

FORSTER[®]
PRODUCTS

Straight shooters



**FROM THE INSIDE OUT, A COMPLETE LINE
OF RELOADING AND GUNSMITHING TOOLS.**

Forster Products®

Straight shooters since 1935

Forster Products is a leading supplier of high-quality Reloading and Gunsmithing Tools designed to expand the capabilities and improve the performance of reloading and shooting enthusiasts.





Reloading Tools (begins on page 4)

Whether you are reloading your own ammunition to improve accuracy or save money, we give you product options that are second to none. Made from well-crafted components specific to your firearm, our tools give you simplicity, precision, and uncompromising performance so you achieve superior results.

Gunsmithing Tools (begins on page 22)

Our Gunsmithing Tools are made with the same high standards as every product that carries our name. These sophisticated, yet easy-to-use, tools can help increase your firearm's reliability, functionality, and durability.



ISO 9001:2015

Forster adheres to ISO 9001:2015
Quality Management System Standards.
Forster Products' certificate
CERT-05739-2006-AQ-HOU-ANAB is
accredited by independent auditor DNV-GL.

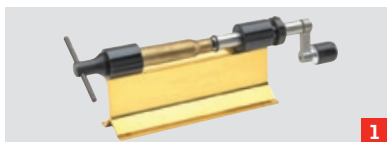


Forster Products®

Straight shooters since 1935

Reloading Steps

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1 PREP CASE	6
How well you sort and prepare your cases affects the accuracy and precision of your ammunition and shooting performance.	
2 LUBE AND SIZE CASE	12
To form the fired case to your rifle chamber, align it in a precision SAAMI-profile die and apply the properly calibrated force with a reloading press.	
3 PRIME CASE	16
Clean the primer pockets to remove residue or crimps, if needed, then seat primers consistently and under flush.	
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Powder measurement and charging tools ensure that a consistent charge of propellant powder is dispensed into primed cases.	
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Seat bullets straight and to consistent depths off the bullet's ogive. Uniform case neck tension around the bullet is another key to precision.	
6 INSPECT AND MEASURE	20
Inspection and measurement tools improve your shooting accuracy and precision (repeatability). Identifying and controlling variables will give you the smallest groups.	
7 CARTRIDGES	21
Tools for refining, measuring and, when necessary, reworking cartridges to enhance accuracy.	



Many accomplished reloaders develop their own methodology and techniques over time, and you will find that you won't need to perform every possible reloading step. As you become more proficient in reloading, you will fine-tune your processes based on available equipment, the firearms you own, and the type of shooting you will be doing most often.



**FORSTER
PRODUCTS**
Straight shooters

The Case Conditioning System

The proven way to control costs and produce precise ammunition is to prep and condition cases yourself.

The Case Conditioning System is built around a miniature lathe that not only trims the case neck to length, but also fits with the industry's widest range of compatible conditioning tools. Four staggered-tooth cutting edges guide these trimmers to fast, smooth, chatterless cutting for perfectly square case mouths. Each bearing is honed by hand to fit the cutter shaft.

Since cases stretch when fired, the first step in reloading is to return them to a consistent length, ideally the minimum that the Sporting Arms and Ammunition Manufacturers' Institute (SAAMI) specifies. Measure each case from base to mouth and then trim to the correct depth. Trimming will improve the precision of your handloads, as well as safety, by ensuring that the case mouth will not contact the chamber mouth.

Original Case Trimmer

Trims most standard calibers from 17 cal (.171") to 460 cal (.459"), such as 223 Rem, 308 Win, 6.5 Creedmoor, and 30-06. Also available in a Kit with an assortment of collets and pilots.



Classic Case Trimmer

Trims larger and classic black powder calibers, such as 45-100, 50 AE, and 50-70 Gov. Also available in a Kit with an assortment of collets and pilots.



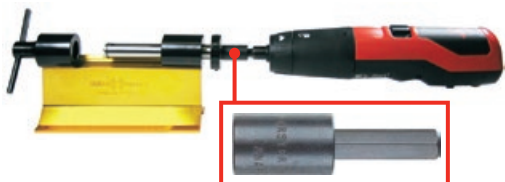
Power Case Trimmer

The Power Case Trimmer accepts 17 cal to 460 cal cases, in a special vertical base that you can align with your drill press for fast, high-volume Case Trimming and Conditioning.



