



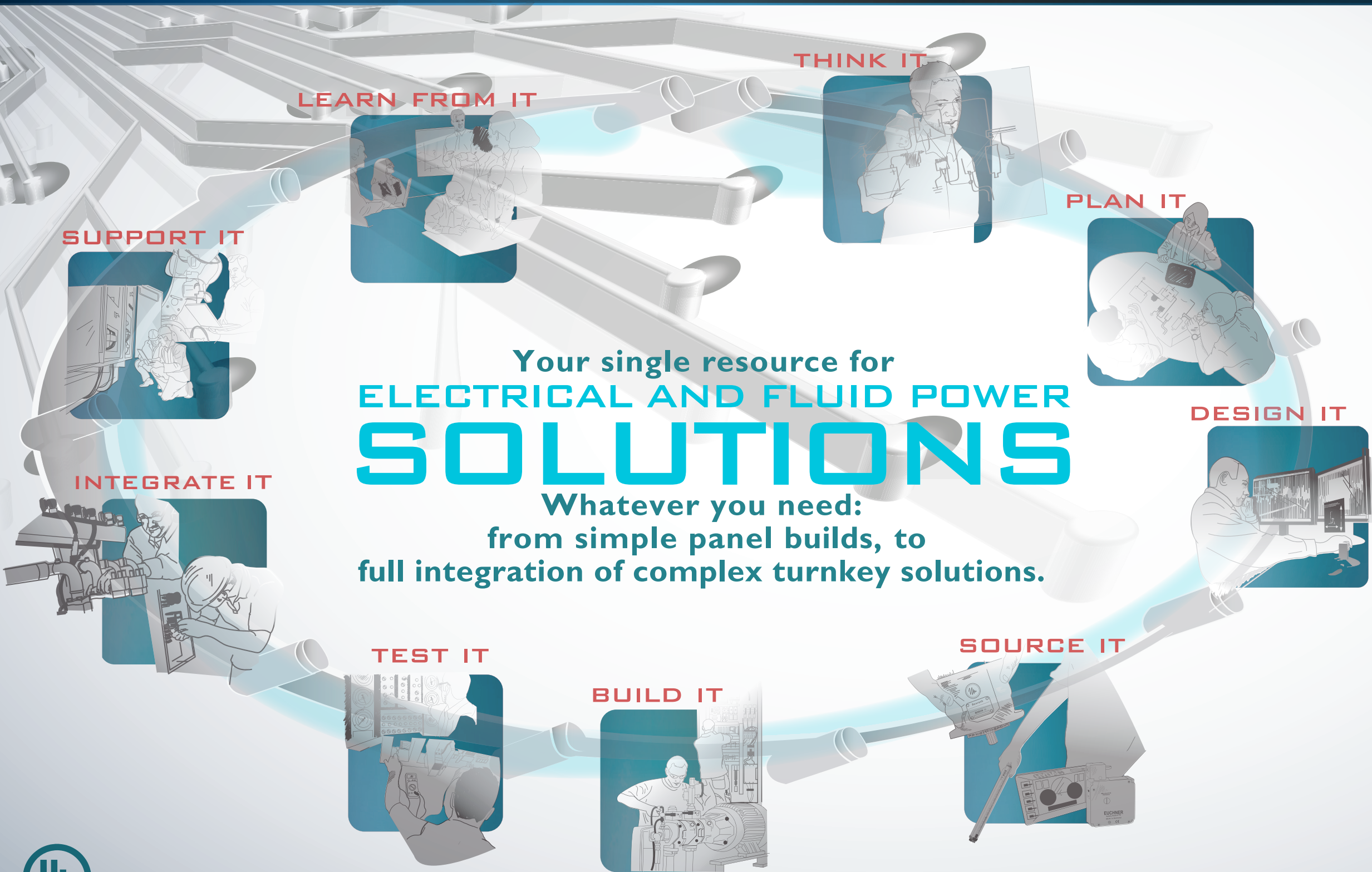
**stegner**  
controls

**A Premier Provider of Solutions for Electrical and Fluid Power Control**

A proud member of the  
**MorrellGroup**  
Evolution in Controls



# COMPLETE LIFE-CYCLE SUPPORT FOR MORE THAN 50 YEARS



Your single resource for  
**ELECTRICAL AND FLUID POWER  
SOLUTIONS**  
Whatever you need:  
from simple panel builds, to  
full integration of complex turnkey solutions.

