

Experience the Capability.  
The Commitment.  
The Service.



Experience Kelley Electric.

Industrial & Commercial Electrical Services

GinManager™ System

Custom Control System Design

Testing Equipment & Control Panels

**KELLEY ELECTRIC**



# Kelley Electric Company.

## Custom Solutions for Your Process Systems Needs.

### Introduction

#### Background

*Kelley Electric* has more than 65 years of electrical contracting experience serving industrial, commercial, agriculture and OEM markets. The company employs skilled electricians who take great pride in providing **custom solutions** and in completing small or large projects **on time, on budget!**



With years of experience across a broad range of applications, Kelley Electric has a thorough knowledge and understanding of the performance requirements needed by engineering firms and facility engineering staffs to efficiently and cost effectively meet all applicable codes and standards.

#### Experienced, Qualified Personnel

Our experience across a wide range of applications provides Kelley Electric with a thorough knowledge and understanding of the performance standards needed by architectural and engineering firms to efficiently and cost-effectively meet CII codes and standards.

Kelley Electric focuses on getting each and every job done **safely and reliably, the first time, every time!**

Personnel credentials include: OSHA, MSHA, NFPA 70E, and First Aid/CPR.

With offices in Kennett, MO and Moultrie, GA, Kelley Electric provides services to the Mid South and Southeast.

Kelley Electric has also worked across other areas of the United States as well as internationally to meet unique customer requirements.

### Products & Services

#### Industrial & Commercial Electrical Services

- In-Plant Power Distribution
- Install, relocate equipment
- Motor Control centers
- Plant Shutdown services
- Renovation/retrofit
- Troubleshooting

#### Specific Markets of Focus

- Agriculture
- Food & Beverage
- Automotive
- Process-driven industries

#### Custom Control System Design

- Cotton Gin automation
- Blending and Batching
- Material Handling
- In-plant Power Monitoring
- Automation of multiple manual processes

#### Motor Testing Equipment & Control Panels

- GinManager™ Cotton Gin system
- Motor and Stator Testers, Bonders
- Machine and Process Control Panels





# Benefit From Our Experience and Capability in Process Automation and Custom Control System Design.

## Process Automation & Control System Integration

### Overview

*Kelley Electric* personnel will work with facility engineering and manufacturing groups to identify, propose and implement innovative process improvements and cost reduction initiatives.

Kelley Electric capabilities include the maintenance and installation of process and production control systems, facility power distribution, and custom control panel design and manufacture.

### Capabilities

- Automate Manual Processes
- Data Acquisition and Analysis
- Process Blending, Batching
- Monitor Bulk Material Handling and Manage Inventory
- Analyze Process Bottlenecks
- Advanced Diagnostic Systems
- Quality Control Vision Systems
- Climate Control Systems
- Steady State Process Control
- Process Control with VFD
- In-Plant Power Monitoring
- Controls Engineering
- Ethernet Communications (Wired, Fiber and Wireless)
- Equipment Controls Design
- Operator Stations
- PLC, HMI Programming
- Dryer System Controls
- System Integrator



### Mission Statement

The Kelley Electric Company mission is to provide our clients with outstanding service quality in a safe and reliable manner. We endeavor to develop long term relationships with our customers by consistently delivering superior service excellence while adhering to the highest ethical and professional standards in our industry. We are committed to reliability, responsiveness and customer-centered solutions.

### Our Core Values

#### Safety

- Our most important core value. Our associates work to live, not live to work. We are committed to ensuring that every employee goes home safely every night.

#### Excellence

- The best equipment, well-trained, experienced professionals, value-driven performance each and every time.

#### Integrity

- A partner that can be trusted.

#### Character

- We expect our leadership and field personnel to conduct themselves at all times as professionals and experts in their respective fields.

#### Accountability

- Serving our client's needs safely, efficiently, and dependably; committed to reliability, responsiveness and customer-centered solutions.

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## Kelley Electric Company



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# Experience Kelley Electric's GinManager™ The Next Generation in Cotton Gin Automation Systems.

Kelley Electric's Gin Manager™ is an integrated process control system designed to improve the overall operation of cotton gins through automation of production stations. It is a state-of-the-art system that successfully addresses the three common issues facing cotton gin operators:

- How to optimize productivity and reduce costs
- Minimize/avoid costly downtime, repairs
- How to transfer ginner knowledge to future staffers

## GinManager™ helps ginner achieve a high ROI in two key ways

1. **Cost Reduction** based on a set level of production
2. **Increased capacity/productivity** over a ginning season

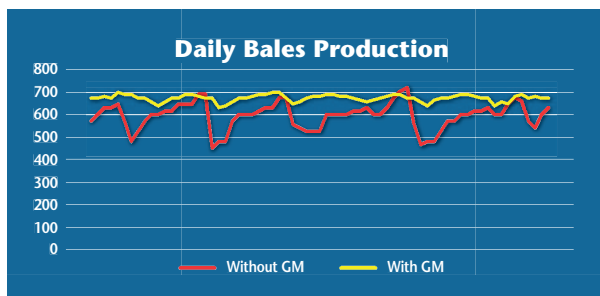
## System Benefits

- Ease of operation
- More consistent Bale production
- Easier training of new operators
- Customized for each gin system and client requirements

