

2020

Renco Electronics, Inc.



Quality
Renco Electronics, Inc.



RENCO ELECTRONICS, INC.

Company Profile

Corporate Headquarters

595 International Place

Rockledge, FL 32955

Tel (321) 637-1000 | Fax (321) 637-1600

www.rencousa.com



About Renco

Renco Electronics is a world class, Engineering driven manufacturer of inductors, transformers, and subassemblies that utilize magnetic components. Our components are designed into thousands of products including cappuccino and coffee makers, parts for back-up generators in the International space station, residential LED lighting, household appliances and mass flow meters for the food and beverage industry.

At Renco, we can build to print, work in conjunction with your engineering team, or, completely custom design inductors or transformers to your exact specifications.

We will build 10 pieces to 10 million pieces. Automated low cost, high volume production lines give us the ability to produce over 5,000 parts per line, per day. Our extensive manufacturing capabilities in North America & China include everything from high speed winding machines to our own programmable work station robots. We control everything down to the final test to ensure uniformity & unsurpassed reliability.

History

1955 - Founded by The Rensing Family

1960 - Specialized in radio and television coils

1981 - Financed and built 18,000 sq ft. manufacturing facility in Deer Park, New York.
Specialized in switching magnetics

1990 - Added linear transformer manufacturing

1993 - Added SMD technology & manufacturing

1995 - Established manufacturing facility in Guangdong Province, CN

1999 - Moved corporate headquarters to a 45,000 sq. ft. facility, on 8.8 acres in Rockledge, FL

2003 - Renco becomes ISO 9001:2000 certified

2005 - Launches all new e-commerce website

2008 - Expansion of Engineering Dept. and technical resources

2009 - Renco upgrades to the ISO 9001:2008 certified

2010 - Purchased addition warehousing in Rockledge, Fl.

2011 - Opened New Hong Kong Logistics and Office



History (Continued)

- 2014 – Launched New ERP System
- 2014 – ITAR Registration
- 2015 – Celebrating 60 years in business
- 2015 – Acquired Coils Unlimited
- 2016 – Obtained United States/Canada Joint Certification Program
- 2016 – Rockledge, FL Facility expansion
- 2017 – NIST 800-171 Compliant
- 2018 – ISO9001:2015 Certification
- 2020 – Acquired by Standex International Corporation

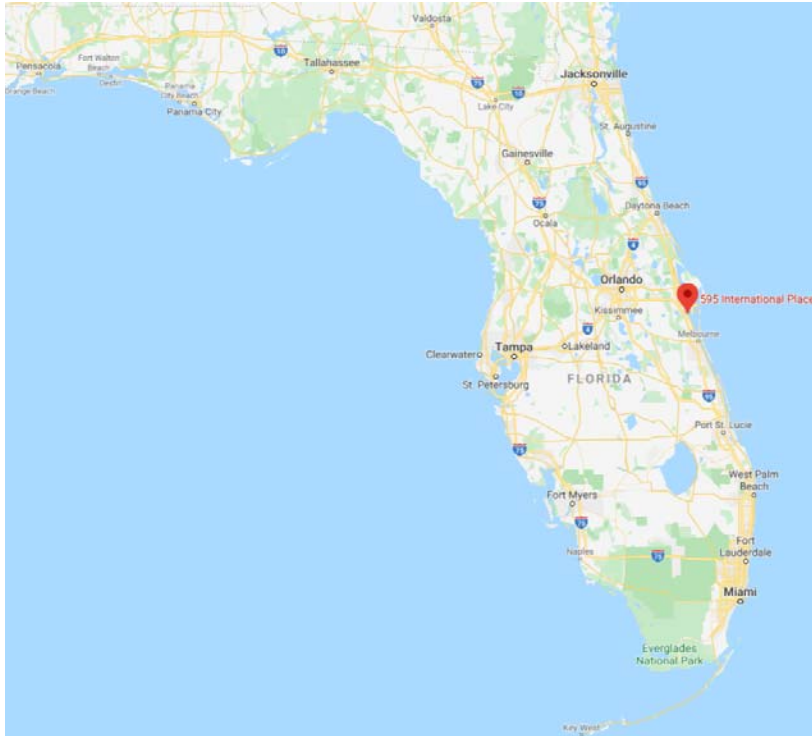
Renco Growth Rate

- **Four (4) year average growth rate >30%**
- **Contributors to Growth**
 - Expanded Engineering Department
 - Expanded Sales Department
 - Improved Worldwide Logistics
 - New Software System (Process Improvements)

