

## **Josh A. Panakkal**

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### **Professional Experience**

#### **Machine Repair Electrician B (3/2017 – 2/2020)**

Lincoln Electric - Euclid, OH

- Electrically support Production through troubleshooting and repair of equipment including extruders, extruding dryers, chemical mixers, wire drawing lines, hot kilns, overhead cranes, and other various machines
- Excellent troubleshooting using PLC (Logix 500, 5000, Studio 5000, Mitsubishi, DirectSoft32)
- Troubleshooting and replacement of various drives (PowerFlex 4, 525, 700, 753, Lenze 8200, KB PentaDrive, Magnatek Impulse G+ mini drives for cranes). Uploaded and downloaded drive parameters either using HIM, Connected Components, Drive Executive, EZ Navigator. Autotuning for performance.
- Ability to setup communication paths using RSLinx and correlating driver cable to processors and drives
- Proficient with Connected Components and Drive Executive software for communicating, uploading and downloading parameters
- Good working knowledge of combustion systems (Extruding Dryers and Hot Kilns)
- Familiar with hydraulic systems using either single vane or piston pumps, compensators, and system components on Slug and Extruding presses.
- Attended three day Kaizen event for Production wire drawing line changeover.
- Project Management (Drives) – I completed projects while also supporting Production needs. Installations included removal of the old system, adding new components such as circuit protection, line reactors, control relays, programming and testing the drive, modifying electrical schematics, submitting changes to Engineering and updating schematics at the machines. Able to utilize downtime between Production repairs and weekends to both prep for and complete installations.
  - Installation of PowerFlex 4 drives on 9 Extruders for wire brush.
  - Installation of KB Penta Power drives for traverse motors on 5 glue machines
  - Installation of PowerFlex 4 drives for 2 cleaning tank pumps
  - Installation of Magnatek Impulse G+ Mini drive for overhead crane travel
  - Installation of PowerFlex 525 drives for 2 Chemical Mix Testers
- Project Management (Other Projects)
  - Overhead crane pendant hanger – fabricated pendant support for three cranes to eliminate safety issue of operator walking near load and damaging pendant
  - 2 Cut Off lines - Installation of fiber optic sensors, mounts and amplifiers for counting rods, prox sensors for detecting rod container, and also installed Euchner safety interlocks for front and back hopper doors
  - Modification of 11 Matthews Ink printer carts to include UPS, duplex outlet, and strobe warning light. Installed timer controlled circuit for UPS and warning light to work with printer. System helped keep printers from turning off accidentally and ink lines drying out.
  - Installed 12x 3- pole breakers with thermal and magnetic protection on 460V heaters for two wire drawing lines. Installation included rearranging panel components, breaker installation, repairing any damaged heater cable or connections, adding new cable connectors to heater covers and grounding all heaters.
  - PowerFlex 700 drive file conversion for 9 Extruder hopper drives. Conversion allowed electricians to switch between 700 series drives with either standard or vector control cassette when swapping drives during repairs. I converted all files for standard cassettes to vector control using Drive File Conversion Utility and wrote step by step instructions for coworkers on the process.

#### **Maintenance Technician (10/2015 – Present)**

Giesecke and Devrient America, Inc., Twinsburg, OH

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- Maintained facility and production equipment as well as performing machine setup
  - Types of equipment include collators, punch presses, auto cutters, laminators, shears, mills, implanters, stamping machines, inspections machines, compressor maintenance.
  - Extensive electrical, mechanical and pneumatic troubleshooting as well as machine setup
  - Strong background with motor controls and schematics troubleshooting
  - Strong background with proper and safe preventative maintenance
  - Minor machining with lathe and mill – turning, parting, drilling, facing, milling
  - Utilized CMMS system to log repairs, alerts, parts search and orders, machine history

**Contractor – Reliability Engineer (11/2014-8/2015)**

Advantage Technical Services / Swagelok, Solon, OH

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- Develop, implement and manage programs to improve equipment reliability, including predictive, precision and preventative technologies
- Develop Equipment Health Assessment Program for Reed A22 Thread Roller – created Standard Work for assessment, project planning with milestones and deliverables, provided training to multiple sites and collaboration with management on analysis and recommendations
- Project Leader / Manager for capital expense Reed A22 Thread Roller Rebuilds
- Critical Spares Analysis for Nakamura-Tome WTW-150 and TW-20 CNC lathes
- Vibration Analysis implementation on Nakamura lathes
- CMMS management and standards operating procedures revisions
- Provided support to multiple sites for asset reliability and standard work modifications

