

# **CONTROL AND SAFETY SYSTEMS**



# **DELTAV™ DISTRIBUTED CONTROL SYSTEMS (DCS) AND SAFETY INSTRUMENTED SYSTEMS (SIS)**

#### I/O ON-DEMAND

Traditional Wiring, Bussed, Wireless, and Electronic Marshalling

#### **COMMUNICATIONS PROTOCOLS**

HART®, WIRELESSHART®, HART-IP™, FOUNDATION™ FIELDBUS, MODBUS® RTU/TCP, PROFIBUS®, OPC (DA, UA, HDA, AE), DEVICENET™, ETHERNET/IP™, AS-INTERFACE® AND MORE

#### OTHER PERFORMANCE ENHANCEMENT SOLUTIONS

Advanced Process Control, Alarm Management, Cybersecurity, Historians, Mobile Applications, Simulation, Operator Training, Virtualization, and Wireless Solutions

#### DELTAV™ DCS

- M-Series Controllers MD+, MX, and MQ
- S-Series Controllers SD+, SX, and SQ
- · CHARMs I/O Technology Change characterization of I/O signal type at any time
- Distributed CHARMs I/O Group small amounts of I/O in the field
- CHARMs I/O Cards CHARMs IOC, Ethernet IOC, Wireless IOC
- Intrinsically Safe CHARMs available
- ISASecure System Security Assurance (SSA) Level 1 certification capable

#### DELTAV™ PK CONTROLLER

- · Integrated or Standalone
- Small-scale Applications Skid units or small unit operations
- Utilize with DCS or SIS
- Embedded Communication Protocols OPC UA, Modbus® TCP, and EtherNet/IP™
- Built-in Redundancy
- Configurations remain intact without power
- Sized for 100, 300, 750 or 1500 DSTs

#### DELTAV™ SIS

- · Integrated or Standalone
- Built-in redundancy
- 1508 Safety Logic Solver (SLS)
- CHARMs Safety Logic Solver (CSLS)
- SZ Safety Controller Can run both safety and non-safety logic
- LS CHARMs I/O Technology
- Distributed LS CHARMs I/O Technology
- Packages for BMS, ESD, FGS, HIPPS, and AOPS Applications
- · Safety Ratings IEC 61508, ISA 84 & ISA SSA Level 1, NFPA (72, 85, 86, 87), and EN (54-2, 298, 50156)
- Intrinsically Safe LS CHARMs Available

**PROGRAMMABLE AUTOMATION** 

**CONTROL SYSTEMS (PLC / PAC)** 

PACSystems RX3i, RSTi, RSTi-EP

VersaPoint / VersaSafe

PAC Machine Edition

PAC Security Center

PAC Productivity Suite

PAC Change Management

VersaMax Modular

VersaMax/IP

PAC8000

**SOFTWARE** 

**FEATURES** 

PACSYSTEMS FAMILY OF AUTOMATION CONTROLLERS



- Scalable, rugged, high availability
- PROFINET, PROFIBUS DP, Modbus RTU/TCP, Ethernet Global Data (EGD), Control Memory Exchange (CMX)

## **PANEL / CABINET DESIGN & FABRICATION**

- Small junction boxes, panels and backplanes, major field
- 7,500 sq. ft. facility
- NEMA 12 & NEMA 4X enclosures
- UL508A and UL698A Certified
- In-House Factory Acceptance Testing Over 70 years combined experience
- Standardized panel and cabinet packages
- Functional, "finger safe" designs
- Brand-friendly





### ADDITIONAL CUSTOMER SOLUTIONS

#### DIGITAL TRANSFORMATION

A very broad term on the surface, but one that Emerson has spent vears planning for and implementing into their product and software solutions. For customers experiencing a retiring workforce, equipment end-of-life, infrastructure obsolescence, and the desire to optimize process and production, Emerson and John H. Carter Company offer an array of Digital Transformation solutions to help get the right information to the right plant personnel at the right time so that the right decision can be made.

- Project & Operational Certainty Consulting
- · Wireless Infrastructures
- Industrial Internet of Things (IIOT) Solutions
- · Digital Twin (Simulation) Technologies
- Edge Analytics for Asset Health Monitoring
- · Safety & Location Technologies
- Automated Operator Rounds
- Digital Turnaround Solutions
- · Augmented Reality (AR)

#### INDUSTRIAL WIRELESS TECHNOLOGY

If your process plant is like most, it has some wireless instrumentation, but you could quickly add more to improve operations, cut energy use and enhance safety. Industrial wireless networks and sensors can be used in a wide range of process measurements, usually at dramatically lower costs as compared to wired alternatives, with faster installation time and minimal disruption.



### **SERVICE & SUPPORT**

#### PROJECT SERVICES

- Control Systems Configuration
- **HMI Graphic Development Services**
- Factory Acceptance Testing (FAT)
- System Inspection
- · System Commissioning
- Process Startup

#### **CONSULTING SERVICES**

- Project Management Services
- Advanced Operator Graphics Consulting
- Advanced Control Consulting
- Safety System SRS Development and SIL Validation Services
- Long-Term, On-Site Resident **Engineering Services**
- Industrial Information Technology Consulting Services (IIoT, Virtualization, Cybersecurity, etc.)

#### LIFECYCLE MAINTENANCE SERVICES

- Emerson Guardian™ Support
- Emerson Extended Hardware Warranty
- Emerson Factory Certified Service
- Education, Seminars & Training
- Lifecycle Maintenance Service
- Preventive Maintenance
- Antivirus Protection & Cybersecurity Implementation
- Software Upgrades
- Emergency, On-Demand, Break/Fix
- System Audits and Consulting

24/7 SERVICE 225-751-3788 JOHNHCARTER.COM

# PROCESS SYSTEMS AND SOLUTIONS (PSS) LOCATIONS

Baton Rouge, LA Process Solutions Groups & Engineering Center 14141 Airline Hwy Building 3, Suite N Baton Rouge, LA 70817

225-751-3788

Sales / Service Office 650 East Highway 108 Sulphur, LA 70665

Sulphur, LA

337-583-8420

Mobile, I A Sales / Service Office 2203 Perimeter Rd. Ste 300 Mobile Al 36615

251-653-9898

Sales / Service Office 2728 N. Arnoult Road Metairie I A 504-887-8550

Metairie, LA

Sales / Service Office 401 Wall Street Lafayette, LA 70506 337-233-8331

Lafavette, LA

DFITAV

# **OTHER LOCATIONS**

BATON ROUGE GEISMAR LAFAYETTE LAKE CHARLES METAIRIE MONROE SHREVEPORT



# **RELATED SOLUTIONS** ASSET MANAGEMENT SERVICES

**CONTROLWORX: SERVICE & SAFETY SOLUTIONS** ENGINEWORX: ENGINE & COMPRESSOR SOLUTIONS FISTHER CONTROL VALVES & FLOW SOLUTIONS INSTRUMENTATION & INDUSTRIAL EQUIPMENT MEASUREMENT SOLUTIONS

MECHANICAL RELIABILITY SOLUTIONS PPE: PROCESS PUMPS & EQUIPMENT PRESSURE MANAGEMENT SOLUTIONS INDUSTRIAL & NATURAL GAS REGULATORS **VALVES & AUTOMATION SOLUTIONS** WATER & WASTEWATER SOLUTIONS

CONTROLWORX A John H. Carter Company