How Custom Printed Tubing Solved Leaks

A NewAge Industries’ customer had a problem that was costing them a great deal of money. A tubing-to-fitting connection used to supply water in an assembly was leaking, and a lot of money was being spent on service calls and repairs.

The customer manufactures industrial battery maintenance products used in forklift trucks and other material handling equipment. Several of their products use a specially-designed fitting that connects the battery to a water supply line.

A number of the manufacturer’s customers expressed concern over leaks that were occurring at the tubing-to-fitting junction. Service calls were made, and the manufacturer determined that field service technicians were not inserting the tubing far enough into the fitting, resulting in the leaks. The manufacturer’s engineers then worked with NewAge on a solution: place a mark on the tubing to show service technicians how far into the fitting the tubing must be inserted.

The fix sounded simple – just print a line on the tubing during the extrusion process. Only it wasn’t simple.

The “insert to here” line needed to be printed along the length of the tubing at 5/8” intervals. This line would show technicians exactly how far to push the tubing into the fitting for a proper, leak-free connection. However, extrusion lines run at varying speeds, so it was a challenge to figure out how to print a line consistently at 5/8”.

Engineers at NewAge researched solutions to the problem. They then upgraded an extrusion line with equipment that could synchronize the extruder with its printer, thereby ensuring that a line was printed every 5/8”.

The extruder was soon manufacturing the precisely-printed tubing. Feedback from the manufacturer told NewAge that as soon as the new tubing was put into use, the leaks – and the many service calls – stopped, saving them time, labor, money and headaches.

If you have a problem with tubing or an assembly, call NewAge Industries at 800-506-3924 or 215-526-2300 and talk with a Technical Service Representative. We have engineers on staff to assist with your design, whether it’s a custom product or a part made from stock items.