#### DESCRIPTION

Thank you for purchasing the FSP1 PROGRESSIVE BENDER SET from Malco. The FSP1 TOOLS may be used by professionals to form both profiles of asymetrical 1.5" standing seam panels. Keep reading to learn more about how to setup and use the FSP1 TOOLS.

## **SPECIFICATIONS**

#### MAX THICKNESS

- Steel: 24 ga. (0.7 mm)
- Stainless steel: 26 ga. (0.5 mm)
- Aluminum, Copper, Zinc: 20 ga. (0.8 mm)

#### TOOL WEIGHT

- Female profile bender 12.3 lbs. (5.6 kg)
- Male profile bender 10 lbs. (4.5 kg)

#### PROFILE DIMENSIONS



## SETTING UP THE WORKSPACE

Set up work table with flat surface and straight edges. Recommended table height is 29.5" (750mm) for efficient use of the tools. Measure material sheet offset from the table edge using provided tool: 1 15/16" (49 mm) for female profile and 2 3/8" (60 mm) for male profile.











Always secure the material to table with clamps.

# SET UP - FEMALE PROFILE BENDER

- 1. Select rolls according to the sheet thickness
  - Roll A: .000" .019" (0 0.5 mm)
  - Roll B: .020" .032" (0.55 0.8 mm)



Use 4mm allen key to change rollers and tighten screws



Change according to material

Roll a test piece to verify the angle. To adjust profile angle, loosen screw with 4mm hex key, adjust angle, then tighten in desired position.

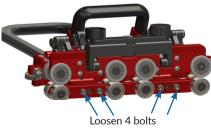




Each step corresponds to 1° adjustment

# SET UP - MALE PROFILE BENDER

1. The rollers should all be in contact with the sheetmetal for the tool to work correctly, to adjust the roller spacing use a 5mm allen key to loosen bolts shown.



2. Insert material sheet between rolls and adjust by turning adjuster screw using 4mm hex key. Adjust until rolls are pressed against the material and then loosen slightly.



Material must go easily between rolls.



Material sheet

Tighten after adjustment

- 3. When desired adjustment is achieved, tighten 4 bolts with 5mm hex key.
- 4. Roll a test piece to verify the angle. To adjust profile angle, loosen screw with 4mm hex key, adjust angle, then tighten in desired position.

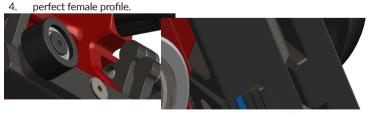


1° adjustment

## **OPERATION - FEMALE PROFILE BENDER**

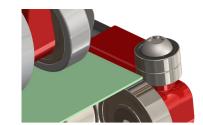
Use the Female tool to make upper seam profile.

- 1. Start by positioning wheels in start position as shown and rolling bender on to the sheet from an edge.
- 2. Make sure positioning rollers are aligned with the edge of sheet. Front wheels are not touching the surface yet.
- 3. Start bending by simply moving bender from one sheet side to other while lifting up the handle and pushing the black handle against sheet. We recommend to add 10° on each pass. First rollers must travel out of the sheet to make sharp edge but front wheels must always stay on the sheet! Keep moving and lifting up the handle until you have made a





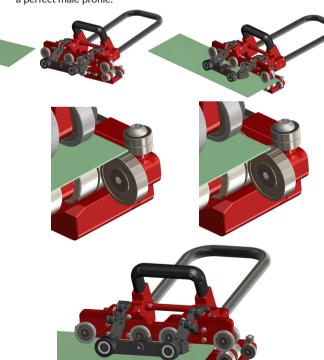




#### OPERATION - MALE PROFILE BENDER

Use the Male tool to make under seam profile.

- 1. Start by positioning wheels in start position as shown and rolling bender on to the sheet from an edge.
- 2. Make sure positioning rollers are aligned with the edge of sheet. Front wheels are not touching the surface vet.
- Start bending by simply moving bender from one sheet side to other while lifting up the handle and pushing the small black handle against sheet. We recommend to add 10° on each pass. First rollers must travel out of the sheet to make sharp edge but front wheels must always stay on the sheet! Keep moving and lifting up the handle until you have made a perfect male profile.



#### MALCO ROOFING ESSENTIALS





Seamers





Modular Benders





2 Station Benders





## SAFETY INFORMATION

- Always use tools exactly as specified by the manufacturer in users' manual.
- Carefully read all safety information before operating the FSP1 TOOLS and save them for future reference.
- For operation, maintenance and repair of the tools, read the operating instructions.
- When working with the FSP1 TOOLS on a roof, always use roof lifeline and follow all safety regulations. Keep proper footing and balance at all times.
- Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating may result in serious personal injury while operating may result in serious personal injury.
- During the operation hold hands, fingers, jewelry, hair, clothes and other tools at a safe distance from rotating parts. Never place your hands, fingers or tools between the rolls or close to moving parts.
- Wear apropriate working clothes. Long hair should be protected by a hairnet. Put on protective gloves.
- It is strictly forbidden to put and keep wet FSP1 TOOLS in case. If sand and dust accumulate around the rollers, clean them.
- Do not expose the FSP1 TOOLS to extreme temperatures, it is not recommended to operate the device in cold weather (below zero degrees). Do not expose FSP1 TOOLS to rain or use it under moist or wet conditions.
- This tool set is not intended for use by children. Ensure that children do not have access to it.
- When the FSP1 TOOLS and accessories are not in use, keep them in a safe place.
- Do not let familiarity with product replace strict adherence to safety rules. Misuse may cause serious personal injury.
- It is strictly forbidden to install, dismantle, replace and modify components, parts and equipment not provided for in this manual without written agreement from the manufacturer.

## CARE AND MAINTENANCE

- Store in the case when tool is not in use. Clean and dry tool after each use.
- Do not expose tool to extreme temperatures (below 0 degrees) and weather conditions.
- Always clean dirt, dust, sand, and other scrap from cutting discs, axles, and guards.
- Maintain tool using factory original replacement parts.
- Periodically, apply a light machine oil to moving joints to maintain ease of movement
- Tools are delivered inside Military grade case with safety foam.



Do not use case for any other purposes than carrying and storing FSP1 TOOLS. Do not put other tools – such as snips, pliers etc. in the case!

#### TROUBLESHOOTING

- If rolls scratch color off the material make sure the work area is clean from sand, dust etc...
- If rotary rolls are starting to rust clean the tool carefully after use.
- If the profile is curled lift up handle less per pass. We recommend 10<sup>st</sup> per pass.
- If profile has wrong sizes make sure positioning bearings are aligned against the sheet as specified.

# WARRANTY

- Malco Tools, Inc. warrants to the original customer/consumer that its products will be free from manufacturing defects in materials or workmanship when subject to normal and proper use.
- Should any such defect occur following original purchase, Malco Tools, Inc. will repair or replace, at its discretion, the defective product.
- Malco Tools, Inc. shall not be liable or responsible for labor charges or other expenses whatsoever in connection with removal or installation of either the original or replacement product. In the event of repair or replacement under the terms of this warranty, the original warranty shall apply to the repaired or replacement product.
- See full terms and conditions on our website

# MALCO FSP1 PROGRESSIVE BENDER SET



