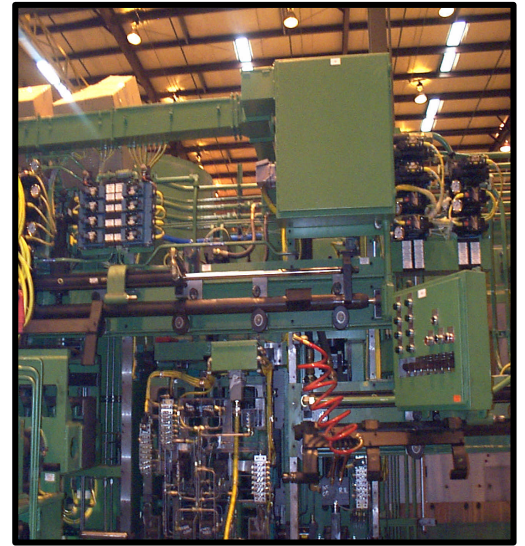


Denmark Consultants, Incorporated is a well-established, quality-oriented engineering firm based in Cincinnati, Ohio. Denmark has been providing engineering services to domestic and international Fortune 500 companies since 1984. Denmark is staffed with experienced and highly qualified personnel of electrical, mechanical, process, and facilities/HVAC expertise. The company also provides the necessary project controls, scheduling and management to coordinate and support these engineering areas.

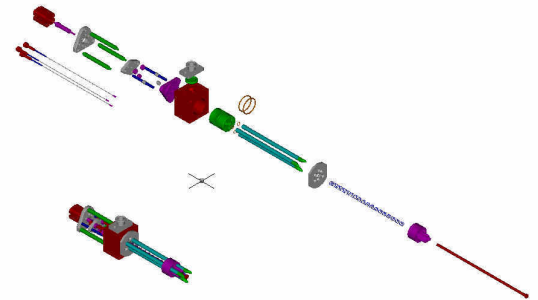


With design engineering as a functional basis of Denmark, the company has excelled in the following areas:

- FEASIBILITY STUDIES
- SYSTEM/PROCESS ANALYSIS
- CONCEPT DEVELOPMENT AND SYSTEM/PROCESS DEFINITION
- EQUIPMENT SPECIFICATION AND VALIDATION
- TRAINING AND MAINTENANCE PROGRAMS
- CONSTRUCTION COORDINATION AND SUPERVISION
- SYSTEM AND FACILITIES START-UP SUPPORT
- SPECIALIZED/PROTOTYPE MACHINE DESIGN AND TESTING



Denmark has considerable international project experience. A large portion of our business since the start of the company has been in foreign locations. We have executed engineering projects in Europe, Japan, Korea, Indonesia, China, Thailand, the Philippines and Latin America. Denmark has developed the skills necessary to successfully complete projects within multi-cultural environments.



Denmark has provided innovative engineering support to many customers. Currently these services include the Consumer Goods market including Foods, Beverages, Fabric Care, Home Care, Health Care, Beauty Care, Pharmaceuticals, and Paper Product Manufacturing and Packaging. Services have also been supplied to the Automotive industry and the Consumer Utilities Sector. Denmark has worked effectively with a number of business partners to provide complete design/build and design/construct services.



## **DENMARK CONTROLS CAPABILITIES**

### **PLC APPLICATIONS**

RELIANCE AUTOMAX  
ALLEN BRADLEY PLC5 FAMILY  
ALLEN BRADLEY SLC FAMILY  
ALLEN BRADLEY CONTROLOGIX  
MODICON - MISCELLANEOUS  
OMRON – MISCELLANEOUS  
SIEMENS – MISCELLANEOUS  
MANY OTHERS

### **PC PERIPHERALS**

ASCII CARDS  
ANALOG CARDS  
DATA HIGHWAY/REMOTE I/O  
REPORT GENERATION MODULES  
C-NET, D-NET  
LAN SYSTEMS  
RS232/485

