## **Problem Statement**

Kelli: The issue with the high density patch panel production is becoming critical. We really need to come up with some creative solutions. Mike can you please get everyone up to speed with an overview of the problem?

Mike: When the customer came to us with this new design a few years ago we told them it wouldn't work. They want to increase the connector density in the patch panel, but keep the overall size the same. The new design removes so much metal that there's no integrity left to the part at all. When the part is bent, the punched holes don't hold their shape.

Len: The problem is that the size of the cutout doesn't remain constant due to the amount of material that's being removed. Since the customer already designed the molds for the new connectors, we're stuck with this specification.

And another problem we have is the tolerance they gave us. It's + 12 thousandths/ - 0 thousandths. That doesn't give us much room for error. We asked to increase the tolerance but the customer said no.

Kyle: The tolerance was so tight that we had to go from powder coating, which is 3-4 mils thick, to e-coating that would only be half to three quarter mils. The powder coating was just not consistent enough.

Mike: We've gone to the manufacturers of all the machines and processes- the press brake, the punch- they all said the same thing. This is out of the realm of normal sheet metal practices.

Kelli: Well the rejection rate is way too high on this part. We can't raise the price so we'd better find an answer right away.