Manufacturing

- **Rockledge, Florida:**
59,000 sq. ft., ~100 employees
- **Guangdong Province, China:**
63,000 sq. ft. 1,000 employees





Rockledge, Florida USA
Site of Renco Corporate Headquarters



Guangdong Province, China
Site of Renco China Factory





**Renco Electronics Hong Kong
RM 806 8/F and RM 1729 17/F,
Thriving Industrial Center
26-38 Sha Tsui Road,
Tsuen Wan N.T. Hong Kong**



CAPABILITIES AND SERVICES



MANUFACTURING

- **Assembly line work flow and Automated Machinery**

- Winding lines
- Specialty Winding Machines

- **Custom Fabrication and Tooling**

- Custom bobbin tooling
 - Multiple Cavity Molds for bobbins (pinned and un-pinned), bases, encapsulation cups, and spacers
- Custom core tooling
 - Unique geometries of ferrite, powdered iron, and silicon steel
- Machine Shop
 - Core gapping
 - Tools/Fixtures
 - Custom bobbins and headers
 - CNC Machine
 - On site machine repair
 - Specialized equipment



- **In-House Core Gapping and Tape Slitting**

- Prep Assembly; (Tape slitting, bobbin preparation, shield assembly, part ID labels, controlled tooling)
 - Centralized manufacturing documentation
 - Raw material preparation
 - Increases line flow time
 - Reduces waste



- **Vacuum Impregnation and Encapsulation**

- Custom varnish system
- Precise electronic controlled varnish levels
- Walk-in computerized controlled oven with chart recorder
- Encapsulation and conformal coating
- Mil Spec capability
- High reliability medical applications



- **Vacuum Oven and Pressure Oven**

- Vacuum or pressure oven encapsulation

- **100% In-process Inspection**

- Voltech AT3600
 - Continuous compliance verification
 - Test data storage and printing
 - SPC capabilities
 - Semi-automatic, multi-functional testing



QUALITY ASSURANCE



- ISO 9001 Quality Management System
- Industry statutory and regulatory compliance (RoHS, REACH, Proposition 65, Conflict Minerals, etc.)
- Full calibration program in accordance with ANSI
- World class test and inspection equipment
- Defined workmanship standards
- Document verification and approval
- Lot traceability, 7-year minimum maintained records
- Corrective and preventive actions program (CAPA)
- First article inspection (IAW AS9102, when required)
- Material review board (MRB)
- Interdepartmental interface



ENGINEERING

Custom Design Forms

- **Simplifies the processes on custom designs**
 - Power Transformer
 - Switch mode Transformer
 - Current Transformer
 - Inductor
 - Common Mode Choke
- **Decreases processing time**
- **Email or Fax it to the Engineering Dept**
- **Makes life easier for both companies**

Custom Sample Support

- **Quick turn samples**
 - Vast raw material inventory is maintained
 - Dedicated prototype department
 - Samples typically at NO Charge
 - 1 Week Lead Time, typically
- **UL Recognized insulation systems available for design**
 - 130°C, 155°C, 180°C, 220°C
- **Documentation**
 - Approval sheet, Electro-Mechanical, and UL material information



Engineering Support



- **Seven Design Engineers**

- Assigned territory coverage
- FAE on-site customer support
- Experienced, 50+ years combined
- Two Engineering Technicians

- **Prototype Department**

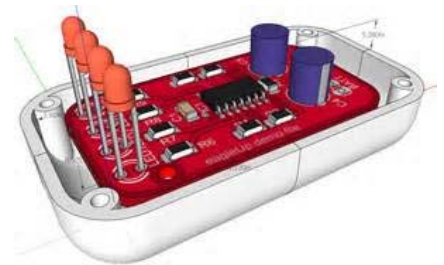
- Quick turn samples
- Complete document and design control
- Industry standard China material stocked domestically
- Design review: Feasibility, cost reduction and DFT/DFM

