

NEW PRODUCT INTRODUCTION (NPI) TO FINAL DELIVERY OF PRODUCT

PROGRAM HIGHLIGHTS

Customer developed a solution for RFID tracking of livestock that required Vexos' involvement at NPI phase for test, mechanical packaging, product identification and device protection. Range of the solution was two to five miles of each device with a three to five year battery life. Key functionality considerations in the product technology was adherence to proper RF production and test protocols. Key considerations for packaging was the requirement for hot plate welding of the plastics case and laser marking for asset identification purposes. Time to market was crucial as design completion to field trials was nine months.

SOLUTION

Vexos engineering (test, plastics, manufacturing) worked concurrently with the customer to provide a deliverable solution from initiation phase to delivery of final product. The technical challenges faced included design of low frequency RF volume test system, commissioning of a high volume plastics tool for engineered plastics, development of a volume manufacturing process that integrated test, laser marking and hot plate melting processes at volume.

RESULT

Vexos team of test engineers, worked together with the customer and developed three FT fixtures to accommodate high volume RF testing and processing. The test was developed at board level and final assembly of the product. At the

final assembly stage, the test outputted a Go / No Go signal that initiated the laser marking process.

Vexos worked in conjunction with their molding supplier partner to develop a high volume plastics tooling that would minimize parts costs, provide for high volume production, integrated a requirement for laser marking additives and enabled hot plate welding of the finished case. The material selected was thermoplastic polyurethane (TPU) with a percentage additive for laser marking and color. In order to minimize plastics cost due to excess sprue, Vexos commissioned a hot melt runner system as part of the tooling.



Vexos integrated two key technologies in the process design for this product: hot plate melting and laser marking. These technologies had to be integrated into a volume assembly process capable of output of 300,000 per month.

Dependable Quality

Vexos achieves the highest quality levels by utilizing the latest equipment, processes, quality standards and certifications across the organization; to enable a flawless launch of each individual program.

- Rigorous selection of sub-contractors or partner factories
- Performance evaluation and monitoring through regular audits of the factories
- Continuous training for personnel at all levels
- Document control to safeguard your data and release of technical documents
- Sample approval process including production part approval process (PPAP)

Certifications

- ISO 9001:2015
- ISO 13485:2016
- ISO 14001:2015
- FDA registered
- OHSAS 18001:2007
- RoHS and Non-RoHS
- IATF 16949:2016
- CGP certification

Markets We Serve



COMMUNICATIONS



INDUSTRIAL



MEDICAL



SMART GRID



SECURITY



AUTOMOTIVE



COMPUTING



AVIATION
DEFENSE SPACE



HVAC

vexos.com | 855-711-3227

Locations

USA

LAGRANGE, OHIO, USA

MANUFACTURING FACILITY

110 Commerce Drive, LaGrange, OH 44050, USA
+1 440-284-2500

CANADA

MARKHAM, ONTARIO, CANADA

MANUFACTURING FACILITY

195 Royal Crest Court, Markham, Ontario, Canada L3R 9X6
+1 905-479-6203

EUROPE

MALMÖ, SWEDEN

EUROPEAN SALES OFFICE

WTC Building, Skeppsgatan 19, SE-211 11 Malmö, Sweden
+46 705 48 26 59

ASIA

DONGGUAN, CHINA

MANUFACTURING FACILITY

Block A, Plainvim Industrial Park, Dongkeng Avenue, Dongkeng Town
Dongguan City, Guangdong, PRC, 523455
+86 769 8101 5368

HO CHI MINH CITY, VIETNAM

MANUFACTURING FACILITY

Floor 4th, Standard factory B, Tan Thuan street, Tan Thuan EPZ, Tan
Thuan Dong ward, District 7, Ho Chi Minh City,
72909, Vietnam
+84 28 3636 2939

HONG KONG

ASIA LOGISTICS

Flat A, 11/F Wing Tai Centre, 12 Hing Yip Street
Kwun Tong, Kowloon, Hong Kong
+852 2304 7900

WINNER OF 2022 CIRCUITS ASSEMBLY'S AWARDS

