



## **Manual and DC Compact RollSizer Operating and Maintenance Manual**

All ROLLSizer.COM products are covered by patents across 48 Countries.

**PLEASE READ THIS MANUAL BEFORE YOU CALL ASKING FOR  
TECHNICAL SUPPORT.**

We at rollsizer.com are always happy to help if you have any questions, but it is nice to know you have read this first.

Please only use clean cases in the rollsizer. The use of dirty cases in the rollsizer will wear out the base and disc and is not a warranty claim. We recommend wet cleaning as dry cleaning can leave dry / dusty residue on cases which can lead to wear.

The rollsizer and parts are shipped with a Lanolin based coating to prevent surface rust, yes it looks horrible, but it is the best we have found to date, clean it off with degreaser or alcohol-based wipes before use.

Please run your DC rollsizer for a minimum of 2 Hours unloaded to bed in the brushes and gearbox before rollsizing cases. If your rollsizer stalls when rolling cases, run the rollsizer unloaded overnight. Occasional / Intermittent stalling WILL occur at first, this is a protection device to ensure the machine is protected whilst running in.

Yes, the rollsizer will get warm especially when new / running in, this is normal. This manual will be updated progressively as needs and the most recent version will be available online via the RollSizer.com Website.



# Operating and Maintenance Manual

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## Operating and Maintenance Manual

### Introduction

The rollsizer you have purchased is a Manual or DC Compact Electric rollsizer that will supply years of reliable operation if the processes and safety procedures in this manual are observed.

The rollsizer has been designed to remove the bulge from the base of the cases, and when combined with a **standard** (not undersized!) full-length sizing die, will result in a smooth and uniform case sidewall.

**Please ensure you read this manual from start to finish BEFORE you use the rollsizer.** Please pay attention to the following key points.

- **Only clean, dry, fired (or deprimed) cases should be used in the rollsizer. Wear on the base / discs are not covered by warranty.**
- **No case lubrication is required. Case lubrication will compromise the operation of the rollsizer and allow dirt to stick to the rolling surfaces. This is the main reason for premature wear.**
- **The rollsizer process will occasionally leave light marks / dimples on the case from the rolling process this is normal and does not affect the operation. This is common on 223 cases and is expected.**
- **Loaded ammunition or cases with live primers should never be processed in the rollsizer under any circumstances.**
- **Check the drop tube height is adjusted before using the rollsizer, refer to the manual below.**
- **Only use sorted cases in the rollsizer, whilst it is not likely to damage the rollsizer, but you will waste a lot of time picking the cases out. Use long nose pliers, keep fingers clear.**
- **If you abuse the rollsizer you can damage the rollsizer. This is not a warranty issue.**



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14. The rollsizer is leaving brass shavings on the base of the rollsizer.
  - a. The rollsizing process involved the brass being forced back to a factory size, concentric to the rim AND square to the base/ rim. This last part requires the cases to be pushed onto the base of the rollsizer. This is indicative of heavily stretched cases. The case rubs on the base leaving small traces of brass dust. This is normal and will not affect the case operation. For cases that are heavily bulged on one side, there will often be a small semi-circular polished finish on the base. This is a sign that your cases are being forced square. This is normal. Blow the brass residue out if required.
15. I want to be a reseller, can I become one?
  - a. Contact us at [info@rollsizer.com](mailto:info@rollsizer.com).

Finish of document.

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13. The rollsizer is leaving marks / indentations on the cases and discs.
- The roll sizing process can leave minor machining marks on the cases. These will gradually reduce as the discs are used, this is normal and will not affect the reloading or reliability of your loaded rounds
  - When cases are heavily stretched and roll sized for the first time, a small indentation immediately above the extractor groove can often be seen. This indentation is normal and is a result of the rollsizer working hard to get your cases back to specification. The indent does not affect case performance or reliability. As the cases are reloaded again and again, this indent will reduce further.

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- The rollsizer is shipped with the drop tube laid over, loosen the bolt and place upright before use. Use a 5mm Allen key (not supplied)
- Fill the clear case tube BEFORE starting the rollsizer.
- Expect the last case in the batch to fall over, they need weight on them to hold them steady.

### Safety First

Please note that with all machinery, safety is critical. Do not allow inexperienced users to operate this machine and never allow children or minors near this rollsizer whilst it is operating. Never attempt any sort of work or adjustment on the machine whilst the rollsizer is energized or operating. Work should never be done on the rollsizer unless the power supply is turned off and the power lead is unplugged from the power supply.

Failure to do this could result in significant injury or death as a consequence.

In addition, you should never process reloaded ammunition or cases with live primers through the rollsizer, if the ammunition or components are ignited, there is significant risk of injury or death as a result.

### Disclaimer

The purchaser and users of this machine expressly acknowledge and hold harmless, RollSizer.com Pty Ltd, its affiliates, associates and resellers (hereafter noted as RollSizer.com), from all liabilities including loss of income, injury, harm or death for the use of the rollsizer and any actions that the use that the rollsizer may have. RollSizer.com make no claims or guarantees regarding the suitability of the processed cases for reloading or



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any other use and it is the responsibility of the user to verify the suitability and purpose of the finished product.

All rollsizers are sold subject to the Terms and Conditions on the RollSizer.com website.



