# DESIGN ENGINEERING SERVICES



ESIGN

NGINEERING

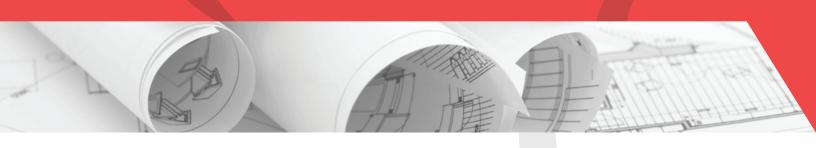
ERVICES, P.C.

Create. Enhance. Sustain.

- MECHANICAL
- ELECTRICAL
- FIRE PROTECTION
- Controls
- TECHNICAL SERVICES
- MAINTENANCE ENGINEERING
- CONSTRUCTION MANAGEMENT

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#### **DUR SERVICES**





# **Business Strategy**

Design Engineering Services, P.C. (DES) is a consulting engineering firm that excels in Mechanical, Electrical, Controls, and Fire Protection projects in the industrial, commercial, and municipal markets. Our practical knowledge of mechanical and electrical engineering design and application comes from years of hands-on effort with small to medium-sized engineering projects, where we provide turn-key design services and solutions for our customers.



### **What We Offer**

DES offers project scope definition, project planning, equipment specifications, engineering, design, recommendations for equipment procurement, installation, start-up, and commissioning or any combination of these services. A critical element to our success stems from listening to and implementing our customers' requirements in the drawing and specification packages we submit. We understand the significance of maintaining the integrity of a location's infrastructure and know how to keep it in top condition.



## **Design Capabilities**

We have certificates in ESRI-ArcGIS, AutoCAD, and AutoCAD MEP software and are proficient in collaborating complex design packages. Our draftsmen are able to capture our customers vision and execute with precision. From detailed substations, piping systems, HVAC equipment, to large-scale database maps, Design Engineering Services can handle it all.



## **Design Services**

We solve real-wold issues in real-time with tailored answers to complex problems reached through a very careful and extensive planning process. The management team at Design Engineering Services has over one hundred years of combined experience in engineering design and project management. Together, we work with equipment manufacturers and our clients to create functional systems for any type of facility while considering future growth.

#### ENGINEERING



## **Mechanical**

Quality engineering with safe process and utility designs are the backbone of our Mechanical and Process Engineering team. Working together with your Mechanical/Process and maintenance groups, we focus on providing design solutions that optimize construction and operating costs.

- Clean Room HVAC Design
- Conceptual Design, Cost & Feasibility Studies
- Cryogenic System Design
- Dry/Wet Dust Collection Systems
- Energy & Material/Flow Balances
- Energy Audits
- Equipment Design & Specifications
- Equipment General Arrangements
- Equipment Sizing & Specifications
- Exhaust System Design
- Fume Removal Systems
- Industrial HVAC Design
- Industrial Process Ventilation (IPV)
- Machine & Equipment Improvements
- Material Handling Systems
- OSHA Process Safety Management
- Piping & Instrumentation Diagrams (P&IDs)
- Piping Analysis & Design
- Piping/Plumbing Systems
- Process Conceptual Design & Feasibility Studies
- Process Enhancement & Debottlenecking
- Process Flow Diagrams (PFDs)
- Ventilation System Design

## **Electrical/Controls**

Sustainable power and reliable control systems are what keeps your business going. DES's electrical and control services provide you with the proficiency you need to minimize the cost of power and optimize the performance of your control systems.

- AC/DC Drives & Motors
- Arc Flash Evaluation
- Conceptual Design, Cost & Feasibility Studies
- Control System Startup & Training
- Controls for Process Equipment
- Emergency & Standby Power Systems
- Energy Efficiencey Studies
- Equipment Design & Specifications
- Fire/Security Wiring Design
- Fuse Selection & Overcurrent Relay Settings
- Grounding Systems
- Instrumentation Application Design
- Interior & Exterior Lighting Design
- New & Upgraded Electrical Services
- Control Panel Design
- PLC & HMI Programming
- Power Distribution (Low & Medium Voltage)
- Power System Analysis
- SCADA & DCC Systems
- Short Circuit Analysis & Coordination Studies
- Switchgear, Switchboard, & MCC Design
- Turnkey Control Systems
- Unit Substation Design & Specification

#### ENGINEERING



# Construction Management Services

We can implement and monitor the schedule and cost control systems of your project as part of our total plant and facility services or as a separate function altogether. From conceptual engineering and construction to startup, we're prepared to implement our project management team during any phase of your job.

- As-Built Drawing Verification
- Bid Packaging Preparation
- Bid Analysis
- Code Compliance Inspections and Reporting
- Constructability Reviews
- Cash Flow Projections
- Construction Scope Development
- Contractor Estimate Development
- Contract Administration Support
- Cost Estimating
- Construction Support
- Design/Build Packages
- Life Cycle Asset Management (LCAM) Support
- Owner Representation
- Planning & Scheduling
- Pre-Bid & Pre-Award Meetings
- Pre-Commissioning and Commissioning
- Start-up and Commissioning Support
- Site Management
- Safety Oversight & Support
- Technical Submittal Review/Approval

# **Design Services**

Flexibility is essential to serving our clients' needs in today's fast-paced, ever-changing environment. We keep ourselves one step ahead of technology and market demands, growing with our clients to meet their changing needs. There are a full range of customized services we can provide to help improve overall efficiency and safety.

- Architectural Specifications & Design
- ArcGIS, ArcMAP & ArcFM
- 3-D Rendering & Animation
- CAD Drafting (AutoCAD/Revit)
- Database Design
- Dry Dock Certification Support Services
- Energy & Utility Management
- Facility Assessments
- HVAC Retrofit Life Cycle Studies
- Inventor & SolidWorks Prototype Designs
- Maintenance Facility Engineering Services
- On-Site Design & Drafting
- On-Site Plant & Project Engineering
- Preventive Maintenance Auditing
- Programming & Database Development
- Software Development Packages
- Website Design