Power Adapter

The Power Adapter (sold separately) allows you to use any power screwdriver or drill instead of the crank on the Original or Classic Case Trimmer. The Adapter is useful for automating all case neck and primer pocket conditioning.



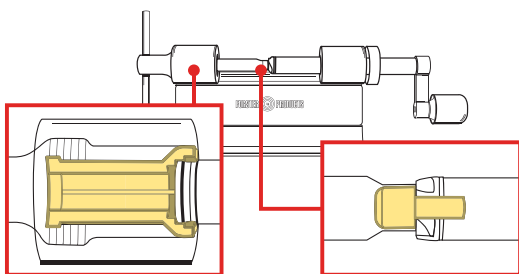
Power Adapter

Case Trimmer Collets and Pilots

A Case Trimmer **Collet** securely holds and centers the case head for neck and shoulder operations. Forster Collets are unique in that they ensure that variations in case head diameter will not affect trim length. Collets are required for all Case Trimmers.



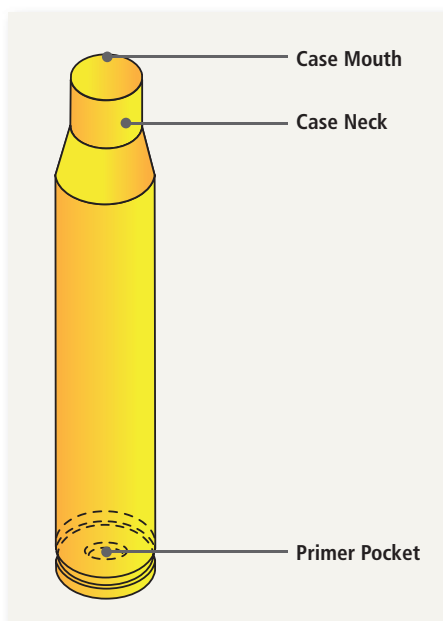
The Case Trimmer **Pilot**, ordered according to the bullet diameter, functions as a mandrel that precisely guides the Case Trimmer cutter. A Pilot is needed for all case trimming, and it is also compatible with the Co Ax[®] Case & Cartridge Inspector (p. 20).



Collet

Pilot

Accessories for the Case Conditioning Process



Primer Pocket



Primer Pocket Chamfering Tool

Chamfers military primer pockets, removing most, if not all, of the crimp from military cases.



The Chamfering Tool and Primer Pocket Cleaner are used with the **Primer Pocket Center**, which supports the case mouth in the Collet side of the Case Trimmer.



Primer Pocket Cleaner

Easily and quickly removes primer and powder residue.

Case Neck and Mouth



Outside Neck Turner

Removes excess brass from the outside neck wall.



Caliber-specific **Pilots** expressly designed for the Outside Neck Turner are required.



3-in-1 Case Mouth Cutter

Simultaneously chamfers the case neck inside and outside diameters and trims the case to length, all in one fast, easy step, with U.S.-made carbide hard metal. Available in several common calibers.



Neck Reamer

Tool-steel blades remove excess brass from inside the case neck wall, as well as the "dreaded donut" of material that can accumulate after repeated firings.



Cutter Shafts

Included with Case Trimmer to square case mouths. Unique to the industry are the Trimmer's sharp, staggered-tooth blades for smooth case mouth cutting. (Power, Original, and Classic Cutter Shafts shown.)

Web

To find the Case Trimmer model, Collets, Pilots, and Trimmer Accessories that work with your particular caliber, see our online tool at <http://search.forsterproducts.com>.



Hand-held Case Conditioning Tools

Hand-held Outside Neck Turner

Turning eccentric case necks to a consistent wall thickness greatly improves accuracy. When the Case Trimmer is back at your shop, take advantage of the Hand-held Outside Neck Turner anywhere, with its long-life carbide cutter. Fine-tune your neck wall thickness to within .0005".