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A. Simply put, rollSizer.com does not believe rim rolling is required in 99.9% of applications. The vast majority of issues identified by reloaders as “Rim Bulge” related were in fact due to the cases being formed incorrectly. The rollSizer.com machine was developed to address this issue.

12. The cases are falling over / jamming on the base

- A. Most problems relating to falling over or jamming relate to the drop tube not positioned correctly. The drop tube / holder was possibly bent from the transport process. Verify the position with a builder’s square and check the drop tube is square / perpendicular to the base.
- B. You can adjust the position of the drop tube holder by loosening the bolt holding it. If you need to bend the drop tube holder, remove the drop tube holder from the base first before bending in a vice, you may break the mounting bolt if you try to bend it whilst connected to the base. Please refer to the photograph below showing the offset (approximately 12mm or ½”). Please note the disc edge covers around 50% of the drop tube when looking down the drop tube. This varies with conversion disc size.



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- C. The power supply has an automatic reset function. This prevents damage to the rollsizer. Switching the rollsizer off will reset the power supply.
7. The DC rollsizer is really hot when running.
- A. The DC motors run hot; they will start to cool down after about 30 hours of operation at which point, they can be considered “run in”. The gearmotors will initially run about 65-75degrees Celsius. They will run cooler (55Deg C -65Deg C) after running in. This is normal. They are designed for this.
8. Where can the rollsizer be placed?
- A. The Manual rollsizer will need to be placed on the bench next to your press.
- B. The DC rollsizer can be placed next to your press OR on the shelf under it. The rollsizer is supplied with a generous length of PVC hose and can be cut to your requirement. The straighter the hose the better.
9. How fast does it operate?
- A. The manual rollsizer is recommended for 400-500 cases in a ½ sitting. Using an electric drill, you can process up to 2,000 cases per hour, but you must hold the drill.....
- B. The DC Compact rollsizer will process 1,500 cases per hour.
10. I want to size pistol and rifle cases, can you do it.
- A. Yes, please look up the rollsizer.com website for available conversions as the conversion list is progressively expanding.

11. Why don't you offer rim rolling in your Rollsizer?



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### 1. Why Rollsize?

Rollsizing is a case processing method that removes the bulges in the base of fired cases and allows the ammunition to be reloaded and reused with a much higher degree of reliability. The ammunition will be more consistent in quality and time that would be otherwise wasted in case gauging and wasting loaded ammunition and components can now be used to shoot.

The shooter / reloader can now consider the option of reloading fired cases with confidence the ammunition will perform reliably.

### 2. Why Reload?

The reloading of ammunition is done for a variety of reasons:

- Cost, reloaded ammunition is cheaper than most factory manufactured ammunition.
- Various shooting sports require ammunition to be loaded with specific power factors, factory ammunition is not usually loaded to suit the specific sport requirements.
- Reloaders will reload once fired or range picked cases and the origin of this cases may be from oversized or unsupported chambers and is required to be resized to meet the appropriate specifications.
- The shooter can control the size, specification, and quality of reloaded ammunition to suit their requirements.
- Ammunition can be tailored more easily to suit specific applications.
- Cases can be reused saving time, cost with higher quality than often available from commercially reloaded ammunition.



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### 3. What are the main steps in reloading?

The steps in reloading are generally as follows; Please consult your loading manual if you are not sure of the reloading processes:

1. Carefully sort / separate your spent cases checking for damaged, cracked, or unserviceable cases.
2. Clean the cases to remove dirt, stains etc. via tumbling or wet processing. We do NOT recommend you full length size before roll sizing. If you want to remove the primers before cleaning use a universal deprimer only, not a sizing / deprimer die.
3. **Rollsize your cases.**
4. Reload normally using standard sizing dies (do not use undersized or small base circle sizing dies).

### 4. What is supplied with the RollSizer?

The roll sizer will generally be supplied with the following components in addition to the calibre conversions purchased with your roll sizer.

1. Your roll sizer is supplied with a drop tube for the calibre conversion. You will need to install and adjust the drop tube height before use per the process described in this manual. A Small Pistol Drop Tube is used for 9mm, 38SC, 357Mag and 40S&W. A Large Pistol Drop Tube is used for 44Magnum and 45ACP. Rifle conversions are supplied with a calibre specific drop tube in the conversion kit.
2. Spares supplied for the manual roll sizer include
  - a. 2 x #5 x 1/4" Hex key driver bits for use with a drill
  - b. 1 x 10mm M6 Socket head bolt
  - c. 1 x 16mm M6 socket head bolt



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- A. Very hard to say, generally much longer than without roll sizing, but too many issues contribute so it is too hard to state exactly. The owner of roll sizer.com normally gets 40+ reloads from good quality cases before the cases start cracking.

### 4. Do I have to resize the cases after roll sizing?

- A. Yes, all roll sizing processes require cases to be full length resized afterwards. The resizing process is usually part of the reloading process, so no additional effort is required.

### 5. How long will it last?

- A. A DC roll sizer is expected to run for years. The limitation will be on how clean your cases are. Dirty or dusty cases will abrade the roll sizer and discs and this is NOT a warranty item. We recommend wet cleaning but if the dry media is changed regularly, it generally is not a problem.