### **OPERATOR INTERFACE**

PANELMATE  
PANELVIEWS (ALL MODELS)  
MESSAGE DISPLAYS  
INTERACT  
WONDERWARE  
(acknowledged System Integrator)  
INTELLUTION  
FLO-PRO  
SCADA SYSTEMS  
FACTORYMATE

### **DISTRIBUTIVE CONTROLS**

RELIANCE D.C.S./AUTOMAX  
ALLEN BRADLEY GMC/GML  
GIDDINGS AND LEWIS  
PROCESS CONTROLLERS

### **DRIVE SYSTEMS**

ROCKWELL/A-B AC VF DRIVES  
ROCKWELL/A-B DC DRIVES  
ALLEN BRADLEY AND RELIANCE SERVOS  
COMPUMOTOR STEPPER MOTOR SYSTEMS  
ABB  
SIEMENS  
MANY OTHER DRIVE SYSTEMS

### **OTHER SKILL AREAS**

PROCESS CONTROLS  
PNEUMATICS  
POWER SYSTEMS  
• MEDIUM VOLTAGE  
• LOW VOLTAGE  
• SHORT CIRCUIT ANALYSIS  
LIGHTING  
SENSOR DEVELOPMENT  
HYDRAULIC SYSTEMS  
VISION SYSTEMS  
DATA COLLECTION/ANALYSIS

### **PROJECT EXECUTION**

FEASIBILITY STUDIES  
OPTION ANALYSIS  
DEFINITION  
DESIGN  
INSPECTIONS  
PSI STATIC/DYNAMIC  
START-UP SERVICES  
CONTROL SYSTEM VALIDATION

- A. Feasibility Studies
- B. Conceptual/Definition/Design Engineering
  - 1. Power and Control
  - 2. Mechanical
  - 3. Facilities/Equipment Layout Studies/New Plants/Plant Expansions
  - 4. Process Chemical
  - 5. Process Controls
  - 6. Utilities Systems
  - 7. Ancillary Systems
  - 8. Dust Control
- C. Specialized/Prototype Machine Design
- D. Project/Design Coordination and Management
- E. Equipment Procurement and Expediting
- F. Equipment and System Training Programs
- G. Equipment and System Selection, Inspection and Testing
- H. Construction Coordination and Supervision for Building/Facilities, Utilities and Ancillaries and Production Equipment

## **TECHNICAL DISCIPLINES**

### **PROCESS MECHANICAL**

PROCESS DEFINITION

COMBUSTION ENGINEERING

MAKING PROCESSES

UTILITIES SYSTEMS

ANCILLARY SYSTEMS

DUST AND FUME CONTROL

PROCESS RELIABILITY

### **FACILITIES**

HVAC ANALYSIS/DEFINITION

THERMODYNAMICS/HEAT TRANSFER

FLUID MECHANICS

PLANT LAYOUT OPTIMIZATION

### **POWER AND CONTROL**

POWER DISTRIBUTION

MACHINE CONTROL

CONTROL SYSTEM INTEGRATION

### **PROCUREMENT**

ORDER PLACEMENT

EXPEDITING/TRACKING

EQUIPMENT STATUS REPORTING

EQUIPMENT INSPECTION &  
ACCEPTANCE TESTING

### **PROCESS CONTROLS**

INSTRUMENTATION

DISTRIBUTIVE CONTROL SYSTEMS

MAKING PROCESSES

### **MECHANICAL**

SYSTEM DEFINITION

MACHINE DESIGN

EQUIPMENT RELIABILITY

LAYOUT DEFINITION/DESIGN

### **PROJECT ENGINEERING**

PROJECT SCHEDULING

PROJECT COST CONTROL

Denmark Consultants, Inc. utilizes a wide variety of technologies and methodologies to execute projects to the customer's needs. Feel free to contact us for specific information or to inquire about our skills. We would be pleased to offer you a more indepth understanding of our company.