THE PROBLEM
A major vehicle producer in Europe was facing challenges in their plant with adhesive burn during spot welding. The manufacturing plant was bonding stainless steel panels to a metal structural frame. The design called for bonding the entire panel to the frame with polyurethane and spot welding on one end to fix the panel in place to control the direction of thermal expansion. During the spot welding process, the polyurethane adhesive layer in between the steel layers was burning and smoking.

THE SOLUTION
Bostik technical engineers reviewed the vehicle producer’s process and recommended the STR 350A for use in this application. STR 350A is a compromise between an adhesive and a sealant and is based on Silyl Modified Polymer (SMP) technology. Many urethanes require the substrate to be properly prepared before adhesive application. SMP technology allows for the adhesive to be applied to a primerless substrate, saving labor time. Bostik’s SMP chemistry also provides better char resistance to short term, high heat applications like spot welding over polyurethane sealants and adhesives while maintaining the green strength required for bonding the exterior panel to the frame.

Bostik’s STR 350A adheres well to substrates of aluminum, stainless and galvanized steel, and powder coated metal making it a perfect fit for this vehicle manufacturer.

The manufacturer converted their entire facility over to Bostik’s STR 350A and was able to eliminate the problem with charred and smoking parts in their plant.