### 6. My DC roll sizer is stalling on some cases.

- A. The DC roll sizer uses carbon brushes. The brushes (and the motor / gearbox) are oversized, this gives a longer life but means the carbon brushes can take longer to bed in (like running in a new car motor) we recommend a minimum of 2 hours unloaded before roll sizing for the first time only. After this you can roll size normally. This covers the brushes and gearbox bedding in.
- B. The roll sizer gearboxes are oversized and longer running / bedding in. In this situation, run the roll sizer overnight unloaded to bed in the mechanical gears. After this it should be good to go. It's a byproduct of using an oversized motor and gearbox.



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- A. The rollsizer machines removes the bulge by rolling the base of a fired case to bring the case back into specification to allow reloading. Removing the bulge brings the base of the case back into specification, when combined with the normal sizing dies the case will be very close to the SAAMI specifications.
  - B. In certain cases (usually 223 but also on cases which are heavily bulged) the conversion discs will get a small indent in the disc immediately above the bottom edge. This is normal and does not affect the cases. The explanation of how and why is an overly complex issue and is related to the way cases deform. The cases will size ok. These cases are often more difficult to rollsizer initially and can be felt in the hand / drill operation (manual) and in the DC rollsizer with occasional tripping out the power unit.
  - C. Please note, some 223 cases will cause problems in rollsizing and may in fact plated steel cases. Your rollsizer will NOT process steel cases. This is not a machine fault.
2. Why do cases need rollsizing?
- A. Not every case needs rollsizing but if you pick up some “Glocked” or major loads from someone else’s unsupported gun then the loaded round may not chamber. We recommend rollsizing every time. The cases after rollsizing will be easier to full length size and will be much more uniform and consistent in performance. When cases have been fired in firearms with unsupported or loose chambers. The cases from these guns can often be heavily stretched or bulged and will not case or chamber gauge reliably after reloading.
3. How long will cases last with rollsizing?

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- d. 1 x oversize washer
  - e. Length of 16mm (5/8”) ID PVC hose with a Dillon casefeeder adaptor on one end **and a cable tie for the drop tube on the other end.** Do NOT cut the cable tie end off to adjust the length.
3. Spares for the DC Compact Electric rollsizer include
- a. 1 x 10mm M6 Socket head bolts
  - b. 1 x 16mm M6 socket head bolts
  - c. 1 x oversize washer
  - d. Length of 16mm (5/8”) ID PVC hose with a Dillon casefeeder adaptor on one end and a cable tie for the drop tube on the other end. This hose has been supplied in a length sufficient for and an under-bench installation.
  - e. Universal Power supply suitable for 90VAC to 300VAC supplies. The power supply brick is supplied to the market as either a molded USA 3 pin plug or with an Australian power plug and depending on your location a plug adaptor. Depending on your location you may need to purchase a plug adaptor to suit your location. These are available from most electronic and travel stores.
4. To remove the bolts and change drop tubes you will need a 5mm Allen key. (Not supplied).

Refer to photographs below identifying the main components of the rollsizers. The base and conversions are the same for the Manual and DC Compact.

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### Manual Rollsizer

Drop tube showing PVC hose correctly positioned / fitted. Trim the **other** end if you need to shorten the hose.

Removable Crank handle. The handle can be folded away if not in use or removed if using a drill.

Mounting holes to screw base to reloading bench.

Socket head bolt in the end of the crank shaft.

Before using a drill to operate the rollsizer, remove the handle.

Use a #5 Hex driver bit inserted in your drill to power the rollsizer.

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The DC motor is fitted with brushes, and these are a normal wear item and are expected to require replacement at after processing around 1,000,000 cases, replacement brushes are available from rollsizer.com. With normal domestic use the brushes should last for years.

The Manual and DC Compact rollsizers are suitable for the low to medium volume shooter. Running the DC rollsizer for extended periods will result in the motor and gearbox getting warm especially when new and the motor and gearbox are not run in. The heat generated will not affect the cases as the clearances between the base and the disc will not change if they are the same temperature.

The universal power brick supplied with the DC rollsizer is a very high-quality unit and has been sized to accommodate an overload condition and turn off. As covered earlier in the manual this will reset automatically once the load to the power brick is turned off. The power unit is not serviceable and must be returned to rollsizer.com in the unlikely event of a warranty issue arise.

### 15. What tools do I need?

You need a single #5 (Metric) Allen key (not supplied) to adjust the dropper hose height, remove or install bolts in the center discs and remove the bolt holding the conversion disc.

All bolts and fasteners used in the rollsizer are standard metric bolts only.

If you need to replace bolts for some reason, please contact us first.

### Rollsizer FAQ's

1. What does the Rollsizer do?

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- Visual inspection, check the power lead is in good condition and is clear of any rotating equipment, check the connecting hose is straight with no kinks.
- Check the base and rollsizer discs are free of dirt and oils or other debris. If the base area requires cleaning isolate the power supply and remove the power lead before attempting any work.
- The rollsizer has the correct calibre conversion installed, the drop tube is adjusted correctly and the casefeeder, connecting hose and rollsizer are clear of any cases.
- Check the power supply is safe and circuit breakers are functioning correctly.
- The gearbox does not have any oil leaks.
- The switch turns the rollsizer on / off as required.
- The drop tube and flexible hose is clear of rubbish, tumbling media or stuck cases.
- The case feeder has the correct cases for the conversion and is operating in accordance with the manufacturer's manual.