Required caliber-specific Pilots (left) and optional Large Case Holder (right) are also available.

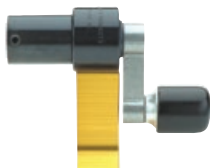
Inside-Outside Deburring Tool

Double-ended equipment removes burrs and sharp edges. Can be used by hand or attached to the Deburring Tool Base.



Deburring Tool Base

Install the standalone Base on your workbench to have instant access and ease-of-operation when deburring large quantities of cases with the Inside-Outside Deburring Tool. Crank by hand or attach the Power Adapter (p. 7).



Web

A variety of REPLACEMENT PARTS are listed at **forsterproducts.com**.



Co-Ax[®] Press

The simplest, most powerful and most accurate press on the market. Co-Ax Reloading Press will give your rounds that famous Forster Products precision.

Co-Ax Press is the multitasking workhorse that serves three critical functions in the reloading process:

2 LUBE AND SIZE CASE

Holds the sizing die and case in true co-axial alignment.

3 PRIME CASE

Consistently and squarely inserts the primer into the sized case.

5 BULLET SEATING

Presses bullet within caliber-specific seater die to the proper depth in the case.

Co-Ax Press boasts several unique features, such as snap-in, snap-out die changing that takes all of two seconds!

A self-contained spent-primer catcher system helps keep all working parts free of dirt and abrasives. Dual floating guide rods help ensure perfect alignment.

What else distinguishes the GOLD STANDARD of reloading presses?

- Requires very little force.
- Mounts virtually anywhere.
- Accepts any standard 7/8" - 14 reloading die.
- Plenty of working room for either right- or left-handed operators.
- Shell Holder Jaws are designed to float with the die, which allows the case to center precisely in the die. The top of the stroke comes to a rock-solid stop for consistency of headspace and bullet seating dimensions.
- Manufactured in the U.S.

Case Sizing

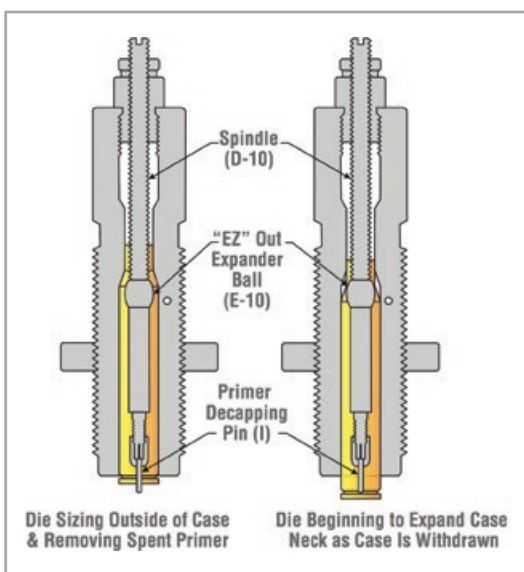
Case sizing involves using the Co-Ax Press to form a properly lubricated cartridge case through the interior of a resizing die.

The sizing die's interior is slightly larger than a new cartridge case. This resizing process returns the fired brass case to a size that will always allow it to fit back into a minimum-sized SAAMI chamber.

Forster Products manufactures two types of **Bench Rest® Sizing Dies**:

- ▶ **Full Length Sizing Die** – Sizes the case neck and body, sizes shoulder to set headspace (length), deprimers, and expands the case neck
- ▶ **Bushing Bump Neck Sizing Die** – Sizes case neck for desired bullet tension, deprimers, and sizes shoulder to set headspace (length)

As indicated, all sizing dies feature a decapping pin that automatically deprimers (that is, it removes the spent primer from the primer pocket).



Cutaway of Full Length Sizing Die

Bench Rest Sizing Die

Features

- Manufactured from the finest quality steel.
- Carefully machined on super precision chucking lathes to very tight tolerances.
- Manufactured with one-piece reamers to help guarantee concentricity between all machined diameters.
- Heat treated and oil quenched in atmospherically controlled furnaces to an extremely tough Rockwell hardness.
- Hand polished in a high-speed lathe both before and after heat treating to guarantee an extra-fine finish.
- Full Length Sizing Dies equipped with our exclusive “E-Z” Out™ Expander Ball, which helps solve the problem of keeping case necks concentric during the neck expanding operation.