- **Design Tools**

- Standard inductor design kits
- Custom magnetics design worksheets
- Web-based virtual engineer and product selector
- Custom bobbin, headers and core tooling

- **Manufacturer Sales Representatives**

- 100+ Domestic
- 25+ International



Additional Support

- **Supply Chain**

- Strategic supply chain management based in Rockledge, FL
- Only approved sources are designed in and utilized
- Renco headquarters specifies approved source for procurement. Material is maintained for distribution via Hong Kong Logistics center



- **Program Management**

- Design & development and product validation & verification performed domestically
- China first article approval performed at USA headquarters
- Manufacturing processes and quality control plan established domestically
- Statistical reports reviewed by USA headquarters for high volume production
- Program Coordinator based in Asia
- On-site coordination/performance review quarterly
- Domestic, single-point accountability for customers enhance ease of doing business



LEAN PROCESS
LEAN PROCESS???

- **Lean Manufacturing and Continuous Improvement**

- Six sigma certified Engineers
- Failure analysis (5 Why's, PFMEA, 8D)
- Process mapping and analysis
- Continually enhanced ERP System
- Mirrored capability between Domestic and Asian facility
- Domestic, low volume dedicated work cell
- In-process, real-time 100% test validation



Safety Information

- **UL (Underwriters Laboratories)**

Renco owns more than fifteen UL Recognized Insulation systems allowing our customers lower costs and faster turnaround time for safety agency approval

- **Designs in accordance with applicable safety agencies**

CSA – Canadian Safety Agency

TUV – German Agency

VDE – European Safety Agency

CE – European Union

JCP – United States/Canada Joint Certification Program



PRODUCTS AND CUSTOMERS



Standard Products

Transformers

- 50/60 Hz Laminated transformers
 - Silicon Steel Cores
 - Nickel, non-gain or gain oriented
 - Chassis and PCB Mount
 - Pinned, Terminals or Fly Lead Termination
 - Single Phase & Three Phase
- High Frequency switch mode transformers
- Switch Mode Transformers

Current Sensors

- PC mountable 50/60 Hz thru-hole current sensors
- High frequency thru-hole current sensors

Unique High Power Magnetics

- 3-phase line reactors
- Cut core transformers/inductors
- Variac
- Typically less than 50kVA

Inductors and Chokes

- Power Chokes
- Differential Mode Chokes
- Line Filters
- Self-leaded and base mounted inductors available shielded or unshielded with current ratings up to 100A+ and inductances up to 100mH+

Common Mode Chokes

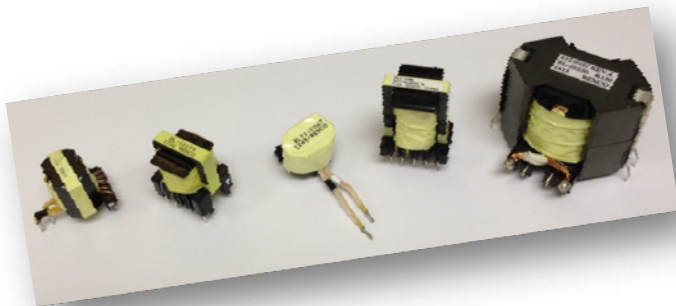
- Single and 3-Phase common mode chokes with current ratings from up to 60A and inductance up to 200mH