## GinManager™ Features

- Synchronization of equipment controls
- Equipment control ranges customized to user specifications
- Monitors and alarms programmed to respond before limits are reached

## Improved Consistency

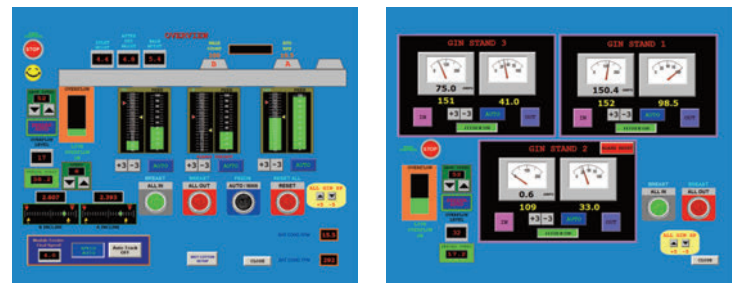


## Cost Reductions

Assume a set Production of 50,000 Bales			
	Typical	GinManager™	Savings
Cost of Production	\$20 / bale	\$20 / bale	
Bales/Hour	26	30	
Shorter Season (10-15%)	87.4 days	75.8 days	
Production Costs @ \$11,440/Day*	\$999,856	\$867,152	\$132,704
Parts replacement (saws & belts)	\$8,000 - \$10,000	\$0 - \$4,000	\$4,000 - \$10,000
* (includes labor costs; production @ 22 hrs./day) <b>Total Annual Savings Est. \$140,000</b>			

Sources: 2010 USDA Study, various cotton gin managers

## Key GinManager™ Integrated System Capabilities



- Gin Stand Control
- Press and Trampler Control
- System Auto Start/Stop Sequenced
- Auto Seed Cotton Feed System
- Auto Wet Cotton Mode
- Module Feeder Controls
- Air Flow Monitoring and Alarming
- Auto Calibrating Shaft Monitor System
- Integration with Existing Drying Systems
- Integration with Spark Detection Systems
- Real Time Alarming
- Owner/Manager Remote Viewing

## Impact on Personnel

- **Base operating logic is programmed into the system, relying less on intuition and feel**
- **Less manpower needed for Operations**
  - Completely Integrated System (CIS): consolidates control from 6-8 stations to 1
  - Frees personnel to be utilized elsewhere
- **Manpower shift can yield cost reduction or increased production**
  - Freed up manpower can be used for expanded hours, overall seasonal cost reduction

## Improved Productivity

Assume goal is to achieve more production over 90 Days				
	Current	GinManager™	Increase	Revenue
Bales/Hour	26	30		
Total Production (90 days)	51,480	59,400	7,920 bales	
Seed Production	20,592	23,760	3,168 tons	\$871,200
Increased Seed Revenue				\$9,680 / Day
Assumes \$0.65/lb. cotton and \$275/ton seed				<b>Increased Revenue \$871,200</b>

Sources: 2010 USDA Study

# Custom-designed Electrical Solutions For Your Industrial & Commercial Needs.

## Industrial & Commercial Electrical Services

### Overview

*Kelley Electric* is experienced and committed to developing custom solutions for industrial and commercial applications that meet customer needs for new-build and/or maintenance

projects. We have extensive experience providing innovative solutions to unique problems across a broad variety of industrial applications.

### Capabilities

- High Voltage Power Distribution
- In-Plant Power Distribution
  - Switchgear and Bus Duct
  - Cable management systems
- Motor Control Centers
  - Variable frequency drives
  - Soft start Starters
- Electrical for equipment Installation/Relocation
- Facility Lighting (indoor/outdoor)
- Plant Shutdown Services
- New Facility Construction
- Preventative Maintenance Services
- Troubleshooting



### Overview

*Kelley Electric* manufactures state-of-the-art testing equipment for major motor manufacturers around the world, as well as custom designed control panels for process-oriented manufacturing and material handling

systems. The company is renowned for its workmanship, programming support and the superior quality that is built into every tester and control panel.

## Motor Testing Equipment & Control Panels\*

### *Motors and Wound Components*

- Custom Cabinet Design, Fabrication
- Software Programming
- Stator Tester and Assembled Motor Tester
  - Manual, automatic mode
  - Test uni-speed, multi-speeds
  - 3-phase, up to 12 leads
  - Uses PC, PLC controls

\* UL Listed for UL508A Industrial Control Panels

### • Stator Tester

- Hi-pot up to 5 KV, 20 ma
- Surge Test up to 5 KV source
- Resistance
- Resistance balance
- Inductance, reactance, rotation
- Winding- winding offset

### • Motor Tester (1- or 3-phase)

- Amps phase imbalance
- Rotation direction and/or speed
- Compares startup criteria to a data bank samples

### • Bonder

- Auto heats to preset temperature
- Can be performed in conjunction with stator test

### *Control Panels for:*

- Conveyor Systems
- Machine Controls
- Process Controls

Experienced.  
Capable.  
Committed to Service.



## Industries Served

Agriculture  
Automotive  
Food & Beverage  
Food Processing  
Manufacturing

Mining  
Municipal Buildings  
School &  
Office Buildings  
Shopping Centers

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