► Full Length Sizing Die

Because they offer maximum flexibility, most reloaders start their Bench Rest Dies collection with the Full Length Sizing Die. The die sizes the case neck, the body, and the shoulder to set headspace – and then removes the spent primer and expands the neck.

The Full Length Sizing Die produces ammunition that is very concentric. Use after each firing or after several firings, when the resulting brass flow will require the case to be full-length sized.

A precisely positioned vent hole located in the threaded or recessed portion of the die body prevents excessive, trapped air and lubricants from damaging the die's components or your cases.

Full Length Sizing Dies are available in more than 70 calibers.





Full Length Sizing Dies are also available as part of the **Bench Rest Die Set** with a Bench Rest Seater Die.

Neck Sizing

► Bushing Bump Neck Sizing Die

The Bushing Bump Neck Sizing Die brings you an advanced level of precision by allowing you to precisely control the amount of bullet tension in your reloaded cartridges. A one-step neck sizing reduction/shoulder bump operation keeps your case necks straighter.

This die improves accuracy and prolongs case life because the body of your case maintains its fire-formed “glove” fit to your rifle’s chamber. At the same time it “bumps” the shoulder of the case to maintain excellent case neck concentricity.

Over 90 available bushings allow case necks to be sized to your exact requirements. The Bushing Bump Die is available either individually or in a kit with the three pre-selected bushings most likely needed to produce accurate ammunition with proper neck tension.



Case Sizing Parts and Accessories

Replacement Parts

All individual Sizing Die components and Decapping Units are available separately.

See **forsterproducts.com** for complete lists, including compatibility of replacement parts among dies of different calibers.



Sizing Lubricants

Lubing brass prevents the case from getting stuck in the reloading die. The best method is to lube each case with the oil-based **High Pressure Case Sizing Lubricant**, using your fingers.

Use **Case Neck Graphiter** instead of oil lubricant when lubing the inside diameter of a case neck to prevent the possibility of gunpowder contamination.



Stuck Case Remover

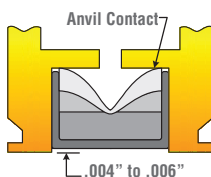
Case stuck in the resizing die? It can happen to the best handloaders on occasion. Forster Products offers a simple, inexpensive Stuck Case Remover to work on Forster dies or any sizing dies with $\frac{1}{4}$ "-28 or 10-32 thread at the top.

The unique design even works on stuck cases that have the decapping rod and expander ball stuck in the die.



Prime Case

Primers are small metal-clad cups that fit into the case's primer pocket, creating a spark when hit with the firing pin. Consistent powder ignition is mandatory for ammunition to perform efficiently.



When reloading a reconditioned case, you should first remove any powder and primer residue (see Primer Pocket Cleaner and Chamfering Tool, p. 8).

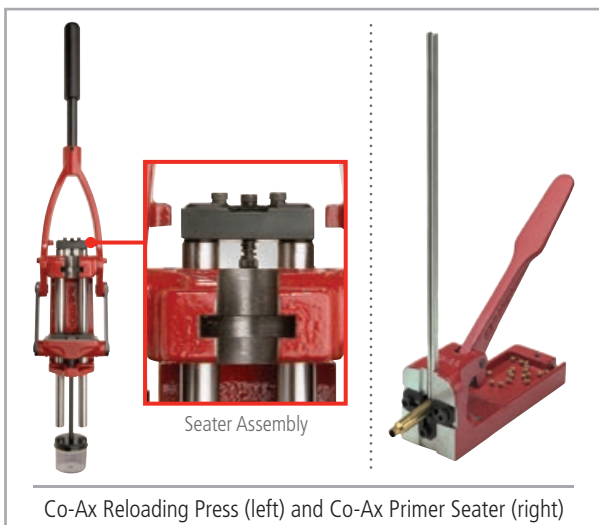
Finally, before adding powder to a new or reconditioned case, you must seat the primer to the correct depth.

