

# **REDUCE YOUR REJECTION**

## **By Implementing these ideas**

### **Problem- Edge Cracking**



While bending if the cracks appear on the edge of the component....

1. Check the shearing edge of the sheet or plate. There should be no burr (if there is burr, grind it). During bending, burr promotes the development of the cracks.
2. Check the shearing machine, shearing tool, edge of the blade and gap of the blade.
3. Check the radius of the punch. In case of sharp bending, radius of the punch should be equal to the thickness of the sheet or slightly more.

### **Problem - Cracks** **appearing throughout** **the bend**



1. Check the material. Is the material being used is of right TDC (Technical Delivery Condition) as per the component requirement?
2. If the drawing of the component allows, change the direction of the sheet when the sheet is cut into pieces. In this type of problem, change of the direction helps to come out of the problem.

### **Problem- Bending differ from end to mid part**

1. Multiple packing between the die and machine bed can be the reason for this.
2. In 1000 mm and above length if this type of defect / problem appear, Segmented Die/Punch can show better results.
3. Alignment of the punch and dies also play major role in bending problems. Check on Priority.

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## Problem in the draw components



1. Check the TDC of material. Is selected material as per requirement of the drawing
2. Check the alignment of punch and die.
3. If cracks appear on particular position, then you must check the die and punch because material alone does not possess this type of tendency. Check the water level of the bed of the power press.
4. If the draw is deeper/multiple, make it into two operations.
5. If draw component cracks from edge, again one should check the blanking tool
6. There should no burr on the material. Also check the edges of the punch and die.

## When problem appears in embossing or in dipples

There is no document that shows or explains the top and bottom surface of Sheet or Plates!

But it has been observed that Sheet has top and bottom. In drawing components it can be easily observed.

When a component shows hair line cracks or some cracks which are not seen after draw but appears after phosphating, then reverse the orientation of the sheet while drawing from top to bottom or bottom to top, as required it gives good results

**In the interest of our valuable customers**

Prepared by  
Pawan Mangla