STAGE 1	<b>THINK IT</b>	<ul style="list-style-type: none"> <li>• Specification Review</li> <li>• Concept Generation</li> <li>• Resource Analysis</li> </ul>
	<b>PLAN IT</b>	<ul style="list-style-type: none"> <li>• Requirements Review</li> <li>• Scope of Work</li> <li>• Cost &amp; Timing</li> </ul>
	<b>DESIGN IT</b>	<ul style="list-style-type: none"> <li>• Design Engineering</li> <li>• Layout</li> <li>• Analysis</li> <li>• Approvals</li> </ul>
STAGE 2	<b>SOURCE IT</b>	<ul style="list-style-type: none"> <li>• Component Selection</li> <li>• Sourcing/Purchasing</li> </ul>
	<b>BUILD IT</b>	<ul style="list-style-type: none"> <li>• Prototyping</li> <li>• Manufacture</li> <li>• Quality Assurance</li> </ul>
	<b>TEST IT</b>	<ul style="list-style-type: none"> <li>• Performance Validation</li> <li>• Build Process Validation</li> </ul>
	<b>INTEGRATE IT</b>	<ul style="list-style-type: none"> <li>• Installation</li> <li>• Start-Up</li> <li>• In-Process Validation</li> </ul>
STAGE 3	<b>SUPPORT IT</b>	<ul style="list-style-type: none"> <li>• In-Process Quality</li> <li>• Maintenance &amp; Repair</li> </ul>
	<b>LEARN FROM IT</b>	<ul style="list-style-type: none"> <li>• Technical Memory</li> <li>• Sharing/Leveraging</li> <li>• Continuous Improvement</li> </ul>



# INDUSTRIES

## AEROSPACE



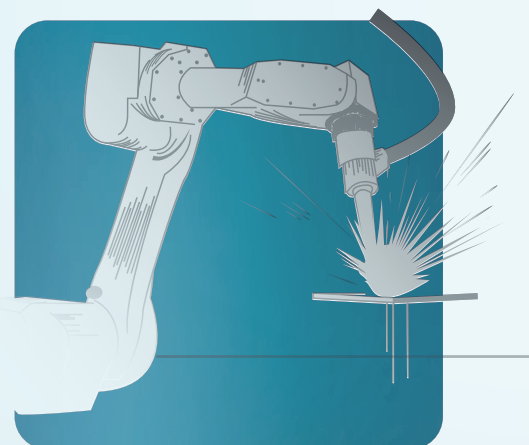
Empennage Assembly  
Final Assembly  
Fuselage Assembly  
Wing Assembly



## JOINING TECHNOLOGIES



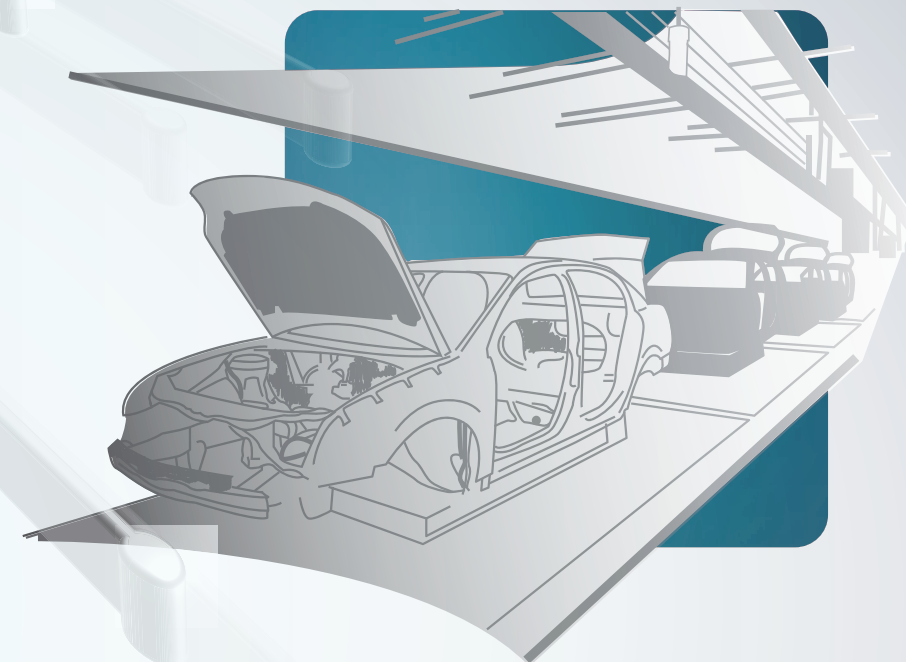
Dispensing Cells  
Final Assembly Cells  
Gluing/Sealant  
Inspection & Verification