Surface Mount Power and RF Inductors

- Available in a variety of sizes, inductance values and currents

Toroidal Transformers

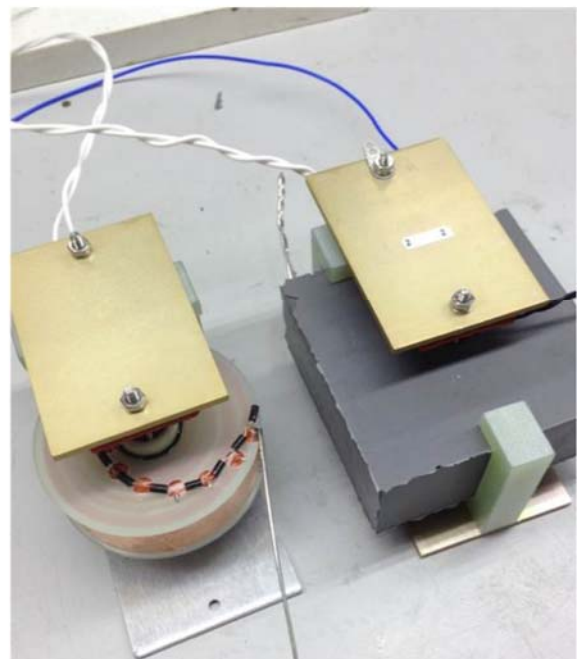
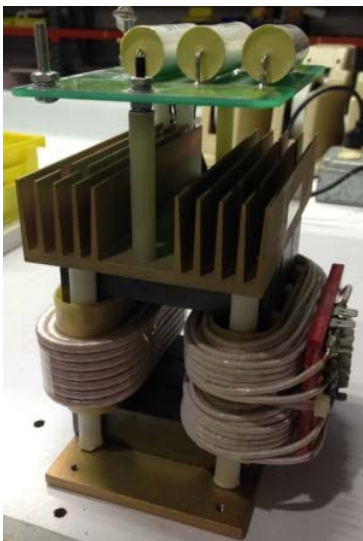
- Laminated/Tape wound core
- Power ratings up to 10kVA



Custom Magnetics are our Specialty



- **Transformers and inductors can be designed on any geometry available**
 - Rod, Drum, E, EC, ETD, EFD Core
 - EP, RM, PQ, DS, POT Core
 - Toroidal, U-Core (cut)
- **Materials to satisfy any application and frequency range**
 - Steel
 - Powder Iron
 - Kool Mu
 - Molypermalloy
 - High Flux Powder
 - Ferrite
 - Amorphous/nano-crystalline Design driven



CONTACT INFORMATION

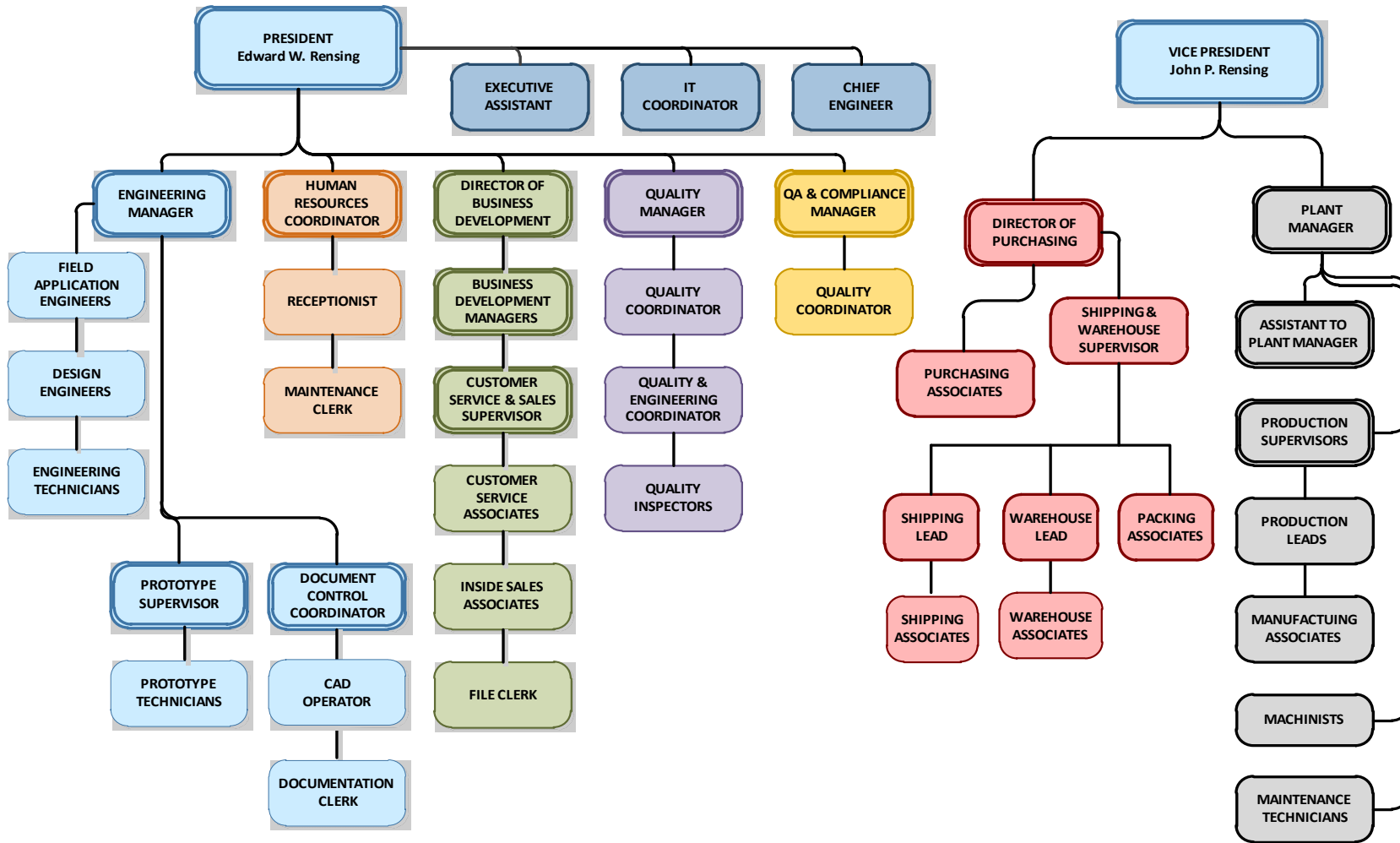
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**RENCO ELECTRONICS, INC.
ORGANIZATIONAL CHART
2018**



