

EXPANDING MANDREL SIZING DIE

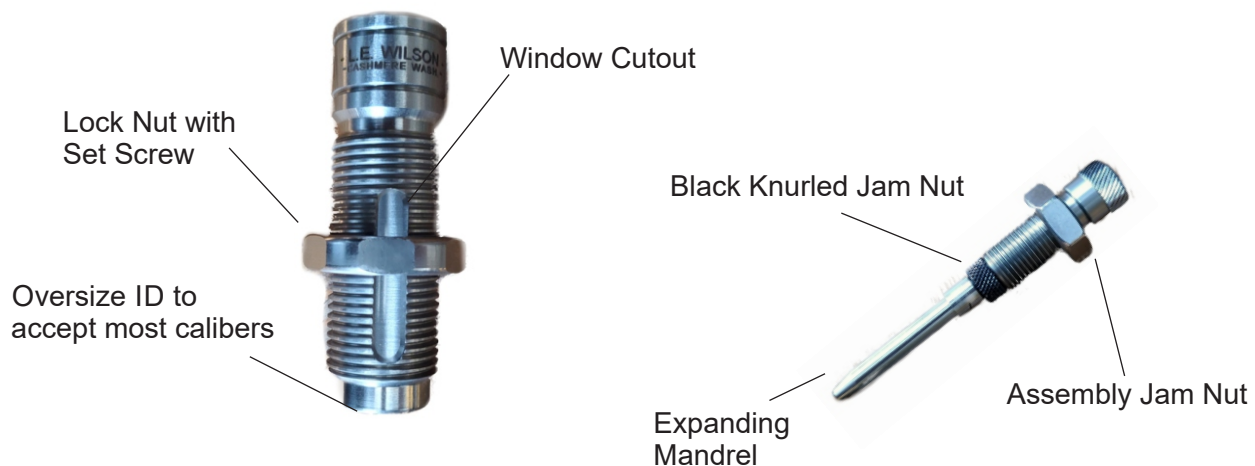
Congratulations on your purchase of the Wilson Expanding Mandrel Die! Below we have outlined how to properly set up the die and enjoy years of use. This Die was designed specifically to be used on NEW BRASS CASES to ensure smooth consistent seating while using the Wilson Bullet Seater. However, the uses for this die are not limited to this specific operation. The Wilson Expanding Mandrel Die as normally packaged contains the die body, top cap, one mandrel of your choice at purchase, extra pad and screw for lock nut and a 3/32" hex wrench. Additional Mandrels, if ordered at the same time, are packaged separately.

First Steps and Set Up of Die:

- 1) Wipe off shipping oil from exposed surfaces
- 2) Remove the top portion from the top of the die to reveal the mandrel assembly.
- 3) Rinse excess oil in the case chamber and the assembly recess with solvent and a soft brush. Wipe the remainder out with a clean patch and clean cloth.
- 4) Loosen the black knurled jam nut and disassemble parts, verify you have the correct mandrel installed. Make sure the assembly is clean and clear of any debris and oil. Once parts are clean, re-assemble, remembering to snug the knurled jam nut with hand pressure and thread back into die. Do not force it, if clean and undamaged, the parts should thread together nicely.
- 5) Before inserting into your 7/8ths press, loosen the set screw on the large lock nut. If difficult to move, use the provided wrench to gain leverage on the nut by inserting and rotating back and forth. We include a small felt pad under the small set screw that is designed to protect the die threads and will wear threads into pad.
- 6) After inserting into your press, make sure you only thread the die in as much as necessary. **IT IS NOT NECESSARY TO HAVE YOUR SHELL HOLDER CONTACT THE BOTTOM OF THIS DIE AS IN FULL LENGTH RESIZING.** Only thread in enough to make the die square to the base of the press and use the Lock Nut to sure up and hold in place. Try to align the window facing you, this will aid in moving to the next step.
- 7) After selecting the correct shell holder for your press (Not included), use the window cutout to help set up final depth of case.
- 8) Be sure to use some graphite lube on the inside of the case neck prior to sizing. This will help reduce friction, ultimately providing a more consistent size and extending the life of your mandrel.
- 9) The mandrel is tapered to help expand the case, it then will slide over the finish OD of the mandrel. Push the case past this point until you no longer feel resistance. The back side of the mandrel also has a very slight taper, which you will feel when you are past the required depth.
- 10) Reverse the direction and remove the case from the die and shell holder.
- 11) **DO NOT EXTEND CASE TOO FAR PAST END OF MANDREL, CASE DAMAGE WILL OCCUR. AFTER SIZING ONE CASE, TEST SEAT A BULLET TO MAKE SURE SIZING HAS BEEN SUCCESSFUL PRIOR TO MOVING FORWARD WITH ALL OF YOUR CASES.**

Best Practices for Using the Expanding Mandrel Die

- Make sure all cases are properly cleaned inside and out before resizing.
- Always use a high quality Neck Lube and lightly coat the inside of your cases with a case sizing lubricant. A soft brush can be helpful.
- Be sure to separate your brass by brand. This will give you a more consistent size.
- To maintain consistent high quality rounds clean the die after each use before storing it away.
- A little light oil such as WD-40 between uses is a good idea.
- If the mandrel gets loose remove assembly and tighten black jam nut.
- Be sure the correct mandrel is installed for your caliber.
- **CONTINUED ON BACK...**



Adjusting the Die

- Use appropriate shell holder (not provided) and set so it **DOES NOT** contact with the die when the ram is in the uppermost position.
- Adjust die height as necessary according to case length by turning clockwise or counterclockwise. Then secure in press with the Lock Nut.
- After sizing be sure to check your case neck diameters to make sure you are within tolerance. We recommend test seating a bullet before moving on to the rest of your cases.
- If you have any issues please contact support@lewilson.com

Mandrel Size Selection:

Standard Mandrel Sizes are set up .001" (Tolerance up to -.0005") under bullet to account for slight spring-back of your cases

- 22 Caliber - .223" OD
- 25 Caliber - .256" OD
- 270 Caliber - .276" OD
- 30 Caliber - .307" OD (.3075" prior to 2/2023)
- 33 Caliber - .337" OD
- 6 mm - .242" OD
- 6.5 mm - .263" OD
- 7 mm - .283" OD

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