If unclean or dirty cases is processed through the rollsizer it will damage the contact faces of the base and calibre conversion discs. The faces will wear, and the finished size and surface finish of the case will be compromised.

**No warranty claims will be considered if unclean cases are processed through the rollsizer.**

### 14. Gearbox and Motor Maintenance

In normal domestic use applications, the gearbox or motor is unlikely to ever require any maintenance. The gearbox is sealed for life and in non-commercial applications is not expected to require oil changes for many years.

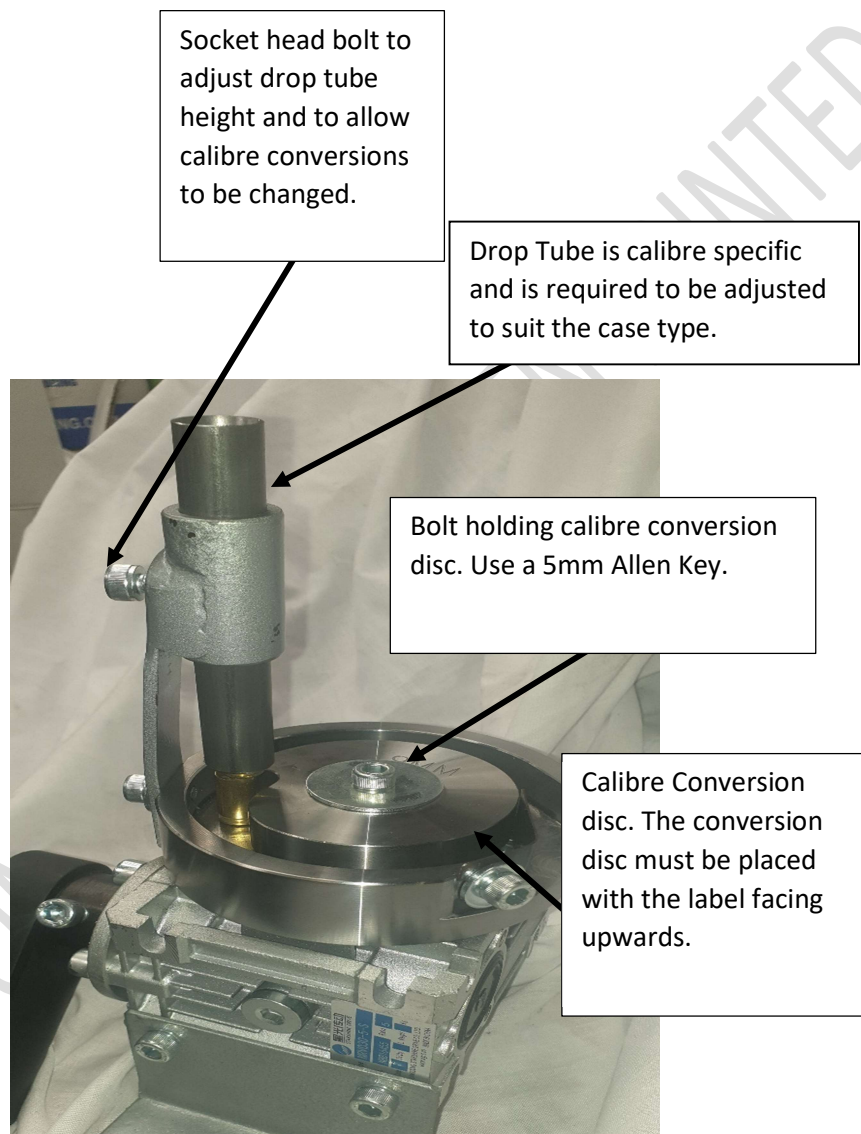
## Operating and Maintenance Manual



This cable tie IS IMPORTANT. It stops cases from catching on the mouth of the drop tube.

If you cut it off when adjusting the tube length replace it!!

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With regular use some brass residue can be left on the roll sizing faces and the base. This is normal and tends to occur with specific cases and especially if the cases have been heavily bulged. The roll sizing process forces the cases down onto the base and this rubs the base of the case leaving brass dust and residue. This is normal. The process of how and why, is a fairly complex process and cannot be covered here. If you wish more information, please contact us directly.

The roll sizer should never be used to process Steel or Stainless-steel cases under any circumstances. These are becoming common, and the use of detection magnets are recommended. These cases can leave metal on the rolling surfaces and is very difficult to remove without damaging the surfaces.

Any surface rust or brass build up can be removed with fine steel wool and retreated with a light coating of oil. Remove oil before use.

Prior to use the discs and all components should be wiped clean and all traces of oil / grease removed using degreaser and a clean, lint free cloth.

The roll sizer needs friction between the cases and the roll sizer to ensure the cases are rolled correctly, case lube will prevent this and will also potentially pickup dirt / grit and damage the roll sizer rolling surfaces.

For roll sizer discs in constant use, the ongoing heat generated from the motor and gearbox will keep away any moisture and as such they are unlikely to require any treatment. If minor surface rust occurs use steel wool to remove this.

If you are not using your roll sizer for a while spray the metal surfaces with a lanolin (or similar) spray. That's what we use, and it really does work.

Contact us at [Rollsizer.com](http://Rollsizer.com) using the contact details below.

### 13. Pre-Start Checks

Prior to use, the following checks should be done.