QMS CERTIFICATION

STATUTORY AND REGULATORY

COMPLIANCE





Certificate of Registration

This certificate has been awarded to

Renco Electronics, Inc

Renco Electronics, Inc, 595 International Place, Rockledge, Florida, FL
32955, USA

in recognition of the organization's Quality Management System which complies with

ISO 9001:2015

The scope of activities covered by this certificate is defined below

**The Design and Manufacture of Transformers and Inductors using
Surface Mount, Through Hole and Chassis Mount Technology**

Certificate Number:

10083/A/0001/UK/En

Date of Issue: (Original)

22 December 2003

Date of Issue:

06 June 2019

Issue No:

6

Expiry Date:

05 June 2022

Issued by:

On behalf of the Schemes Manager



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RoHS and REACH-209 Compliance Statement

July 6, 2020

As of July 1st, 2006 Renco Electronics, Inc. converted all products to RoHS compliant; Lead-free manufacturing, unless otherwise required by the below 'RoHS Note'. Renco maintains compliance with the current Directive (EU) 2015/863, Amendment of RoHS Directive (2011/65/EU) Annex II; recasting (2002/95/EC), by manufacturing finished components with raw materials that do not exceed the acceptable levels of 10 restricted substances defined by RoHS (EU) 2015/863.

- Tin-Lead (Sn/Pb) solder has been replaced with RoHS Compliant Tin-Copper (Sn/Cu) solder. Renco Engineering has incorporated this alternative, due to its performance & compatibility with applications.

RoHS Note: Renco shall continue to support customer applications that require Tin/Lead (Sn/Pb) solder. To ensure Renco meets this requirement, you must clearly define the use of Sn/Pb solder on your drawing, bill of materials, and/or purchase order. Otherwise Renco defaults to RoHS solder.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18-December-2006, concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), established a European Chemicals Agency to regulate Substances of Very High Concern (SVHC) and their safe use. Renco Electronics, Inc. manufactures Articles in compliance with REACH and its associated Annex XVII. Renco manufactured Articles, do not intentionally contain or have any added SVHC-205 above the defined threshold of REACH. Articles comply with Annex XVII Restricted Substance List, as applicable by their "Conditions of Restriction". The below 'REACH Note' identifies potential SVHC in our products.

