# **Application Alley**

# Sensors - Laser Welding and Stainless Steel Fabrication

Why Standex Electronics Laser Welding and Stainless Steel

Fabrication?



At Standex Electronics, customer-specific product development has never been a problem. With our expert engineering staff and cutting-edge manufacturing capabilities, we are well-equipped to produce unique solutions for just about any environment or application.

As part of these services, Standex Electronics offers the ability to manufacture products with both stainless steel fabrication and precise, cost-effective laser welding techniques. Using these two technologies, we can produce versatile solutions that not only have the strengths and amenities of stainless steel, but are also manufactured with the power of laser welding. We offer these flexible, high-reliability options for various stem lengths, switching points, and small to large volumes.

By utilizing a laser welding system with our stainless steel components, we are able to provide complete solutions rather than single components. Standex Electronics aims to be a one-stop, comprehensive resource for our customers, and this service provides an important part of that mission.



# **Why Stainless Steel Fabrication**

- Medical applications
- Industrial and Power applications
- Food Service: Pressure cooking, Food grade / FDA, Steam ovens, and others



- High temperatures
- High pressure
- Surface protection
- Robust design for agriculture and construction machinery, off-road vehicles, and marine
- Liquid level sensors
- Corrosive liquids
- Laboratory equipment
- · Chemical resistant



Stainless steel fabrication is ideal for sensors and other components in harsher environments, where high temperatures, high pressure, corrosive liquids, or other factors might damage a less robust material.

Standex Electronics offers stainless steel fabrication for our level sensors, magnetic floats, and many other products to better equip them for automotive, industrial, medical, lab, and food and beverage applications. In addition, our manufacturing facilities make the most of stainless steel's potential. For example, we now seal our stainless steel sensor housings with a rolling and crimping machine. Previously, we had utilized potting as a sealing method, which is very limiting. With rolling and crimping capabilities, Standex Electronics can effectively seal housings with a wider variety of features.

## **Why Laser Welding**

- Precise working, with exact placement of the energy spot
- Cost-effective
- Low heat application
- Low thermal distortion
- Low post-weld operation times
- Long work piece up to 2000mm

- Short sampling
- Higher vibration resistance
- Large working distance is possible
- Ideal for welding of complicated joint geometry
- High grade of automation
- Cavity-free welds
- High in-housing production depth
- Quick reaction/response time





Component Corner (Expert Insights)
Daniel Kuechler, Product Manager
Europe, Standex Electronics

Our approach is very customer-centric. When we saw the challenges involved in the fabrication of stainless steel level sensors, we set out to provide a high-quality solution that was also cost-effective and highly flexible. Once we added laser welding capabilities to our portfolio, we were able to do that. We can now manufacture the entire solution in-house, rather than only the

individual components. This saves customers time and money, and it gives

them that extra guarantee of expertise. In addition, by partnering with our engineering experts, they can create custom solutions to fit their individual

application.

Standex Electronics's laser welding systems allow us to provide customers with a total solution rather than single components. This technology is especially relevant for stainless steel level sensors, which we can now manufacture entirely in-house. This means that we are able to offer our customers quick samples, customized marking, and cost-effective designs, all while maintaining the high quality standards that have made our name in the industry.

Find out more about our ability to propel your business with our products by visiting www.standexelectronics.com or by giving us a hello@standexelectronics.com today! One of our brilliant engineers or sales leaders will listen to you intently.













#### **About Standex Electronics**

Standex Electronics is a worldwide market leader in the design, engineering, and manufacture of standard and custom electro-magnetic components, including magnetics products and reed switch-based solutions.

Our magnetics offerings include planar, current sense, and conventional low- and high-frequency transformers and inductors. Reed switch-based solutions include Meder, Kent, and KOFU brand reed switches, as well as a complete portfolio of reed relays, and a comprehensive array of fluid level, proximity, motion, water flow, HVAC condensate, hydraulic pressure differential, capacitive, conductive and inductive sensors.

We offer engineered product solutions for a broad range of product applications in the transportation, automotive, medical, test and measurement, military and aerospace, aviation, HVAC, appliance, security and safety, and general power and industrial markets.

Standex Electronics has a commitment to absolute customer satisfaction through a partner, solve, and deliver approach. With a global organization that offers sales support, engineering capabilities, and technical resources worldwide – we implement customer driven innovation that puts the customer first.

For more information on Standex Electronics, visit us on the web at standex electronics.com.

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