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Rollsizer.com cannot guarantee every case will case gauge reliably as there are too many factors outside our control including the ammunition cases, reloading methods used, the load data and projectiles used for the ammunition, the reloading processes used after rollsizing as well as the condition and type of firearm used all can have a significant effect on the ammunition quality and performance.

Should you need to discuss this in detail, please contact at [info@rollsizer.com](mailto:info@rollsizer.com) or by using the contact details below.

### 12. Maintenance, what is required?

The short answer is, very little.

The equipment requires little maintenance. A small spares kit has been supplied with the rollsizer and generally most of these components should never have to be replaced. Should you require replacement components please contact us using the contact details below.

Should the DC motor trip, stop working turn the machine off and let the power block reset (it only takes a few seconds). If the electrical circuit breakers or safety fuses trip out, please do not use the machine, remove the power lead from the wall socket and ensure the machine is not used, place an "Out of Service" tag on the machine if available.

The rollsizer is made from very high-quality CNC machined steel and if exposed to wet / moist environments the base and conversion discs will develop surface rust if left in a wet or humid environment. It is recommended the calibre conversion plates and all unused metal components are wiped with an oily rag and packed in the supplied calibre conversion boxes supplied with the rollsizer.



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### 5. DC Compact Operation

Please note, do not plug in the rollsizer to the power supply until all the positioning and adjustments of the rollsizer, connecting hoses and all the ancillary checks have been done. Please ensure all hands, clothing and other equipment are clear of the rollsizer before plugging the power brick in.

The DC Compact Rollsizer is fitted with a 3-position switch. The positions are On / Off / Reverse (Momentary). The On switch allows normal rollsizing, the Reverse switch is a momentary operation which returns to the off position when released and is designed to allow the rollsizer to be reversed in the case of a jam or malfunction.

Once the rollsizer is set up and adjusted, plug in the power supply to the back of the Terminal box and plug in to the wall socket using a plug adaptor if required. Please note the power brick is a universal power supply and can accept power supply from 90VAC to 300VAC as well as 50-60hz. The power supply is fitted with an Australian plug, international customers will require an adaptor to suit their local requirements.

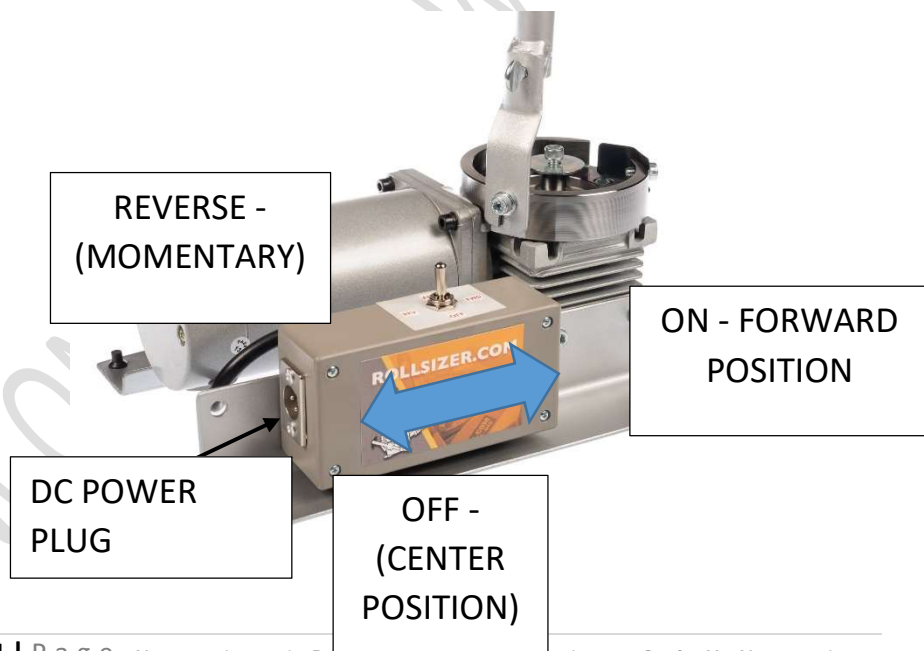
If the power supply is on and connected to the rollsizer and the switch does not operate the rollsizer please check the connections and the plug is fully inserted first. If this does not work, then do not use the rollsizer and consult with your reseller in the first instance or Rollsizer.com via [info@rollsizer.com](mailto:info@rollsizer.com).

The power supply block is designed to switch off automatically in the case of a jam. To restart the rollsizer move the switch to the "Off" position and the power block will reset itself. The reset may take a few seconds to reset.

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The DC motor uses carbon brushes. These brushes occasionally need bedding in to ensure a good contact between the brushes and the motor armature in and it is recommended the rollsizer is run unloaded for a minimum of 2 hours before use.

Yes, the DC rollsizers will run warm, especially when new. This is normal and the rollsizer can get up to 75 Deg C when new. The rollsizer will cool down significantly after about 30 hours of operation. If your rollsizer trips out repeatedly it may need to be run overnight unloaded to bed in the brushes / gearbox. This is normal. It is a result of us supplying and oversized gearbox and motor. It will last a long time, but they do occasionally need time to run in.



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The rollsizer.com process is designed to remove the bulge at the base across the calibre conversion ranges offered AND to ensure the cases are concentric to the rim to ensure the reloaded ammunition case will gauge and perform reliably.

