

# Rail Bender

for

16-21mm profiled rail



## INSTRUCTIONS



## IMPORTANT SAFETY INSTRUCTIONS!



### **Warning:**

The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that **COMMON SENSE AND CAUTION ARE FACTORS WHICH CANNOT BE BUILT INTO THIS PRODUCT, BUT MUST BE SUPPLIED BY THE OPERATOR.**

### **The Operator**

PLEASE REMEMBER:

- Do not operate the product if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment/reflexes might be impaired.
- Do not wear loose clothing or jewellery as they can be caught in moving parts.
- Protective gloves and non-skid footwear are recommended.
- Wear restrictive hair covering to contain long hair.
- Maintain proper footing and balance at all times.
- Use the right tool for the job. Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- For your own safety, maintenance should be performed regularly – oil spindles and check spindle fixings for tightness.

### **Work Area**

**TO AVOID RISK OF PERSONAL INJURY, EQUIPMENT DAMAGE, FIRE AND SHOCK, MAKE SURE YOUR WORK AREA IS:**

- Free of damp, wet or rainy conditions.
- Free of children (never let them handle tools or machinery unsupervised).
- Well-lit.
- Clean and uncluttered.

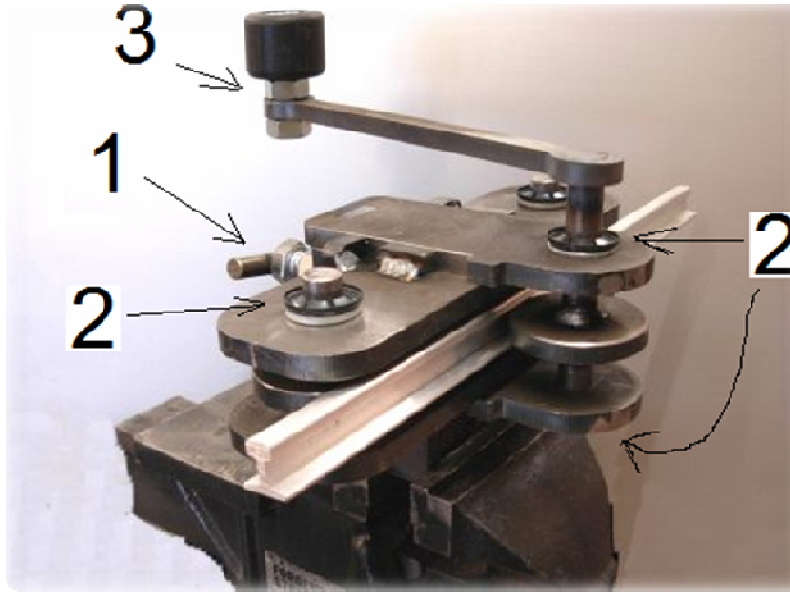
### **Before Operating**

- For ease of use we would recommend securing the bender in a vice fixed on a sturdy bench. Check to make sure the vice/bench can not only support the bender but also the rail protruding out from either side. This is especially important when using heavier steel
- Make sure the rail bender is securely clamped and secured in place so it cannot fall and cause injury.
- Oil spindles (marked #2 on picture)

**Ride on Railways Ltd**

20 Eastern Avenue East, Romford, Essex. RM1 4DR

[www.rideonrailways.co.uk](http://www.rideonrailways.co.uk)



### **Operation**

Never force the tool to do the work of a larger industrial tool. It is designed to do the job better and more safely at the rate for which it was intended - 16-21mm rail.

Step 1) Determine the size of radius you wish to obtain. Do this by marking an arc on the ground using a tape measure and piece of chalk.

**Warning: Do not use flat bar. Only profiled rail will work safely**

Step 2) Move the Adjustable Wheel (#1 see picture above). Back it off to allow the rail to slip in without any resistance. Roll the rail to the start/end.

Step 3) To curve the rail tighten the adjustment until you feel quite a bit of resistance. Turn the handle (#3) until the rail has passed fully through.

Step 4) If the radius needs to be tighter turn handle 1 clockwise to tighten the rollers. Half a turn for slight adjustment, a couple of turns for major increase.

Step 5) To reengage the rail wind handle 3 while pushing the rail into the bender. If you over bend the rail you can simply back off the adjuster 1, turn the rail over and re feed it through.

Step 6) **WARNING** – once you have the correct radius on your first piece of rail do not feed the next piece of rail through without slackening off adjuster 1. Failure to do so will result in the following rail being over bent.

### **SUGGESTED METHOD OF WORK**

1. Practice on a scrap of rail to get a feel for the bender.
2. Mark out an arc for the desired curve.
3. Have a good guess at setting required and wind the rail straight through.
4. If the rail is too tight wind handle 1 anticlockwise. If not tight enough wind clockwise.
5. Wind next piece of rail and follow step 4 if necessary
6. Wind remaining rail through.
7. Go back and re roll first pieces of rail. Turning to straighten if necessary.

**Ride on Railways Ltd**

20 Eastern Avenue East, Romford, Essex. RM1 4DR

[www.rideonrailways.co.uk](http://www.rideonrailways.co.uk)