



## ELIMINATE MANY PRESS BRAKE OPERATIONS WITH EASYBEND™

### THE PROBLEM:

Fabricating jobs often require the bending of parts. Typically, fabricators use press brakes for these operations. Sometimes, using a press brake seems like overkill, especially on smaller parts, and adds a secondary operation and cost to a job. Bending parts by hand could help lower manufacturing costs and speed time to delivery.

### THE MATE SOLUTION:

EasyBend™ is a tool that creates bend lines to make hand bending operations easy and convenient. EasyBend is ideal for intricate assemblies where conventional press brake forming techniques are inconvenient.

EasyBend employs a linear V-line to create a stencil in the sheet metal. The tool penetrates the sheet metal, creating a crisp bend line, enabling it to be bent by hand. The angle of the stencil point is related to the angle of the desired form, which must be specified when ordered. The actual depth of penetration is dependent on the ductility and thickness of the work piece. The continuous nature of the design allows the length of the bend-line to be a maximum suggested length of 12 inches (300mm).

EasyBend may be ordered to allow bending up. To **bend up**, the upper scores the **top** of the sheet (Figure 1). To **bend down**, the lower scores the **bottom** of the sheet (Figure 2.)

Fig. 1.  
Bend Up

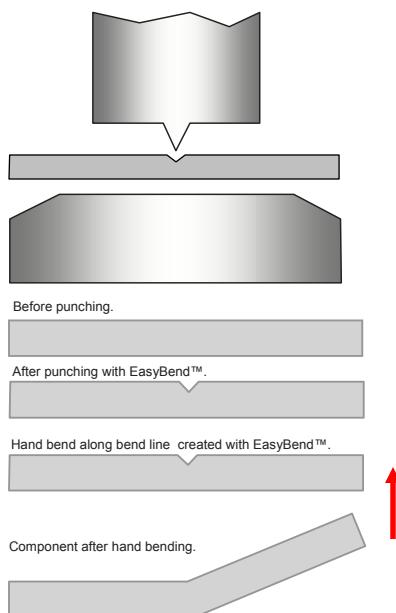
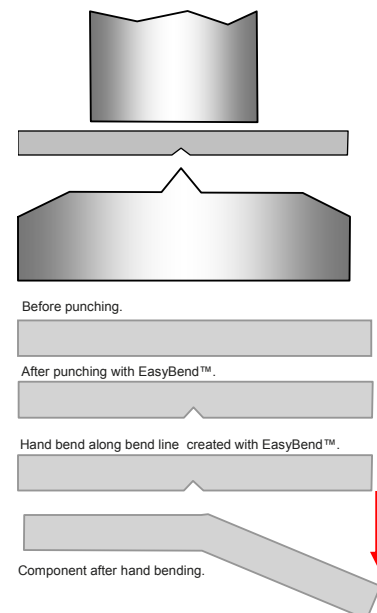


Fig. 2.  
Bend Down



# SOLUTION BULLETIN



The benefits of using EasyBend include:

- Precision bends done by hand
- Eliminates bending in a press brake
- Bends can be up or down
- Perfect for smaller parts or lighter gauge materials
- Eliminates expensive secondary operations
- Fabricate and bend pre-painted material
- Parts can remain flat during transport or shipping. This saves space and allows the parts to be bent manually before assembly

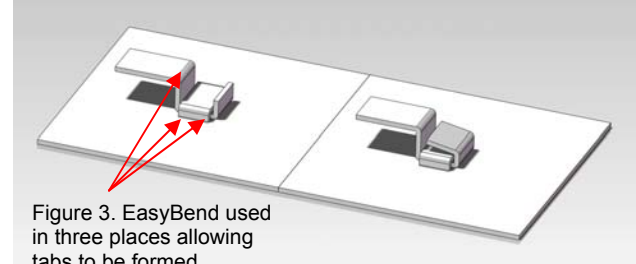


Figure 3. EasyBend used in three places allowing tabs to be formed.

EasyBend opens up a lot of possibilities. One such idea is to use it to make tabs that can lock two parts together (Figure 3), which can be particularly useful in field installations or repair applications in various industries. You can also use EasyBend to perform multiple and decorative bends. Figure 4 shows a display in Mate's Customer Solution Center that used EasyBend and other forming applications such as louvers.



Figure 4. Three views of a display in Mate's Customer Solution Center made using EasyBend. Left shows entire display. Center shows close-up of decorative bends. Right shows end-view with all bends made with EasyBend.

## POTENTIAL INDUSTRIES THAT COULD USE EASYBEND:

- Aerospace
- Appliances
- Commercial Furniture
- Electronics Enclosures where there is minimal stress
- Food Service Equipment/Refrigeration
- HVAC (Heating/Ventilation/Air Conditioning)
- Lighting
- All others!

## ADDITIONAL INFORMATION:

- View a video of EasyBend at Mate's YouTube® site: <http://www.youtube.com/user/mateprecisiontooling>
  - Construction of a metal box shows EasyBend™, SnapLock™ and EasySnap™.

## AVAILABLE TOOLING STYLES:

- Available for all presses.

## MATERIAL RESTRICTIONS:

- Material thickness less than 16 gauge (1,50mm)
- Maximum 12 inches (300mm) length recommended
- Bends greater than 90 degrees not recommended
- Design variations are available for thicker materials

## HOW TO ORDER:

- EasyBend (top of sheet): Use special application code JB
- EasyBend (bottom of sheet): Use special application code JC
- Consult a Mate Applications Specialist to determine the ideal tool for your needs.

## OTHER MATE PRODUCTS TO CONSIDER:

- EasySnap™
- SnapLock™
- Foot Tool