## AUTOMOTIVE



Body In White  
Engine & Transmission Assembly  
Final Assembly  
Metal Removal  
Paint  
Test



Stegner's body of knowledge not only provides exceptional solutions, but also tremendous value.

Our broad industry experience has left us a unique technical memory that we leverage with tremendous success for all our customers.



## DEFENSE

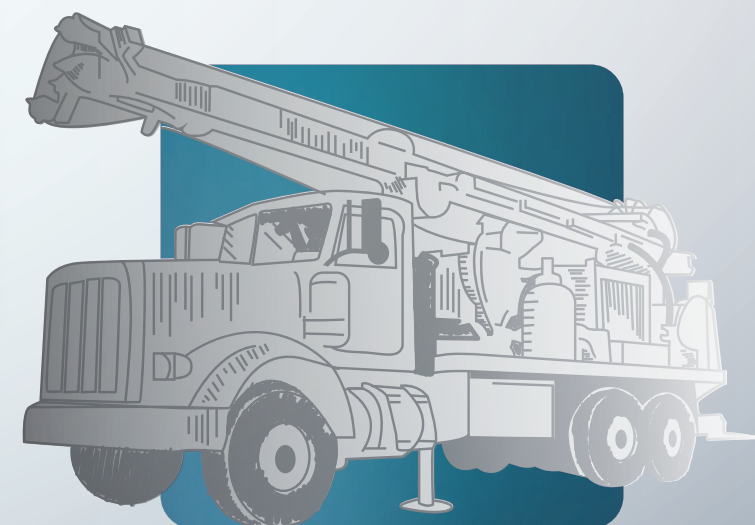


Autonomous Vehicles  
Factory Automation  
Special Machinery  
Track Vehicles  
Wheeled Vehicles

## MOBILE EQUIPMENT



Agricultural Machines  
Forestry Machines  
Off-Road Vehicle Control  
Rail Transportation  
Renewable Energies





**Going forward, look to Stegner for recurring needs, but also for technologies that differentiate your business.**



**We gain your trust with products and processes that prove time and again to be, by far, the most cost effective.**

## Control Expertise

### Automation/Assembly

- Allen-Bradley CompactLogix<sup>1</sup>
- Allen-Bradley ControlLogix<sup>1</sup>
- Allen-Bradley Micrologix<sup>1</sup>
- FactoryTalk View<sup>2</sup>
- Fanuc<sup>3</sup>
- Modicon, Quantum<sup>4</sup>
- Siemens S Series<sup>5</sup>
- Telemecanique<sup>4</sup>
- RS View Series<sup>1</sup>

### Metal Cutting/Powertrain

- Allen-Bradley Kinetix<sup>1</sup>
- Bosch Rexroth CLM/CLT/CLC<sup>6</sup>
- Bosch Rexroth DIAX02/04<sup>6</sup>
- Bosch Rexroth Indra Drive<sup>6</sup>
- Bosch Rexroth MLC<sup>6</sup>
- Bosch Rexroth MTX<sup>6</sup>
- GE Cimplicity<sup>7</sup>
- Fanuc i Series<sup>3</sup>
- Fanuc PowerMate<sup>3</sup>
- Mitsubishi CNC<sup>8</sup>
- Siemens 840 Series<sup>5</sup>
- Telemecanique NUM CNC<sup>4</sup>

## Panel Build

- 100% Panel Testing Before Shipment
- Labor Plus Material
- UL Panel Build Facility – Built to CSA, CE, IEC