### 11. Why don't you rim roll your cases?

Good question, the simple answer is that we at rollsizer.com do not believe it is required in over 99.9% of situations.

In the extensive testing processes undertaken over many years, we identified that in the majority of occasions, rim deformation was **not** the root cause of why ammunition was not reliably feeding.

The investigations by the designer (and mechanical engineer of 30+ years' experience), identified the root cause of the ammunition failure was in fact due to the location and shape of the case bulge. In many situations, the case stretch was eccentric, and the standard resizing process did not always reform the case body concentric to the case rim. When the reloaded case was chambered in the firearm, it jammed as the rim locked up on the breech face. This is not a reflection of the firearms manufacturers themselves, but a recognition that these manufacturers make their firearms with tighter tolerances than others. Higher specification competition firearms are often fitted with tighter chambers and breech faces.

The rollsizing process adopted in the rollsizer.com machine has recognized this, and the sizing / arrangement and tolerances adopted in the rollsizer.com machine has been designed to minimize this problem.

In the rare situations where the rollsizer.com machine does not resolve this problem; we see the most likely scenario is that the case is unserviceable. In most situations, the cases were excessively worn with little or no headstamp markings visible. We recommend the user check their cases carefully as unserviceable cases can lead to injury to the user and their firearms.



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### 10. Why do cases stretch?

When ammunition is fired, the cases stretch to match the shape of the chamber of the firearm used. The chamber sizes are usually manufactured to established standards and tolerances (SAAMI or CIP) but the final chamber dimensions are often quite different between the manufacturers and their market application.

In some situations, loose / oversized or unsupported chambers are required for a particular firearm design, other applications may result in chamber tolerances that are very tight or undersized (for example high end target firearms).

In many Military or Law Enforcement, Concealed Carry / Self Defense (MilSpec) applications, reliability under difficult and less than optimum conditions are seen as more important than sub-1" groups at 100m. These firearms are likely to have looser chambers than match or custom firearms. Stretching also occurs when running high pressure ammunition in Competition firearms particularly with light recoil and / or main springs, the quicker unlocking and reduced energy in the slide often leads to a case that is partly unlocked before the chamber pressures have reduced. A common example is seen in the use of 9mm major ammunition in IPSC / USPSA competitions as well as blowback actions used in PCC competitions.

The normal reloading dies / processes used cannot remove the case bulge as the shell plate holding the case prevents the sizing dies reaching the location of the bulge on the case. Several alternative methods of removing the bulge include push through die systems, undersized dies (small base circle dies) as well as a few alternative case rolling designs. These low volume / low processing rate systems can work to a degree. Many of these systems are limited to specific case types

or are limited in the extent in which the cases can be rolled or reshaped due to the equipment design.



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### 6. Installation

Before you commit to the location of your new rollSizer, please think of the following key issues.

- How is the tube routed to the Casefeeder when the rollSizer is in use?
- Does the hand crank (or drill position) of the rollSizer allow full range of operation and if your hand does not hit any parts for the press or bench?
- What is the route of the flexible hose between the casefeeder and the rollSizer? The hose route needs to be smooth without kinking the hose.
- Can you access the center bolt holding the caliber conversion disc in this position to allow you to do caliber conversions without moving the rollSizer?
- Can you see the cases under the drop tube to check the drop tube is adjusted to the correct height?
- It is recommended the manual rollSizer is bolted or screwed down to a benchtop before use using the pre-drilled holes in the base angles. The DC Compact rollSizer does not require mounting to the bench but has been supplied with pre-drilled holes in the base angles if required. Simply remove the rubber feet if required.

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### 6.1 Casefeeder and Connecting Hose

The rollsize has been supplied with an adaptor and hose to connect to the standard Dillon™ casefeeder. Refer to photo below.



The adaptor will clip into the casefeeder where the normal plastic drop tube connects the Dillon™ casefeeder to the Dillon™ reloading press. The flexible PVC hose supplied will connect the adaptor clip to your rollsize drop tube.

When the casefeeder and rollsize locations are confirmed, check the route for the flexible hose.

Install the hose end with the cable tie on it on the drop tube. Run the hose from the rollsize to the casefeeder. Insert the adaptor clip into the casefeeder and

mark out where to cut the hose. The hose route should be smooth and clear of equipment, allow some extra length in the hose, mark the hose. Measure and check again before you cut the hose.

To mount the hose onto the adaptor clip, you place the end of the hose in some hot water for approximately 2 minutes and push onto the hose tail barbs whilst still hot. Leave to cool whilst holding the hose straight.

In some situations, the hose will have kinked when it is coiled in the box. The hose can be re-shaped by plugging one end of the hose and filling the hose with hot water and kneading the hose to re-shape the hose as required. After

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It is important to note that different manufacturers of case gauges use different tolerances. There are many case gauges in the market that have very tight tolerances. The rollsize.com machine has been designed to roll cases to meet the mid-range SAAMI specifications with normal sizing dies. This dimension reflects the typical factory ammunition dimension which is usually the most reliable and consistent dimension.

Rollsize.com cannot guarantee all cases will pass case gauge as the cases, gauges and sizing dies and the cases themselves all vary and are not within our control. Some cases are too badly blown to use, and sizing dies DO wear out.

These gauges will require consistent monitoring and adjustment of the dies and in high volume commercial applications, the sizing dies require replacement on a regular basis.

