Robotic Laser Cutting & Welding of TPO Fascia

A hydraulic punch and sonic welding operation was replaced by robotic laser cutting and welding of a Class A exterior fascia. Unlike other welding processes, it is not necessary to thicken wallstock in weld areas to prevent read-through with robotic laser welding of brackets on the backside of the part, and that reduces weight slightly. It also eliminates the need for contoured horns and punches. Clean cuts can be made in 1 sec on the painted side of the part. The dual-function process provides greater flexibility between programs and reduces floor space and tooling costs.