

A pyramid type plate bending machine is widely used in automation industry. Unfortunately, there is no proper bending machine to bend a sheet metal of less thickness. Moreover, the existing bending machine is big in size, consume a lot of space and it is use for big scale production. Plate bending is a process by which a metal can be bend by plastically deforming the material and its shape. Material suppose to be stressed beyond the yield strength but below the ultimate tensile strength. Roll forming (as know as roll bending) is a process for forming plates, sheets, bars, beams, angles or pipes into various shapes by passing the work piece between the properly spaced rolls. Sheet and plate are the mill products often formed by the three roll bending machine.

Types of 3 roll pyramid type plate bending machines are:

1. Single pinch 3 roll plate bending machine
2. Double pinch 3 roll plate bending machine
3. 4 roll plate bending machines

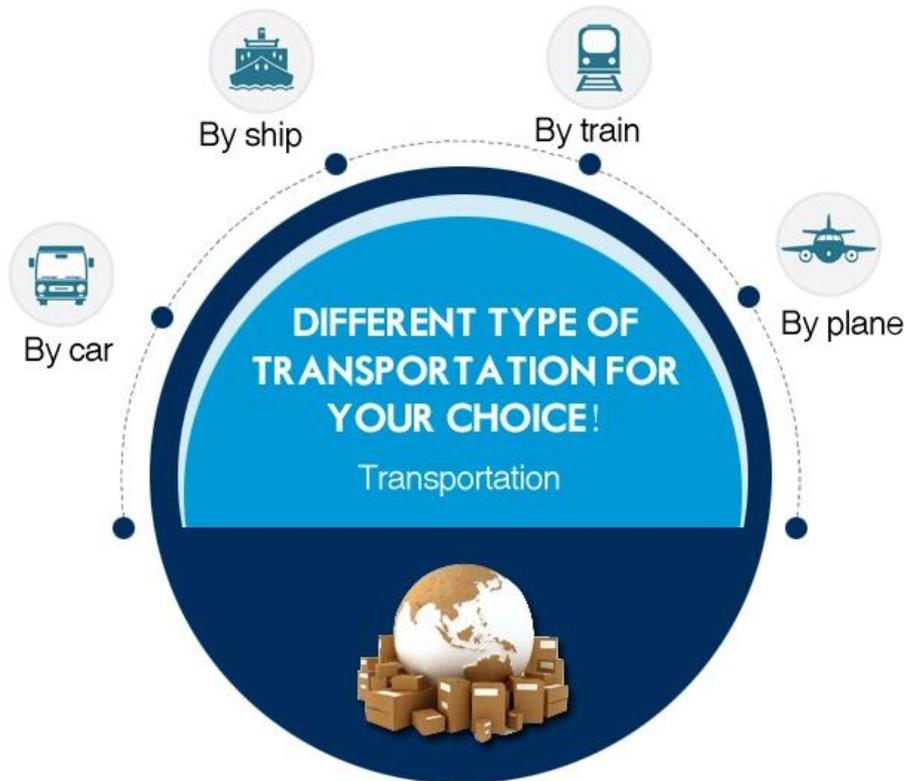
#### **The main working components of the pyramid type plate bending machine:**

1. These rolls are supported on either side by the left and right stands
2. The two bottom rollers receive power where as the top roll does not it rotate freely
3. The deform plates into cylinders or cones, the top roll must be subjects by a down ward load; this is achieved by as crew pressure through a power screw, which is located at the top of the two stands
4. The top roll have more load than the bottom rolls, it is therefore, made of a large diameter. and it is supported on a hinge on the right side, the hinge is also supported on the housing block and carries the bearing to support the shaft and moves together with roll and the block

#### **Working principle of the pyramid type plate bending machine**

**Parfit Electronic Technology (Jiangsu) Co., Ltd**  
Address: High Technology zone Hai'an City, Jiangsu province  
Mob: +86-158 5134 1020 Tel: +86-513-8866 6186  
Fax: +86-513-8866 3659 [E-mail: judy\\_song@parfit.com](mailto:judy_song@parfit.com)  
[Web: www.cnparfit.com](http://www.cnparfit.com)

1. Insert the plate by adjusting the upper roller and by adjusting the upper roller provide the pre stress on plate
2. The plate bends towards the upper roller and after one complete cycle measure the radius
3. Roll the whole sheet as per required diameter
4. Adjust the rolls for the final outcome and make necessary clamping force
5. After getting required diameter lower the clamp force



### High Speed

Express for sample or urgently orders!

