

TROUBLESHOOTING GUIDE: HOW TO AVOID FISHEYES

Fisheye is a problem that can lead technicians and users to replace parts needlessly. There is one fact that's important to remember about Fisheyes; **IT'S VIRTUALLY NEVER THE PRINTERS FAULT.** The reasons for Fisheye are as follows:

- 1. The media has a defect in the coating which is causing the ink to vacate that spot.** In these instances locate the lot number on the box of media and contact the media manufacturer or supplier where the media was purchased. Save the defective print sample to return with the roll.
- 2. There are foreign substances on the media.** Most often the fish eyes are caused by airborne particles landing on the media before it enters the printer. Be sure your printer is not located under an air conditioning vent, next to an engraver or router table and not in the breeze of an open door. It's also possible, but less likely, for the debris to be coming from inside the printer. Be sure to check the inside of the printer for debris that could be caused by previous media, lack of maintenance, etc.

Troubleshooting Fisheye

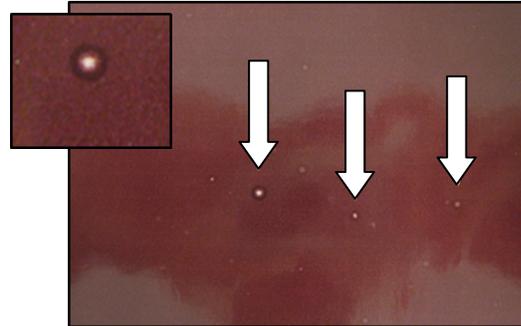
Now we've established there are only two reasons Fisheye can show up in the output from your printer. Keep in mind how the printer works as it is printing. Hundreds of small nozzles are firing ink at a precise rate to give the appearance of an image. In Roland devices each particular point on the media will be passed over a minimum of 4 times by several different sets of nozzles on the same printhead. Add additional printheads depending on what printer model is being used and there is too much redundancy for the printer to miss a single spot (or several single spots) when printing. It is just about physically impossible.

Another component that gets blamed for Fisheyes is often the heating system. Also keep in mind that there are two or three heaters running the length of the platen on each Roland device. Any malfunction of the heating system would most likely be shown across the entire width of the media. Prints that have heating problems can give a streaky or orange peel look to the prints, not areas completely devoid of color.

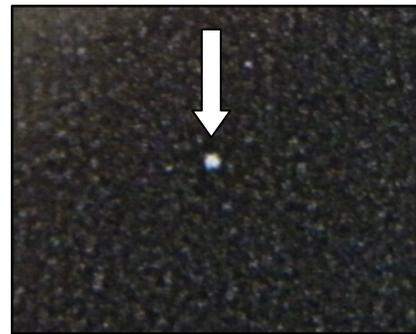
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Troubleshooting Fisheye – Sample Images

1. This is a classic Fisheye image. You can see the white area surrounded by a darker area which indicates that the ink has vacated off of the white area. This makes the area around the white area darker from extra ink that has moved from the white area.



2. This image shows one white spot in the center of a black printed area. The other light areas shown in this image may be confusing because they are imitating a fisheye. This is actually an orange peel effect that is from the print profile being incompatible with the media or running on a heat setting that is too low.



3. In this image there are two defects. One is a fish eye and the other looks to be a short line with a curve. This type of print defect would be caused by a fiber on the printed surface. The same grain shown here as the print above could be from orange peel or from having the BiDirectional Adjustment incorrectly set.