**Facility Maintenance Manager (09/2011 – 07/2014)**

FedEx Ground, Richfield, OH

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- Development of Maintenance Department on proper preventative maintenance procedures
- Equipment requiring preventative maintenance includes high speed conveyors, package scan tunnels, fire suppression system, power distribution system, lighting, plumbing, HVAC, pavement repairs, phone system troubleshooting and repairs, Rf network troubleshooting and repair, PLC hardware and Rockwell Logix 5000 troubleshooting and repair
- Budget Control – in charge of Facility Maintenance and Material Handling Maintenance budgets. Ordered supplies needed for dock budget and also worked to reduce utility expenses
- Oversaw entire recycling program – reduced general waste while generating revenue from recycling pallets, cardboard, plastic, paper, cans, bottles and steel
- Oversaw safety aspects of facility in accordance with OSHA standards – conveyor safety, electrical safety, hazardous communication, machine tools, proper injury reporting, fire suppression system, power distribution system with respect to NEC and FedEx specifications, Arc Flash (Category 2), Hazardous Energy Control Procedures including Lockout / Tag out
- Utilization of computer based inventory and work order Maintenance management system (iMaint)
  - Work order planning (preventative, corrective, emergency, project, training)
  - Inventory control / organization of five warehouses – parts issuance and reconciliation

**Maintenance Technician III, (02/2007 – 09/2011)**

FedEx Ground, Columbus, OH

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- Lead Technician from 06/2010 to present
- Oversaw pm workload, projects and maintenance on a daily basis
- Provided daily communication between Operations, Maintenance Management and Technicians
- Focused on safety and quality of any work being done
- Develops fellow technicians using the Mentor Program, special projects, and personal experience
- Utilized Computer Maintenance Management System for inventory control and parts order
- Completes scheduled work orders in a timely manner
- Highly knowledgeable with maintaining basic to complex conveyor systems (end/center belt and chain drives, Portec spiral curves, HK Transort line sorters, Siemens RS200 line sorters, HK Singulators and High Rate Induction belts, Wasp single and multistage extendable conveyors)
- Ability to troubleshoot and maintain 120, 277, and 480 VAC circuits, three phase motors, motor controls
- Ability to read and interpret electrical schematics and building layout schematics (power distribution, sanitary sewer and storm water lines, fire sprinkler layout)
- Experience with hydraulics systems for multistage conveyors, pneumatic diverting equipment, compressor maintenance and repair
- Experience with PLC hardware troubleshooting and repair (Allen Bradley, SLC500, PICO, Micrologix), connecting with processor, uploading/downloading program, troubleshooting I/O cards using electrical schematics or graphical display units.
- In depth knowledge of wet, fire sprinkler system maintenance
- Strong stick welder (6011 structural steel), very good with MIG, torch and plasma cutting
- Ability to run and bend ½” and ¾” Rigid conduit (stub up, saddle and offset bends)

### **Education/Specialized Training**

- **Bachelor of Science** (Major-Chemistry/Minor-Biology), Cleveland State University, Cleveland, Ohio, 2005
- Case Western Reserve Coding Bootcamp Certificate
- Columbus State Community College – worked towards Associates in Electromechanical Engineering Technology (Motors and Controls, Control Logic, Basic Electrical Systems, Basic Digital Systems)
- OSHA 30 hour training
- OSHA 10 hour Construction Safety and Health
- American Red Cross First Aid Certified
- Emerging Leadership Series (FedEx Ground)
- Solidworks Level 1 and 2 – Cuyahoga Community College

### **Awards/Recognition**

- Innovation Award Smalls Bi-directional Infeed Belt FY09
- Innovation Award IC Dim Compliance FY09
- Purple Promise Award FY08
- Purple Promise Award FY12 - Green Special Handling Belt rollers
- Maintenance Tech of the Month 06/2007 and 08/2009