Co-Ax® Reloading Press

The Co-Ax Reloading Press features a Primer Seater Assembly. This accurate seating feature is built into the Press and seats to very consistent depths.

Co-Ax® Primer Seater

The standalone Co-Ax Primer Seater allows for fast, easy priming. Set the jaw for a particular caliber, load the tube, and you're ready to seat primers into multiple cases of that caliber.



Primer Tube Loader

The innovative Primer Tube Loader aligns primers in the Co-Ax Primer Seater's feed tube with just a few flicks of the wrist. No more fidgeting to flip over half your primers on the tray.

4 CHARGE CASE WITH POWDER

Charge Case with Powder

Powder measurement ensures that a uniform charge of propellant powder is dispensed into primed cases. A powder measure or scale will speed your handloading operation and make charges consistent.

The **Bench Rest® Powder Measure** keeps your powder flowing evenly. Its ingenious design – with the long, narrow reservoir – minimizes the amount of powder shearing for each and every charge.



The vernier scale on the charge arm lets you control minute changes in capacity. Achieve repeatability within 1/10th of one grain while throwing a charge every 4 seconds.

The Forster Products **Powder Funnel with Long Drop Tube** will cleanly fill cases without any need to compress the charge during bullet seating. The momentum of the gunpowder dropping down the 5¼" long tube results in a larger volume by weight. Using the Powder Funnel typically adds from three to eight more grains of powder to your load, depending on the internal capacity of your case.



4 Charge Case w/ Powder



Seat Bullet

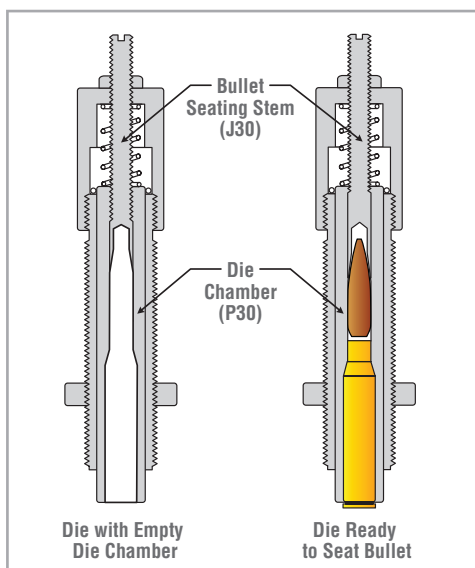
Bullet seating is the art and science of pressing a bullet into a case to the proper depth. The seating depth controls the interior volume of the cartridge case, playing a large role in determining the optimum chamber pressure.

Prepping cases to obtain the proper bullet tension (that is, the “grip” on the bullet) is also critical to proper seating.

This is the last and one of the most important steps in reloading, which you will want to master in order to get your projectiles spinning consistently toward the target.

Forster Products produces two types of **Seater Dies**:

- ▶ **Bench Rest® Seater Die** – Holds the bullet, case, and seating stem in perfect alignment when the bullet is seated
- ▶ **Ultra™ Micrometer Seater Die** – Has an integral micrometer that fine-tunes your precise seating depth, also holding the bullet, case, and seating stem in perfect alignment



Cutaway of Bench Rest Seater Die

Bench Rest Seater Dies

Features

- Innovative, caliber-specific Die Chamber supports the entire outside diameter of the sized case, rather than just the bullet and case neck.
- Forster seating stems have plenty of clearance to allow any bullet to be seated off the ogive and not the tip.

► Bench Rest Seater Die

Forster created the first die of its kind on the market, and it's still the best straight-line Seater Die anywhere.

The sliding Die Chamber has a concentric bullet channel just slightly larger than the bullet diameter.

This tight fit ensures straight-line (co-axial) seating. The hand-polished Bullet Seating Stem provides consistent reloads.

The Seater Die adapts to most reloading presses and comes standard in 80 calibers or as part of the Bench Rest Die Set with a Full Length Sizing Die (p. 13).



