.

mainspring – the principal spring in a mechanism.

Martini-Henry – a breech-loading single-shot lever-actuated rifle adopted by the British Army.

match grade – refers to firearm parts and ammunition that are suitable for a competitive match.

matchlock – an old form of gunlock in which the priming was ignited by a slow match.

metal plating – a surface covering in which a metal is deposited on a conductive surface.

micrometer – is a device incorporating a calibrated screw used widely for precise measurement of small distances.

muzzle: – the part of a firearm at the end of the barrel from which the projectile will exit.

muzzleloader – Any rifle with a solid breech, thereby necessitating loading through the muzzle of the rifle.

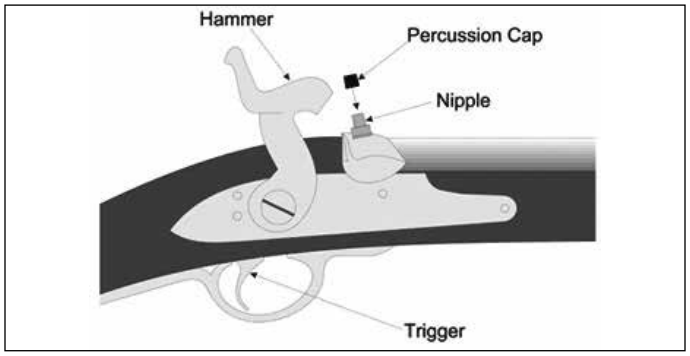
orthographic projection – Orthographic projection (aka orthogonal projection) is a means of representing a three-dimensional object in two dimensions.

overarm support – device on a horizontal milling machine that reaches over the workpiece and supports the spindle or arbor.

Parkerizing – aka phosphating, is a method of protecting a steel surface from corrosion and increasing its resistance to wear through the application of an electrochemical phosphate conversion coating.

pawl – A hinged or pivoted device adapted to fit into a notch of a ratchet wheel to impart forward motion or prevent backward motion.

percussion cap – where a percussion cap is placed over a nipple and a hammer must strike the rim of the cap to ignite a powder charge in the barrel.



pinfire – of or pertaining to a cartridge fitted with a pin that, when struck by the hammer of the firearm, causes the cartridge to explode.

pistol grip – a handle or grip, as of a rifle or saw, shaped like the butt of a pistol.

Plastigauge – is a measuring tool used for measuring plain bearing clearances.

plinking – informal target shooting done at non-traditional targets such as tin cans, glass bottles, and balloons.

pump-action – a rifle or shotgun is one in which the handgrip can be pumped back and forth in order to eject a spent round of ammunition and to chamber a fresh one.

reaming – the use of a multi-point cutting tool to smooth or enlarge a previously drilled hole.

rear sight – the sight nearest the breech of a firearm.

recoil – to spring or fly back, as in consequence of force of impact or the force of the discharge, as a firearm.

reticle – a network of fine lines, wires, or the like placed in the focus of the eyepiece of an optical instrument.

rimfire – A rifle cartridge which contains the priming mixture within the rim of the base of the cartridge. (Not Reloadable).

rolling-block – a form of firearm action where the sealing of the breech is done with a specially shaped breechblock able to rotate on a pin.

round – a single cartridge.

safe-edge file – a file that is left uncut on at least one edge and used for filing near a corner so as not to cut the surface at right angles

safety lever – used to help prevent the accidental discharge of a firearm.

saltpeter – the form of potassium nitrate, that occurs naturally, used in the manufacture of fireworks, gunpowder, etc.

sandblasting – a blast of air or steam laden with sand, used to clean, grind, cut, or decorate hard surfaces, as of glass, stone, or metal.

scattergun – firearm that is a double-barreled smoothbore shoulder weapon for firing shot at short ranges

scopemounts – brackets that hold a scope in place on a rifle


scopemounts

Screw Check'r – allows you to determine the size, pitch, tap drill size, clearance drill size, length and diameter of Metric screws.

screw pitch gauge – used to measure the pitch or lead of screw threads.