## Welding

- Advanced Alloys
- Aluminum Welding
- Flash/Butt Welding
- General Purpose Resistance Welding
- High Current Flash Welding
- Precision Spot Welding
- Press Welding
- Projection Welding
- Seam Welding
- Short Duty/High Current Applications

## Machine Control Design Expertise

### Automation/Assembly

- AGV/ASRS Systems
- Automated Inspection
- Material Handling Equipment
- Press Automation
- Robotic Manufacturing Cells
- Seat PODS Systems
- Sortation/Distribution/Towline/ Power & Free Conveyors
- Specialty Machines
- Trim Press Machines
- Underbody Assembly
- Weld Panel & Weld Lines
- Wheel Alignment Machines

### Metal Cutting/Powertrain

- Adhesive Application Equipment
- Broaching Machines
- Chilled Water Systems
- CNC Machining Centers/Turning Machines/Lathes
- Fastening Systems
- Gear Shapers/Shavers/Hobbers
- Induction Heating Machines
- Leak Test Machines
- Linear and Area Gantries
- Micro Finishing Machines
- Press Fit Machines
- Torque-To-Turn Test Machines
- Transfer Machines/Dials

## Vision

- Assembly Verification
- Defect Inspection
- Part Identification
- Vision Guided Robotics

## Americanization of Off-Shore Machines

- Conversion Of Hardware/Software Design
  - HMI Screen Conversions
  - New Panel Drawings
- Re-Engineering of Existing Machine Design to North American Standards
  - Safety Standards
  - Specification Compliance
  - UL, CSA

## Hardware Design

- AutoCAD 2007 to present
- Designed to Specification for Compliance
- Electrical, Pneumatic, Hydraulic, Lube, Coolant Design
  - Complete Stocklist/BOM Generation
  - Heat Calculation/Air Conditioner Sizing
  - High & Low Voltage Systems
  - I/O Layouts
  - JIC, ANSI, or IEC Drawing Standards
  - Load & Phase
  - Panel/Backplate Layouts
  - PLC/CNC Architecture Hardware Layouts
  - Power Consumption/Transformer Sizing
  - Single Line to Complete Design Packages
  - UL 508 Compliance Review Services

## Software Design

- HMI
  - Computer or Dedicated HMI
  - Designed to Reference
  - Diagnostics – Level 1, 2, or 3
  - Level of Control through HMI
  - Touch Screen or Keypad
- Motion/CNC
  - Basic Parameters
  - Logic
  - Macros
  - PC Front End
- PLC
  - Designed to Detailed Sequence of Operations
  - Diagnostics
  - Ladder Logic/Sequential Function Chart/Flow Chart
  - Required Software Revision Level

<sup>1</sup>Registered Trademark and/or Trademark of Rockwell Automation. <sup>2</sup>Registered Trademark and/or Trademark of ControlNET International. <sup>3</sup>Registered Trademark and/or Trademark of Fanuc Corporation. <sup>4</sup>Registered Trademark and/or Trademark of Schneider Automation. <sup>5</sup>Registered Trademark and/or Trademark of Siemens AG. <sup>6</sup>Registered Trademark and/or Trademark of Bosch Rexroth. <sup>7</sup>Registered Trademark and/or Trademark of General Electric Corporation. <sup>8</sup>Registered Trademark and/or Trademark of Mitsubishi Electric Corporation. Morrell is in no way affiliated with the listed companies.





**Stegner Controls. A proud member of the Morrell Group.**

Stegner Controls  
3333 Bald Mountain Road  
Auburn Hills, MI 48326  
1-248-904-0400 (phone)  
1-248-904-0401 (fax)  
[sales@stegner.cc](mailto:sales@stegner.cc)



Stegner Controls is a member of the Morrell Group, which also includes Morrell, WESS, and Morrell Defense.

The Morrell Group distributes world-leading components, integrating them on demand into highly engineered solutions – all backed by a legacy of family-based customer service for more than 50 years.

#### **Locations**

**Auburn Hills, MI**  
**Chicago, IL**  
**Evansville, IN**  
**Indianapolis, IN**  
**Fort Wayne, IN**  
**Grand Rapids, MI**  
**Saginaw, MI**  
**Toledo, OH**  
**Windsor, CA**