► Ultra Micrometer Seater Die

Includes all the popular straight-line seating features of the original Seater Die, plus an ultra-accurate micrometer for adjusting bullet seating depth. The Micrometer allows fine-tuning in either direction – easily adjustable to .0005". Gradations at increments of .001" are clearly marked.

After you have seated your bullet close to the desired depth and measured it, simply adjust the Micrometer stem up or down to the desired depth and the cartridge will be exactly the length you need. This clever die eliminates much of the trial and error that was once associated with seating accurate rounds.

Also available in 80 calibers, and several replacement parts and accessories are sold at **forsterproducts.com**.



Inspect and Measure

Your handloaded ammunition will ideally fire the smallest groups possible, and the best way to control precision groups is to refine your processes to eliminate variability, based on accurate data.

Even new cases from the same batch have slight differences. Brass actually liquefies as it fire-forms to the gun's chamber. Inspection and measurement tools will help you eliminate variation to improve shooting safety, consistency, and repeatability.

► During Reloading

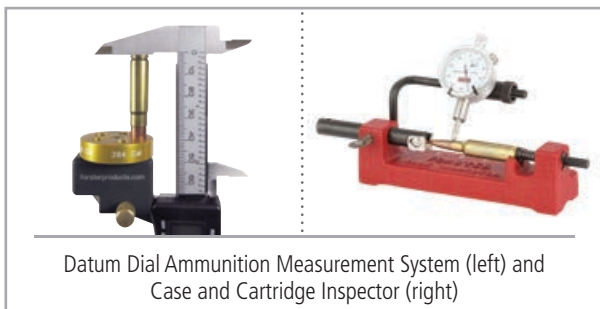
Refine case sizing and bullet seating operations with the patented **Datum Dial™ Ammunition Measurement System**.

The easy-to-use and versatile Datum Dial reliably measures relative distances between selected points on cases, bullets, and cartridges. It helps you reduce excessive case headspace, which may lead to dangerous case separation. Datum Dial also works to measure bullets and cartridges, for use in adjusting the seater die to the optimum seating depth.

► During Reloading and for Reloaded Ammunition

The **Case and Cartridge Inspector** measures many critical dimensions: neck wall thickness, case neck concentricity, and bullet runout of your loaded ammunition.

Measurements are in increments of one-thousandth of an inch for superb accuracy. The Inspector is unique because it checks both the bullet and case alignment in relation to the centerline (axis) of the entire cartridge or case. Accommodates cartridges from 204 Ruger to 338 Lapua Mag.



Datum Dial Ammunition Measurement System (left) and
Case and Cartridge Inspector (right)

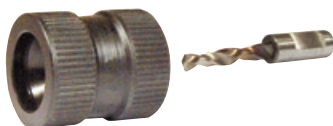
Cartridges

Forster tools for use on loaded rounds (cartridges).

► Hollow Pointer

Improve performance and save money by making your own hollow-pointed rounds. Hollow-pointing lets shooters fine-tune bullet weight to improve ballistics. Use the Hollow Pointer attachment on the Original Case Trimmer (p. 6) to drill cavities in the noses of cast or jacketed soft-nose bullets.

Control the hollow point size and depth to fit your own requirements with this Forster-exclusive DIY tool. Available in either 1/8" (usually used for handgun rounds) or 1/16" (usually used for rifle rounds) drill sizes.



► Bullet Puller

You shouldn't need to pull a bullet often, but nothing compares to the Bullet Puller when duty calls. For example, you may have extra rounds that are not required for load development testing. Or, occasionally you may make a mistake or change your mind. This tool will allow you to disassemble those rounds and reuse valuable components.



The Standard model fits any 7/8" -14 reloading press, and the Universal model works with Co-Ax[®] Press (p. 11) and many other presses.

The Collet grips the bullet as you manually lower the ram, pulling the bullet from the case. Order interchangeable Bullet Puller Collets according to the caliber (bullet) diameter.

