

Engineering Solutions Since 1981

Employee owned. Customer committed.



## **Custom Engineered Control Panels**

Experienced Control Panel Design Services
State-Of-The-Art Machine Manufacturing Tools
Quality Fabrication of Panels & Sub-Assemblies
High Volume Production Capability
Comprehensive Panel Testing
Support Services for Equipment Manufacturers

Agriculture

Automotive

Chemicals

**Data Centers** 

**Energy Management** 

Food and Beverage

Gas, Oil and Biofuels

Government/DOD & DOE

**Industrial Utilities** 

Life Sciences

Material Handling

Manufacturing

Mining

**Packaging** 

**Power Generation** 

Pulp and Paper

Water/Wastewater





# Experience you can build upon since 1981

## State-Of-The-Art Machine Tools Provide:

Employee Safety Improved Quality Reduced Labor Accelerated Schedules Since 1981 Wunderlich-Malec has provided control panel customers with valued panel engineering services and quality custom control panels that meet their application requirements. Our knowledgeable engineers and technicians provide our customers innovative panel and electrical solutions *built to meet the most stringent customer design criteria including control panels that meet UL 508A*, *UL 689A and UL 698 certification*.

Our modern and highly automated lean manufacturing processes include state-of-the-art machines, software tools and committed technicians that *provide clients engineered sub-assemblies and control panels of the highest quality, delivered on time with the best value.* 

Wunderlich-Malec uses advanced technology and tools to build control panels that provide clients:

- Quality with precise and repeatable mounting panel cuts and openings
- Reduced labor resulting in cost savings
- Shorter fabrication schedules
- Accurate bills of materials from integrated Software Systems



Automated machine to cut doors/enclosures and drill and tap back-panels to improve quality and schedule.

### Comprehensive Control Panel Engineering and Design Services

#### **Custom Control Panels Meet Customer Needs**

### **Certified Testing and Local Support Services**

# Large Volume Capacity

High Quality Sub-Assemblies

Documented Quality Control

Valued Support Services Our facilites, automated equipment and personnel resources will meet our customers most demanding production quantities. Our engineers collaborate with our customer to ensure their design integrates with **Wunderlich-Malec** manufacturing to deliver quality at high volumes.

Wunderlich-Malec provides sub-assemblies to Original Equipment Manufacturers that integrate seamlessly into OEM products on just-in-time schedules.



Custom sub-assemblies integrate seamlessly into OEM "just-in-time" schedules to reduce costs and inventory expenses.

Wunderlich-Malec utilizes a *Quality Assurance program that builds quality into every product*. Each panel and sub-assembly is manufactured in accordance with pre-approved documentation. A quality check is performed and documented at each step of the process, assuring the final product meets customer specifications and complies with applicable standards.

Our Professional Engineers can provide engineering services associated with electricial systems and panel designs from any of our 36 locations across the USA.

## Comprehensive Control Panel Engineering and Design Services

# Quality Custom Control Panels Meet Customer Needs

# - Certified Testing and Local Support Services

Wunderlich-Malec can provide a detailed design for custom panels that meet the functional requirements provided by the customer. The design process includes: device selection, layout, wiring details, Heat/FLA/SCCR calculations, and any testing protocols required. The final design achieves the functional requirements of the customer. We specialize in the design and fabrication of:

- PLC Control Panels
- Motor Control Center Modifications
- Power Distribution (Up To 1kV / 1000A)
- Panels Located in Hazardous Environments

#### **Value Engineering**

Customers that have finished design details for their panels appreciate *Wunderlich-Malec's Value Engineering service* provided with our production quality process. Cost, schedule, and performance improvements may be achieved with our Value Engineering services.

Our complete electronic documentation package, including inspection reports and test results provided with our panels, assist customers with field testing, maintenance or future modifications.

We can provide circuit breaker coordination and Arc Flash studies that meet NEC requirements. We also offer Power Quality and Thermography services.

