

## PROFILE

Mr. Edward J. Soltis is a Mechanical Project Engineer with over 20 years of experience dealing with both large- and small-scale industrial manufacturing equipment used in the steel and paper industries. He has extensive experience with engineering, design, and installation for a wide range of equipment used to either facilitate higher production rates, cost saving measures or improving ergonomics. His expertise in surveying and analyzing situations for improving and/or repairing processes in a production environment proved ideal for the field of forensics. Mr. Soltis has investigated C&O cases involving all types of electrical and mechanical failures. These cases include HVAC systems, boilers, plumbing installations, elevators and fire suppression systems to name a few. Through his experience, he has gained a firm understanding of NFPA and IBC codes for various municipalities throughout the surrounding area. Key strengths include the following:

- ▶ Boilers
- ▶ Chillers
- ▶ Concrete Masonry
- ▶ Design Engineering
- ▶ Equipment Layout
- ▶ Fire Suppression Systems
- ▶ HVAC Systems
- ▶ Industrial Equipment
- ▶ Machine and Design Fabrication
- ▶ Mechanical Engineering
- ▶ Project Management
- ▶ Root Cause Failure Analysis
- ▶ Structural Steel
- ▶ Troubleshooting

Powertruck battery manufacturing, recycle steel mills (sheet), and recycle paper mills (CRB)

- ▶ *Computer Skills:* Windows, MS Office (Word, Excel, PowerPoint), and MS Project
- ▶ *CAD/Design Packages:* AutoCAD Mechanical 2018 and SolidWorks 2014

## EDUCATION

**Bachelor of Science, Mechanical Engineering Technology, 1995**  
*Penn State University – Harrisburg, Pennsylvania*

**Associates Degree, Mechanical Engineering Technology, 1993**  
*Penn State University – Ogontz, Pennsylvania*

## LICENSES

**Professional Engineer (PE):**

- ▶ Maryland
- ▶ New Jersey
- ▶ New York
- ▶ Pennsylvania

## CERTIFICATIONS

**Pennsylvania Automotive Inspection Certification, 1990**

## CONTINUING EDUCATION

### OFFICE

Philadelphia, PA

### CONTACT

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### CORPORATE OFFICE

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Suite 900

Atlanta, GA 30342

### WEBSITE

[www.envistaforensics.com](http://www.envistaforensics.com)

▶ *Industries:*  
Forensics, UPS and

- ▶ Air and Gas Compressors
- ▶ Boiler Systems
- ▶ Failure Appraisal
- ▶ Finding the Root Cause
- ▶ Fluid Flow Fundamentals
- ▶ Fluid Power – Principals and Power Units
- ▶ Fundamentals of Gear Drives
- ▶ HVAC Systems
- ▶ Industrial Fan Fundamentals
- ▶ Laws Rules and Ethics for Pennsylvania Engineers
- ▶ Lubrication Fundamentals
- ▶ Non Destructive Testing Methods for Metal Corrosion
- ▶ Valve Fundamentals

## PROFESSIONAL BACKGROUND

**August 2015 – Present: Envista Forensics – Aston, Pennsylvania**

*Project Engineer*

**June 2009 – August 2015: PaperWorks Industries, Inc. – Philadelphia, Pennsylvania**

*Project Engineer*

**March 2000 – April 2009: Clayton H. Landis Co. – Souderton, Pennsylvania**

*Senior Project Engineer*

**January 1997 – March 2000: C & D Technologies – Conshohocken, Pennsylvania**

*Mechanical Engineer*

**November 1995 – January 1997: Actual of America – Philadelphia, Pennsylvania**

*Design Engineer*

## REPRESENTATIVE PROJECT EXPERIENCE

### **Lead Plate Processing Machine**

*C&D Technologies – Attica, Indiana*

- ▶ Responsible for design and build on new equipment to process lead plates used to make large single cells for UPS systems.

### **Lead Strap Slot Cutting Project**

*C&D Technologies – Attica, Indiana*

- ▶ Responsible for design and build on new equipment to process lead straps used to connect positive and negative plates for large single cells used in UPS and emergency backup systems.

### **Hot Box #2 Redesign to Incorporate X-ray Gauge Equipment**

*NUCOR Steel – Crawfordsville, Indiana*

- ▶ Responsible for incorporating X-ray gauge machine within the product line for measuring gauge thickness of steel strip. The unit needed to be integrated within existing structure and equipment.

#### **Work Roll Change Car**

*NUCOR Steel – Crawfordsville, Indiana*

- ▶ Responsible for engineering and design for a work roll change car that could stage newly ground work rolls for an easier, less time consuming, roll change. After the old rolls were removed onto the car, the car would side shift from the remove to the install position to install the new set of rolls.

#### **Descale Upgrade for Finishing Mill**

*Arcelor/Mittal – Coatesville, Pennsylvania*

- ▶ Responsible for determining NPSHA for proposed higher pressure and flow descaling system along with heat rise calculations due to recirculation bypass loops during idle periods. This system would utilize existing piping which was also evaluated to make sure it was capable of handling the higher pressures.

#### **Ladle Shroud Manipulator**

*Arcelor/Mittal – Gary, Indiana*

- ▶ Responsible for engineering and design of a new multi-axis device to install the shroud onto the bottom of a tundish car. The boom needed to extend over 18 feet from the platform, support over 3,000# at the end of the boom, and rotate about the boom and base axes. The engineering and design of the platform was also included in the project.

#### **Web Cooler Installation**

*PaperWorks Industries – Philadelphia, Pennsylvania*

- ▶ Responsible for scheduling and installation of cooler into process line. Redesign of surrounding equipment to facilitate the installation was included in the scope.

#### **Hydraulic Conversion on Calendar Stack**

*PaperWorks Industries – Philadelphia, Pennsylvania*

- ▶ Responsible for design, engineering and installation to convert the existing lifting device used in a calendar stack from a screw jack to hydraulic cylinder lift.

#### **IR Dryer Installation**

*PaperWorks Industries – Philadelphia, Pennsylvania*

- ▶ Responsible for engineering the layout, scheduling, and installation of IR dryers into the process line.

#### **Crane Column Repairs**

*PaperWorks Industries – Philadelphia, Pennsylvania*

- ▶ Responsible for engineering and scheduling to recondition crane columns due to severe corrosion. Large sections of the column were completely removed and replaced with galvanized material all while machine was in full production.