

HARMONY ENTERPRISES, INC. wire guide system

ABOUT THE CLIENT

Industry:

Waste Solutions

Location: Harmony, Minnesota Toulouse, France

Over 40 years ago Harmony Enterprises, Inc. saw the need for a better way to curb the mounting problem of air pollution caused by the widespread incineration of cardboard. Harmony built their first low profile baler to help reduce the amount of cardboard waste. Now Harmony is the world leader in the design and manufacturing of waste solutions.

WIRED TO WORK HARD.

complex manufacturing • painting & finishing • assembly solutions • metal fabrication • machining

HARMONY'S CHALLENGE:

Lou-Rich was asked to look at a particularly challenging project that Harmony Enterprises had been struggling with for several years. Most of the baler compactors featured a wire guide system that allowed just one operator to feed a long piece of wire through slots in the machine. The wire was fed across the top of the cardboard bale, around and down the back, and then out the bottom. The operator could then twist the wire together holding the compacted bale in place when the top of the machine was brought back up. Unfortunately, that wire was getting stuck during the process requiring an additional set of hands to feed it through. Sometimes the entire baler had to be moved so maintenance could access the back of the machine. The wire guide system was contributing to widespread and costly warranty issues. complex engineering • quality control • project management • precision machining







OUR SOLUTION:

After seeing the current design and hearing about the existing challenges, Lou-Rich collaborated with the Harmony engineering department to create a rough prototype of a new design. The innovative wire guide system was engineered to withstand a heavy workload and consistently feed the wire through without getting stuck. After working together through three iterations of the design, Harmony gave the green light for Lou-Rich to produce a few sets of the new wire guides for field testing.

THE RESULTS:

Two sets were sent into the field and retrofitted onto an existing baler. During the 60-day test, both sets performed flawlessly, with a 100% success rate. Harmony finally had an answer to expensive issues with a 90% reduction in warranty claims. Moving forward, virtually every new Harmony baler is designed and manufactured with the new wire guide system and units in the field are being retrofitted to take advantage of the improved design.

"CRAIG AND THE LOU-RICH TEAM WERE A KEY ELEMENT IN THE SUCCESS OF THIS PROJECT, AND HAVE BECOME A GREAT PARTNER BECAUSE OF THAT." - ISAAC KRUSE, ENGINEERING