#### **Panel Manufacturing and Testing**

Wunderlich-Malec fabricates control panels in our modern, advanced manufacturing shop in Eden Prairie, Minnesota. We provide integrated control panels with complete electrical systems wired and tested. All control panels are fabricated in accordance with our quality and testing procedures defined in our Quality Production Manual. Customized for the specific requirements of each panel, the Quality Production Manual includes:

- The production process and organization checklist
- Panel construction/test punch list
- Testing sign-off check sheets, including:
  - Equipment inspection
  - I/O check of all wiring
  - Power up sequence
  - Functionality of all devices
  - Panel labeling
  - Shipment photographs

#### **Local Field Service**

Wunderlich-Malec *provides customers local site service* for all control panels from 36 local offices.



Custom-Fabricated Motor Control Centers with components being wired and pre-tested prior to final installation.



Specific design criteria for each panel ensures "quality is built into every panel."



State-Of-The-Art Machine Tools provide precise cuts and holes for rapid and repeatable fabrication of high-quality panels.



Detailed design and quality fabrication and wiring simplify and speed testing and field commissioning and maintenance.

# Experience you can build on since 1981

Wunderlich-Malec provides customers with value engineering, quality system integration, and innovative panel and control house solutions.

As an experienced engineering company with offices throughout the United States, we are uniquely qualified to meet our customers' most demanding requirements, including their sustainability goals.

We deliver panels, systems and value-engineering services that lower costs, improve quality and accelerate project schedules.

With over 400 experienced professionals, our team is one of the largest and most well-established engineering, system integration and process automation providers in North America.

## **Certifications**



ETAP – Systems Integrator



GE – Premier Solution Provider

**Honeywell** 

Honeywell - Diamond System Integrator



ICONICS – Gold Level Certified System Integrator



Inductive Automation – Premier Integrator



Microsoft - Certified Partner



OSIsoft - OSIsoft PI, Solution Partner



Rockwell - Solution Partner



Schneider Electric - Certified Alliance Partner



Siemens – Solutions Partner/Smart Grid Solutions Partner



TATSOFT Tatsoft – Partner



Wonderware – Endorsed System Integrator



Yokogawa – Systems Integrator

## System Experience

ABB Bailey Infi90/800xA

Emerson DeltaV/Batch

GE Series 9030/9070/PAC Systems RXI, RX3i, RX7i

GE-IP Proficy HMI/SCADA – iFIX, Cimplicity,

Historian, WorkFlow, Portal

Honeywell Experion LX/PKS, HC900/MasterLogic

ICONICS Genesis 32 & 64/Hyper Historian/BizViz

Microsoft SQL Server

Modicon 984/Quantum/M340

Novatech D3

OSIsoft PI

Rockwell 2/3/5/SLC/ControlLogix/MicroLogix/GuardLogix/

FlexLogix/CompactLogix

Rockwell FTView/Panelview/FactoryView/PlantPAx

AssetCentre, Historian, and VantagePoint

Schneider Electric – Plantstruxture

Siemens S5/S7/PCS7/TI545, 555, 565/APACS/APT/TISOFT/

APAC+

Wonderware InTouch/InBatch/InSQL, AVEVA

System Platform

Yokogawa CENTUM, STARDOM

## Centers of Excellence

Albuquerque, NM Eden Prairie, MN Las Vegas, NV New Albany, OH San Francisco, CA Atlanta, GA Golden, CO Longmont, CO Orlando, FL Tampa, FL Biddeford, ME Green Bay, WI Phoenix, AZ Williamsburg, VA Los Angeles, CA Boston, MA Hampton, NH Loveland, CO Portland, OR Wilmington, NC Chicago, IL Houston, TX Malta, NY Sacramento, CA Winslow, ME Dallas, TX Nashville, TN Winston-Salem, NC Huntington Beach, CA St. Louis, MO