REACH Note: Components that use EI DuPont Nomex[®] insulating material, may contain the SVHC 'DMAC' (CAS#: 127-19-5) below the allowable threshold <0.050%(w/w). Within Annex XVII, Entry 52, the chemical substance 'DINP' (CAS#: 68515-48-0) has been added. PVC wire contains this substance above 0.10(w/w). However, the Conditions of Restrictions in Entry 52 do not apply to Renco components that use PVC wire. Renco does not manufacture nor import any chemical substances into the EU on their own, or in articles in quantities of one ton or more per year. Renco is not required to notify or register any substances with ECHA. All Renco components remain REACH compliant.

****Full Material Declaration Sheets prior to July 6, 2020 may contain 2-Methylimidazole (CAS#: 693-98-1) above 0.10(w/w) within epoxies/adhesives. Epoxy supplier has confirmed this substance is not present in the current formula. Please contact trensing@rencousa.com for an updated FMD.**

Confirmation of the above and other statements made in Renco Electronics, Inc. statutory, regulatory or environmental compliance documentation, including but not limited to, Certificates of Compliance, Full Material Declarations, and third party test reports, are to the best of our knowledge valid and accurate. Renco communicates material compliance requirements throughout its supply chain and relies upon its suppliers to maintain compliance with such standards.

Travis W. Rensing
Quality Assurance & Compliance Manager

This letter is not intended to create legal obligations between Renco Electronics and the recipient of this letter.

Legal Disclaimer:

Renco Electronics, Inc. (Renco) may make changes, improvements and/or modifications to the information provided at any time without notice. IN NO EVENT shall Renco, its employees, its officers, its suppliers or other third parties be liable for any damage, including without limitation, special, indirect, or consequential damages (including, without limitation, damages for loss of profits, business interruption, or loss of information), arising out of the use, inability to use, or the results of use of information provided herein.

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Date: May 19, 2020
To: Valued Customers
From: Travis Rensing – Quality Assurance & Compliance Manager
Subject: California Proposition 65 Statement

This letter is intended to acknowledge California Proposition 65 and describe its impact on our passive components. Proposition 65 became law in November 1986 when California voters approved it by a 63-37% margin. The official name of Proposition 65 is the Safe Drinking Water and Toxic Enforcement Act of 1986. The Proposition was intended to protect California citizens and the State's drinking water sources from chemicals determined by a state agency to cause cancer, birth defects or other reproductive harm.

The Office of Environmental Health Hazard Assessment (OEHHA) administers the Proposition 65 program. For detailed information about Proposition 65, visit <https://oehha.ca.gov/proposition-65/about-proposition-65>.

Proposition 65 requires companies doing business in California to provide a "clear and reasonable" warning before knowingly and intentionally exposing anyone to a listed chemical, unless the business can show that the anticipated exposure level will not pose a significant risk of cancer or is significantly below levels observed to cause birth defects or other reproductive harm.

Renco does not add or use any Proposition 65 chemicals, however through supplier Full Material Declarations (FMD), Renco identified two chemicals necessary for the functionality of materials used in our components. Nickel (CAS: 7440-02-0) and other nickel compounds, are constituents of ferrite, terminals and various metal alloys. Antimony Trioxide (CAS: 1309-64-4) is a constituent of electrical insulating tapes and thermoplastics. Supplier Material Safety Data Sheets (MSDS) indicate there is no evidence of exposure to these chemicals by handling the materials and they **do not pose any significant risk of cancer** when used in their intended purpose. These materials could become hazardous if they were transformed into powder or dust. This would require an extraordinary effort, is in no way its intended purpose and should not be considered.

Starting January 1, 2018, Renco added a Proposition 65 "warning label" on our shipping labels. Further review of Proposition 65 requirements, indicate adding a "warning label" is an admission to acknowledging the products do pose a significant risk of cancer, birth defects, or reproductive harm to persons that handle it. Since this is not true, Renco will modify or remove the Proposition 65 "warning label" from shipping documents.