Rollsize.com is able to provide special order undersized / oversized calibre conversion discs if required. Please contact us at [info@rollsize.com](mailto:info@rollsize.com) with your requirements. They are very rarely required.

With roll sizing, the point of impact of ammunition will need to be checked as this may have changed due to roll sizing process.

Based on feedback from buyers, (in general) the power factor in reloaded pistol ammunition used in IPSC / USPSA matches, roll sized ammunition will usually increase in power factor by approximately 1-2 points and the velocity variation will reduce considerably resulting in significantly better accuracy. We typically see sub 8fps total variation in a 3 shot Chronograph group. Typically, this is 25-30fps or more. Overall, we have found the ammunition will nestle in magazines better and high-capacity magazines will allow extra room with roll sized ammunition.

If you have any questions on the case gauging or final sizing processes, please contact us at [info@rollsize.com](mailto:info@rollsize.com).



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this with a fully loaded round (I.E., powder and primers inserted into the round)



Please note that all reloading presses flex to a degree (even high-end commercial presses when using fired cases). The settings of the reloading press should only be considered final once the shell plate assembly is filled with cases and the press is fully loaded. It is often necessary to adjust the dies further once the shell plate is full of cases. Roll sizing your cases **will** reduce the load on your reloading press to a significant degree.

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the hose is straight and kinks removed drain the water and hang vertically to cool for 1/2hr.

When not in use, the hose must be hung vertically from one end or left in a flat position to prevent kinks or bends in the hose. If this occurs repeat the process above.

The placement of the cable tie on the drop tube end is required to prevent cases in the hose catching on the end of the drop tube.

In most cases, the end of the hose where it mounts on the drop tube is not required to be secured, but can be if required, using cable ties or hose clamps (not supplied).

### 7. Processing rates

The manual roll sizer operating speed will be limited by either the crank speed you can supply or by the drill speed you use (typically 1,000 to 2,000 cases per hour). Typical case feed rates from Dillon casefeeders are around 1,500 to 2,500 cases per hour depending on their condition and fill amount.

For the Manual roll sizer – hand cranking, we only quote a 400-500 cases per 1/2hr as we doubt you will want to spend more than 1/2hr each time to hand crank your cases.... The effort required to roll cases is minimal, but it is repetitive. The crank handle is fitted with a foldaway provision to prevent it catching on clothing when reloading or walking past the roll sizer.

The alternative to the crank handle is to use an electric drill with the supplied #5 x 1/4" hex bit. These do wear out but are usually available at most hardware stores if you need more. They are cheap....



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The manual rollsizer is fitted with a socket head bolt screwed into the end of the crank handle shaft. The bolt is an M6x16mm metric bolt and has a #5 socket head. We have supplied 2 x #5 driver bits in the spares kit.

If you wish to use an electric drill to operate the rollsizer you need to do the following.

1. Remove the crank handle by removing the cap crew holding the handle onto the crank shaft.
2. Check the drill is set to screw mode only with the clutch set as low as possible. Do not use IMPACT MODE. The use of impact mode in a drill will break the bolt and possibly damage the gearbox. This is NOT a warranty claim, you have been warned. Any damage to the gearbox will require the gearbox to be returned to a reseller or rollsizer.com for inspection.
3. Run the electric drill in low-speed mode, if your drill does not have a low-speed setting, go buy one. If you run the electric drill too fast and a jam occurs the bolt in the crank handle bolt is likely to break, this is to protect the gearbox. Removal of the bolt may require specialist help

**It is critical that you do not try to process cases through the rollsizer faster than the casefeeder can supply reliably and consistently supply. This will result in jams. 99% of the problems can be directly related to this.**

If you wish to process cases at rates above the capacity of your existing casefeeder, please contact us at [info@rollsizer.com](mailto:info@rollsizer.com) or call us on +61-400-712-512.

**The DC Rollsizer is a fixed speed machine and will process cases around 1,500 cases per hour.**



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When the cases are rollsized, the cases will lengthen slightly. This is of no significance as pistol cases usually shrink with repeated reloading, but it is common for the seating and crimping dies to require adjustment.

Rifle cases will often need trimming, and this should be checked before reloading.

The following procedure is a process that will assist in establishing the adjustment required in your reloading press for rollsized cases.

1. Clean and rollsize your cases per the details outlined above using the correct conversion kit.
2. Full-length size the case in your reloading press. Remove the case and check again in the case gauge. The case should seat full depth.
3. If the case still does not fully seat, then it is likely the full-length sizing die needs to be adjusted down. Repeat this step and until the empty case gauges correctly. **DO NOT USE UNDERSIZED DIES...**
4. Reload the case (without primers or powder) and repeat the process with a single case. Once this is correctly adjusted repeat with as a continual process reload 10 or so dummy cases continuously. **This often shows up movement / flexing in the shell plate holder of some progressive presses.**
5. If the dummy cases do not insert fully into the case gauge, the reloading press dies may need further adjustment, this is normal. Refer to the press manual.
6. To verify where the adjustment is required, remove the dummy case and place permanent marker lines around the entire round and let dry.
7. Once dry, place the case inside the case gauge (or chamber check in your firearm) and twist slightly to make a witness mark on the case. The witness marks will be visible by scuff marks on the case. These scuff marks will identify the areas where the cases need adjustment. Consult your press manual for these adjustments. Please do not do



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- The cases must sit on the disc for a minimum of 50% for reliable operation. Occasionally the drop tube holder is bent during transportation (very rare), the drop tube holder can easily be bent back to the correct shape in a vice.