screw-cutting lathe – a lathe capable of cutting very accurate screw threads via single-point screw-cutting.

semi-automatic – automatically ejecting the cartridge case of a fired shot and loading the next cartridge from the magazine but requiring a squeeze of the trigger to fire each individual shot.

semi-automatic pistol – a type of handgun which uses a single chamber and barrel, with a mechanism powered by the previous shot to load a fresh cartridge into the chamber.

set screw – a type of screw generally used to secure an object within or against another object.

shell – a payload-carrying projectile which, as opposed to shot, contains an explosive or other filling

shotgun – a firearm that is usually designed to be fired from the shoulder, which uses the energy of a fixed shell to fire a number of small spherical pellets called shot, or a solid projectile called a slug.

shotshells – a self-contained cartridge loaded with lead shot or a shotgun slug which is designed to be fired from a shotgun.

sight-in –process to make certain that your rifle shoots where it is aimed.

single-shot – requiring loading before each shot; not having or using a cartridge magazine.

slide-action – A rifle mechanism activated by manual operation of a horizontally sliding handle almost always located under the barrel aka Pump action.

slide-lock – A type of action, where the moving parts are located on the side lock plates inletted in the stock.

small-bore – of, noting, or relating to a .22-caliber firearm.

smoothbore – having a smooth, bore; not rifled.

spokeshave – a cutting tool having a blade set between two handles, originally for shaping spokes, but now in general use for dressing curved edges of wood and forming round bars and shapes.



spokeshave

stock fitting – a process involving the evaluation of and if necessary, the change of stock dimensions to fit the unique size and shape of an individual (usually shotgun) shooter.

straight-peen hammer – has the wedge oriented parallel to the hammer's handle.

swage – to reduce an item in size by forcing through a die. In internal ballistics, swaging refers to the process where bullets are swaged into the rifling of the barrel by the force of the expanding powder gases.

swaged bullet – bullet that is formed by forcing the bullet into a die to assume its final form.

swaged choke – constriction or choke in a shotgun barrel formed by a swaging process that compresses the outside of the barrel.

tack-weld – to join (pieces of metal) with a number of small welds spaced some distance apart.

tailstock – a device often used as part of an engineering lathe, or wood-turning lathe.

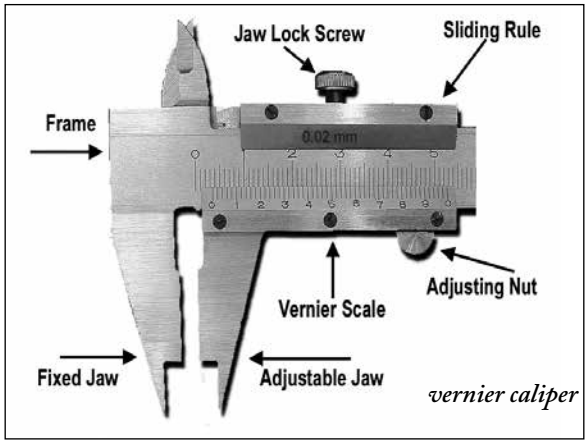
taper-turning – basic machining process.

thermocouple pyrometer – a non-contacting device that intercepts and measures thermal radiation, a process known as pyrometry. This device can be used to determine the temperature of an object's surface.

trigger – A trigger is a mechanism that actuates the firing sequence of a firearm.

trigger guard – A trigger guard is a loop surrounding the trigger of a firearm and protecting it from accidental discharge.

try-stock – a sample of a stock used to determine the proper fit of a stock.



vernier caliper

vernier caliper – additional scale which allows a distance or angle measurement to be read more accurately than directly reading a uniformly-divided straight or circular measurement scale.

wadcutter – special-purpose bullet specially designed for shooting paper targets, usually at close range and at subsonic velocities typically under 800 ft/s (240 m/s). A wadcutter has a flat or nearly flat front that cuts a very clean hole through the paper target, making it easier to score and ideally reducing errors in scoring the target to the favor of the shooter.

wheel lock – an old type of gunlock in which sparks are produced by the friction of a small steel wheel against a piece of iron pyrites.



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