The Challenge
An Ohio-based animal feed company noticed some of their feed bags were not completely filled to capacity before being put on a pallet for the delivery trucks. After careful examination of their production line, they noticed some feed would spill out of the bag when it was laid down horizontally after the sewing portion of the production process. At times, the sewing machine wasn’t completely sealing the bag shut, and there was no way of determining this had happened, until it was too late. The feed company wanted to ensure their customers were getting the full amount of quality feed in each bag.

The Solution
Initially, the feed company wanted to put in a laser profile sensor that would detect the thread of the bags to make sure they were being sewn accurately. Their current line equipment made it difficult for a system like this to be installed within their budget and timelines. MartinCSI recommended Omron E32 and beam fiber optic sensors be installed at the transition point where the bags were laid down horizontally on a conveyor after being sewn. The sensors would detect if any feed had fallen from the bag in between the transition point, if it had, the line would stop so production workers were able to remove the bag.

The Result
• Sensors were able to be applied to the existing equipment infrastructure.
• There was no downtime to the line because the installation of the sensors were done during production time.
• Now, operators don’t have to emergency stop the line if they notice the spill. The sensors easily detect a spill and will stop the line automatically.
• Decreased amount of open bags placed on pallets.