### 9.1 OK, I have roll sized my cases, now what?

Once your cases have been roll sized, your normal reloading process can occur. It is important to note your reloading press will probably need adjustment. In most cases, only the seating and crimp stations will need adjusting.

IF YOU FULL LENGTH SIZE CASES BEFORE ROLL SIZING, THEY WILL SOMETIMES SPRING BACK AND MAY NOT PASS TIGHT GAUGING. This won't damage the brass or machine, its just not as consistent.

**It is strongly recommended the reloading process and reloaded ammunition checked carefully before reloading quantities of ammunition.**

### 9.2 My cases do not gauge after roll sizing

The roll sizing process works on the lower 10-15mm of the case. This is the section of the case that is unable to be sized in the full-length sizing process.

#### **You must still full-length size your cases.**

To complete the case gauging process, the roll sizing process will often require the reloading press to be adjusted to ensure cases gauge correctly. **We do not recommend the use of undersized dies (small base circle dies) combined with roll sizing. They are not required and can cause reliability and feeding problems.**



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### 8. Calibre conversions

#### 8.1 Pistol conversions

The calibre conversion for a pistol calibre comprises of 2 basic components

- Calibre specific conversion disc (with the calibre engraved on the disc)
- Drop tube, there are different types, (small pistol, large pistol, and rifle conversions)
  - Small pistol drop tube covering 9mm, 38S/SC, 357Magnum and 40S&W
  - Large Pistol drop tube covering 44Magnum and 45ACP
  - The 223 and 308 rifle conversions are supplied with a calibre specific drop tube.
  - Additional pistol calibres will be released when they become available

#### 8.2 Calibre conversion process

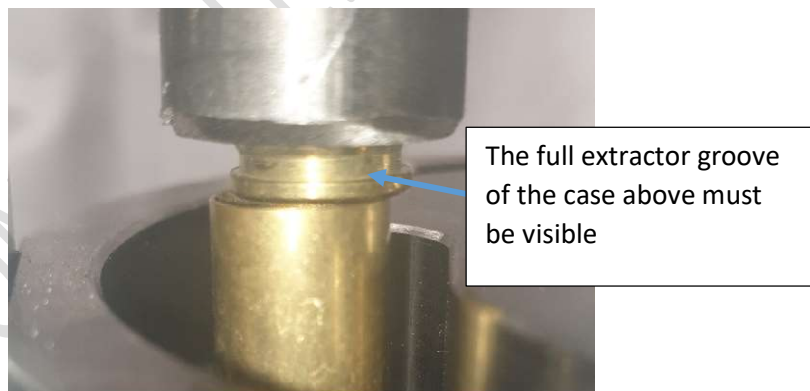
To change calibre, you need to.

1. Remove any residual cases from the case feeder, check the casefeeder is empty by running for a short time and listening and checking for any cases in the case feeder or feed hose.
2. Turn off the roll sizer and unplug the Roll sizer power brick from the wall socket if applicable.
3. Using a #5 Allen key (not supplied) and loosen the bolt holding the drop tube. Lift the drop tube approximately 25mm (1") up and lightly tighten the bolt.
4. Using the same #5 Allen key remove the bolt and oversize washer in the center disc. Lift out the disc and store in a dry place. (If the work

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area is subject to high humidity, wipe the disc down with an oily rag to prevent surface rust or place in an airtight bag).

5. With the disc removed wipe down the base assembly with a clean dry rag to remove any dust or residual dirt or tumbling media etc.
6. Replace it with the new disc ensuring the disc is clean with no traces of oil or rust preventative. Reinstall the center bolt and oversize washer, install the bolt finger tight only.
7. If the conversion requires the drop tube to be changed remove the drop tube by unscrewing the bolt securing the drop tube and replacing it with the required tube.
8. Check and adjust the drop tube height. Drop 2 cases into the drop tube and check the extractor groove of the second case is visible, adjust the height of the drop tube as required. Check the clearance of the case containment spring as the rifle conversion drop tubes can interfere with the containment spring. Refer to attached photograph.



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9. When the drop tube is correctly positioned for height, fill the casefeeder and feed hose.
10. Please note the drop tube must be square to the base. If the drop tube is not square the cases can fall over. To adjust this, loosen the bolt holding the drop tube holder, remove it and bend the bracket in a vice if required.

### 9. RollSizer operation

The rollSizer operation is as follows.

- The rollSizer is setup and installed per the above processes.
- Check the drop tube size is correct for the case type and the height is adjusted correctly.
- The correct calibre conversion disc is installed correctly with **label facing upwards**.
- Only clean and carefully sorted cases matching the calibre conversion are placed in the casefeeder and the casefeeder will then drop the cases base first into the hose connecting the casefeeder to the rollSizer.
- Once the rollSizer feed hose is full, turn on the rollSizer, manually crank or use drill as appropriate.
- The cases will sit on the conversion disc. As the disc rotates, the case will drop and move sideways pushing the case out from under the drop tube.
- The next case will drop down and sit on the top of the conversion disc.
- When the center disc rotates around, the next case will drop and push out sideways again.