Gunsmithing Tools

Whether it is your hobby, your profession, or truly your passion, gunsmithing tools from Forster Products let you up your game. These products not only help you repair, modify, or customize your firearms, they help keep your guns in safe and top-notch condition.

The result? Better potential, better performance, and bragging rights for excellent workmanship.

► Sight Mounting

The Universal Sight Mounting Fixture guarantees true spacing and alignment of scope mount, receiver sight and shotgun bead holes. The Fixture will receive any single barrel long gun – including bolt actions, lever actions and pump actions – as long as the barrel can be laid into its “V” block.

- The movable over-arm has built-in spacing increments of .500" and .860" between center, for locating pilot holes to standard spacing.
- The over-arm is keyed and slides within a T-slot in either direction, to allow for drilling holes to custom spacing. It's always in true alignment with the exact center of the gun barrel.



► Inlay Filling

“Gold” and “Silver” Inlay Filling materials add a touch of elegance, enhancing the value of any new or used engraved firearm.



► Gunsmith Screwdrivers

Choose these quality manufactured, hollow ground screwdrivers, designed specifically for the mounting of scope sights and other common gunsmithing requirements. They are versatile enough for many other uses, as well.



Twelve different specialty screwdrivers are available individually. Eight of the most commonly used screwdrivers from that collection have also been bundled together as a convenient set (right).

► Gunsmith Screws

Forster offers a collection of specialty screws engineered for the unique needs of the gunsmithing profession.



Gun Screw Assortment

23 of the most popular screw sizes (x12 ea.). Heat treated and blued.



Stockmakers Hand Screws

Use in the final accurate fitting of stock to action.



Stock Inletting Guide Screws

Headless, free of threads for repeat fittings.



Trigger Guard Screws

Machine turned with a blued finish. Slotted heads.

► **Headspace Gages**

The proper use of a Headspace Gage is the most reliable way to test rifle chamber length. Excessive headspace may lead to gas leakage around the case or head separation and the sudden release of high-pressure gas. Insufficient or excessively tight headspace may cause malfunctions, such as failure to lock.

Forster Products' large caliber selection of both rimmed/belted and rimless gages, manufactured from top-quality, hardened steel and precision ground to SAAMI standards ($\pm.00015"$).

Forster offers three lengths of headspace gages per rifle caliber: GO (min. chamber dimensions), NO GO (max. recommended for new bolt action rifles), and FIELD (longest safe headspace).



**Rimmed and Belted
Headspace Gages**

for popular rifles such as 30-30,
303 British, and 460 Wby Mag



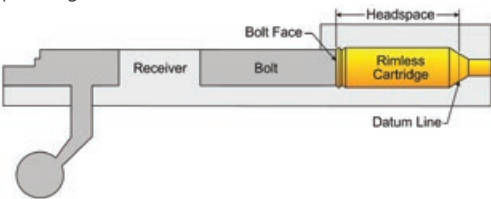
Rimless Headspace Gages

for popular rifles such as 223
Rem, 243 Win, 300 Blackout, 6.5
Creedmoor, and 5.56 & 7.62 NATO

FYI



"Headspace" is the distance between the face of the breech and the base of the cartridge when the action is closed. If chamber headspace is excessive, the gun should be taken out of service until it has been inspected and repaired by a competent gunsmith.



For more diagrams explaining headspace configurations and a complete list of calibers sold, visit **forsterproducts.com**.

Gunsmithing Accessories

Swiv-O-Ling Vise is the most versatile vise you can imagine. Just rotate the jaws, tilt it to the best working angle for you, and securely lock it in place. There's no unclamping, turning, and re-clamping your work in a different position, because the jaws on the Swiv-O-Ling rotate a full 360° and tilt up to 28° from the vertical.



The 3/16" brass **Universal Drift Punch** with a high-impact plastic handle is the best size punch for most gunsmithing and gun tinkering operations. It's particularly useful for removing the cross pin that retains the trigger group to the receiver in virtually all pump and semiautomatic shotguns and rifles.



The Forster **Polishing Roll** is a multi-purpose cleaning and polishing product that comes in one continuous 20" length that can be cut or trimmed to size. The silicone carbide-impregnated material helps prevent rust. It's ideal for preparing a bright finish for bluing, and also versatile enough to be used for many purposes around the home or workshop.