The list of chemicals in Proposition 65 is dynamic and ever-changing. Renco will continue to monitor it and change processes when needed. Further inquiries can be sent to quality@rencousa.com

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Conflict Minerals Policy Statement

As part of our Ethics and Social Responsibility Policy, Renco has committed to the responsible sourcing of Conflict Minerals. Renco began requesting mineral sourcing data from its suppliers in 2010. By August 2011, we implemented our conflict-free minerals policy and have followed it since.

HISTORY

On July 21, 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act was signed into law. In August 2012, the U.S. Securities and Exchange Commission (SEC), issued its final rules on Conflict Minerals defined under Section 1502. Conflict Minerals currently include the metals Tantalum, Tin, Tungsten and Gold, which are also referred to as '3TG'. The Conflict Minerals Rule outline 3TG sourcing and reporting requirements, for all publicly traded companies subject to the SEC. Rules of the Dodd Frank Act Section 1502 include, but are not limited to; evaluate whether 3TG are necessary to the production or functionality of your products; identify and document all 3TG throughout your supply chain; implement downstream "DRC conflict-free" sourcing policy throughout the supply chain; due diligence to restrict sourcing of 3TG from the Democratic Republic of the Congo (DRC) and its adjoining countries; annual reporting of 3TG findings to the SEC.

By requiring companies to document and report 3TG sources, the intent of the Dodd Frank Act Section 1502 is to expose financial interests that support armed groups in the DRC area, and dissuade companies from continuing to engage in trade that contributes to conflict-zones.

IMPACT

Virtually every product Renco manufactures and supplies contains one 3TG; Tin, which is necessary to the production and functionality of our products. Renco does not purchase or process any raw Conflict Minerals directly. Tin is added to our products, by way of molten bar-solder and roll-solder. Renco is a privately held corporation, not subject to SEC rules. However, Renco chooses to be a responsible company with DRC conflict-free standards and understands the needs of our customer base subject to the SEC.

COMMITMENT

- Support the goals and objectives of the Dodd Frank Act Section 1502, by educating our suppliers about Conflict Minerals and the importance of transparency regarding origin.
- Assist suppliers with understanding due diligence measures they can take, to investigate the source of Conflict Minerals in products sold to Renco.
- Discontinue business with suppliers that do not implement reasonable steps to eliminate any identified Conflict Minerals, not deemed as DRC conflict-free.
- Document Conflict Minerals sourcing, using the most current version of the industry recognized CMRT (Conflict Minerals Reporting Template).

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SUPPLIER COMMITMENT

- Suppliers should develop Conflict Minerals policies, due diligence frameworks, and management systems that are designed to prevent the use of Conflict Minerals originating from the DRC or adjoining countries.
- Suppliers are expected to source Conflict Minerals that are DRC conflict-free only, and not supply products or materials which are not DRC conflict-free.
- Notify Renco of any supplied product that are believed to contain Conflict Minerals sourced from the DRC or adjoining countries.
- Implement procedures for the traceability of Conflict Minerals; such as using the CMRT.
- Use reasonable efforts to source Conflict Minerals from smelters and refiners validated as being DRC conflict-free, and downstream the same requirement throughout the supply chain.

All suppliers, including companies that are not subject to the Dodd Frank Act Section 1502 rules, are encouraged to support industry efforts enhancing traceability and responsible practices in Conflict Minerals supply chains.

SUSPECT CONFLICT MINERALS

Employees and suppliers are able to communicate any potential Conflict Minerals violations, by using the following methods:

- Send letters to: Renco Electronics Inc., Attn: QA Conflict Minerals, 595 International Place, Rockledge, FL 32955
- Email: quality@rencousa.com
- Call: 1-321-637-1000, QA Manager

No retaliatory actions will be taken against any who report true findings. All reporting information will be kept confidential and may be done so anonymously.

Renco is committed to contributing to the safety, health and protection of people and the environment worldwide. These principals are promoted throughout our global business practices, Ethics and Social Responsibility Policy and Supplier Code of Conduct.

Travis Rensing
trensing@rencousa.com
Quality Assurance & Compliance Manager

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