Pneumatic System

Analysis and

Design Services

WPI skilled technicians are ready to help you improve your operation by:

Reviewing the current pneumatic systems and equipment:

- Document system as-built.
- Review compliance to NFPA regulations.
- Measure performance of the system as-built.
- Assess equipment wear and integrity.

Recommending areas for improvement:

- System redesign as necessary.
- Modification of equipment and/or new equipment.
- Explosion venting, isolation and/or suppression.

In our initial discussion, we will:

- Agree on equipment and systems to focus on.
- Clarify NFPA compliance expectations and identify relevant authority having jurisdiction.
- Clarify arrant dust expectations.
- Review available documentation and photographs.
- Discuss budget.
- Arrange next step, Site Visit.

After the site visit, we will:

- System redesign as necessary to provide proper velocities for the given dust properties.
- Analyze capture points and provide solutions for better dust capture.
- Evaluate existing equipment and provide trade-off between upgrading versus new equipment.
- Develop equipment explosion venting plan:
- Evaluate system for appropriate isolation via abort valves, flap valves and/or feeders.
- Evaluate spark detection and suppression system, where appropriate.

On our site visit, we will:

- Document the current system configuration with schematics, CAD drawings and photographs including equipment, buildings, processes and geography.
- Assess condition of current equipment including wear, corrosion, weld and joint integrity.
- Take performance measurements of airflow, velocity, temperature and humidity.
- Discuss initial impressions and suggestions. Brainstorm possible solutions.

In conclusion, we will provide:

- CAD layout of the proposed new system.
- Recommendations for modifications of existing equipment.
- · Venting, isolation and suppression plans to meet customers requirements.
- New equipment drawings and specifications.



ABOUT WPI

- Western Pneumatics was founded in 1982 with our focus on high and low pressure pneumatic conveying and aspiration systems.
- Diversification has been a constant as we offer materials handling systems for wood products, environmental, biomass, agricultural and minerals.
- The headquarters in Eugene, Oregon, include the fabrication facilities with CNC machine centers, laser cutting machine, sandblasting and painting.
- An additional fabrication facility is located in Ruston, Louisiana.
- WPI typically offers turnkey systems including design, fabrication and installation.

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