Kwik-Fill Sandbag Filler helps you get the sand in the bag instead of around it. It's a simple system that features a durable, compact funnel with a steel drop tube. The whole thing will fit easily into a range bag.

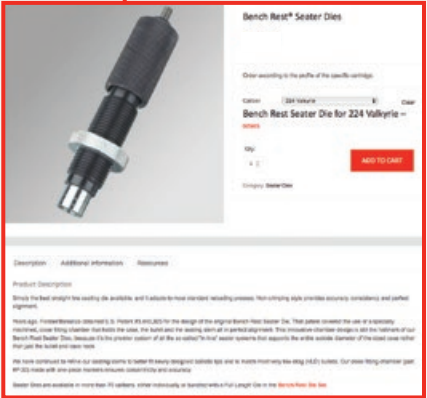
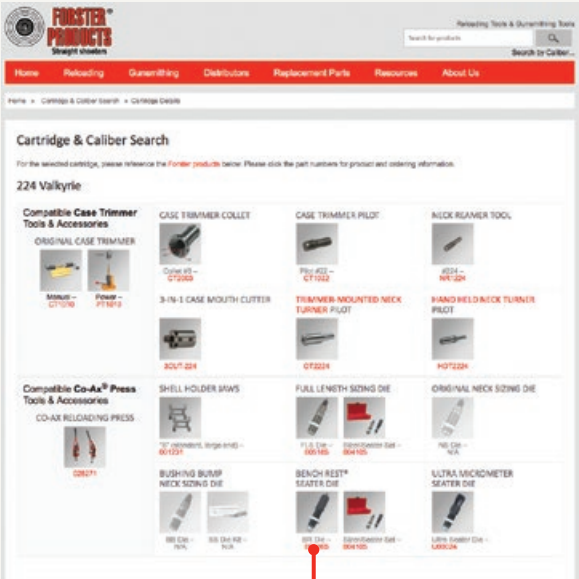


Reloading Tools and Accessories Search

To find the Case Trimmer model, Collets, Pilots, and Accessories that work with your particular caliber, start with our handy online search.

The search will also return compatible Co-Ax® Press Shell Holder Jaws and Sizer and Seater Dies. We have done the research on almost 400 case calibers from obscure to popular – to give you answers within a few clicks:

- 1 Go to **forsterproducts.com**
- 2 At the top of any page, click **Search by Caliber**
- 3 Browse the list, or enter the chambering of your rifle or pistol



► Forster Products Distribution Network

We recommend ordering from a dealer or distributor. Their experience and knowledge will help you select the best products that meet your specific requirements. In addition, they usually offer the best prices and convenient delivery options.

To find a Reseller go to **forsterproducts.com** and click Distributors. If your distributor cannot supply you, or if you need parts, please contact Forster Products directly by email, phone or fax.

► Our Quality Policy

At Forster Products, it is our goal to manufacture and distribute superlative tools for precision firearms while meeting customer specifications and exceeding expectations.

We focus on continually improving manufacturing skills and processes to fulfill customer needs and trends.

► Custom Machining Services

We machine to customers' exact specifications, including Collets and Pilots, as well as provide such services as Die repolishing, Case Trimmer Cutter shaft resharpener, and even stuck case removal.

A complete list of services, including prices and approximate lead times, is available at **forsterproducts.com**, under **Resources » Custom Machining**.

Warranty

Forster Products warrants goods of its manufacture against defects in materials and workmanship for the life of the product.

Parts excluded from the warranty are those that, by nature of their function, are subject to normal wear (such as springs, pins, etc.) or that have been altered, abused, or neglected. If the product is deemed defective by workmanship or materials, it will be repaired, reconditioned, or replaced (at Forster Products' option).

This warranty supersedes all other warranties for Forster Products, whether written or oral.



**FORSTER[®]
PRODUCTS**

Straight shooters

Forster Products
310 SE Lanark Avenue
Lanark, IL 61046

forsterproducts.com
815-493-6360

