

Slip Roller Operation

WARNING: Improper use of this machine can result in severe personal injury. Personnel using the equipment must be qualified, trained, and familiar with the operating procedures prior to operating the machine.

WARNING: It is the responsibility of the owner or employer to ensure that the operator is trained and practices safe operation while using and servicing the machine. It is the owner's responsibility to maintain and repair product with factory approved replacement parts. Unapproved modifications or repairs may damage the machine and its performance and could result in personal injury.

NOTE: Slip-rolling is a slow process and usually requires many passes through the rollers, with small, incremental tightening on the adjuster block to achieve a smooth roll. Overloading a slip roller is very easy and will shorten the life of the machine. Exercise additional care when rolling hardened or stainless steels as you may damage the surface of the rollers.

NOTE: Depending on your material's surface properties, the rollers may work better when covered in gorilla tape, duct tape, or other grippy materials.

1. Ensure machine is firmly secured to a sturdy work surface.
2. Ensure that all rollers move freely. Roller end bolts and adjuster bolts should be regularly oiled with heavyweight oil such as SAE30 or 85W-140. Failure to keep friction points oiled may result in premature wear, damage to the machine, and extra difficulty in operation.
3. Visually inspect rollers and the material you are bending to ensure that they are free of dirt, debris, and burrs. Slightly round the edges of the material as shown on the left of the figure below. Workpieces with sharp edges may make indentations in roller surface.



Figure A - ideal material edge condition

4. Loosen adjuster bolts enough to put workpiece in between rollers.

5. Tighten adjuster bolts by hand, making sure to keep even pressure on each side. CAUTION: movable roller must always be kept level and parallel with other rollers. Having one side be higher than the other can result in premature wear and may create uneven products.
6. Roll workpiece all the way to the end of the material. Ensure that workpiece is perpendicular to the rollers.
7. Tighten adjuster bolts one-half of one revolution or 180°.
8. Place wrench or ratchet on the bolt connected to the center roller and gently turn it clockwise. The center roller is the single roller on the top side of your workpiece. In some units, it is the roller that is a different color than the other two. If your material moves the wrong way, move your wrench or ratchet to the other side of the machine. Roll workpiece all the way through rollers. If using a ratchet and socket, the ratchet should always be set in the tightening position.
9. Tighten adjuster bolts another half-turn. If rolling was extremely easy, you may try tightening adjuster bolts a full revolution.
10. Place wrench or socket on opposite end of the center roller and roll workpiece through again. If you begin to un-thread the bolt from the roller, you are turning the bolt the wrong direction.
11. Repeat the previous two steps until your workpiece has reached the desired curvature.
12. Loosen the two adjuster bolts, thereby releasing pressure, and remove your workpiece. Note: this may cause the piece diameter to increase slightly.

Removing a complete circle - If you have rolled a complete circle, and you are unable to remove it from the rollers, you will need to remove the center roller from the unit.

1. Loosen both adjuster bolts all the way so that workpiece moves around freely and all rollers move freely.
2. Using a tongue and groove wrench, firmly grab the center roller at the end.
3. Completely unscrew the bolt from one end of the center roller.
4. Attempt to remove your workpiece. If it will not come off, re-secure roller with the tongue and groove wrench and remove the bolt from the other end of the same roller.
5. Once you have removed your workpiece re-align center roller in its position and GENTLY re-screw in the bolt(s) that were removed. Do not use an impact wrench or drill for this process. The bolt must be screwed back into the roller perfectly straight, and using the pre-existing threads.