

Engineering

▶ **Matrix Technologies** is one of the most experienced engineering companies in industrial manufacturing.

From initial feasibility studies and conceptual design through construction and project startup, Matrix is a single-source supplier for all engineering services.

With decades of experience and advanced plant design technology, our our engineers produce accurate, top-quality work approaching zero defects.



Manufacturers in many industries trust Matrix with their most challenging engineering projects.

Matrix's Multidiscipline Engineering Capabilities

Mechanical Engineering:

- Conceptual Engineering/Detailed Engineering
 - PFDs, P&IDs, Plant Layouts
- Cost Estimating
- Energy Conservation/Retrofits
- HVAC Design and Layout
- Machine Design/Machine Safety
- Material Handling Equipment Design and Layout
- Piping Design and Layout/Process, Utility, Building
- Process Control Equipment Specification and Selection
- Process Engineering Studies/Trade-off Studies/Modeling
- Relief Valve Sizing; Process Relief Analysis

Civil/Structural/Architectural Engineering:

- Industrial Building Design
- Land Development
- Machine Foundations
- Modifications to Building Structures
- New Building Structures
- Pre-engineered Buildings
- Process Structures
- Site Development
- Surveying (Topo and Boundary)
- Vibration and Blast Analysis

Electrical Engineering:

- Arc Flash/Protective Coordination
- Communication System Design Specification and Layout (LAN, phone, Ethernet, Fiber Optic Cabling)
- Control Panel/HMI Design and Layout
- Cost Estimating
- Energy Management and Conservation Retrofit

- Fabrication, Coordination, and Testing
- Facilities Design and Layout (Lighting, Grounding, Receptacles)
- Field Installation Assistance
- Instrumentation Specification and Design
- Power Distribution Design (Substation, MCC, Panelboard, UPS)
- Safety Systems
- Schematic Wiring Design (Power, Control)

▶ The Matrix Difference

People: A versatile, knowledgeable team of design and engineering experts.

Process: A proven project approach designed to embrace a customer's proprietary methods.

Performance: A 40-year track record of successful projects, completed on time and on budget.