Hello friends,

Welcome to a view of Samuel Jackson, Inc. It is my hope that through this catalog, you will get a glimpse into our culture as well as become more knowledgeable about our products. At Samuel Jackson, we strive to make the best products available. We manufacture all of our products in Lubbock, Texas and each product is thoroughly inspected before it goes to a gin. We continue to expand our knowledge each and every day and because of this, we continue to provide new technology that helps fiber processes operate at remarkable capacities and profitability.

If you are as serious about cotton as we are, there is no better time to begin than now.

Sincerely,

S. Chris Jackson
President
Samuel Jackson, Inc.
Samuel Jackson welcomed the completion of “Rain Park Research and Development Center” on our Lubbock campus in 2018. Rain is not always common here on the high plains of Texas; it is typically absent when needed most and in abundance when desired the least. In addition, Lubbock’s water is very hard and full of minerals and other substances. Because of this, we decided we needed a more reliable source of high-quality water to test our Humidaires. Therefore, in September of 2015, we attempted to harvest the rainfall from our factory roofs. One thing led to another and before long, our entire facility was running on filtered rainwater.

Then in 2018, we began to construct a product development and support facility that happened to look out onto the rain tanks drainage area. With a bit of landscaping work, we were able to form an attractive and useful park area. Because of this, “Rain Park Research and Development Center” was chosen as the name.

The Rain Park facility has given us the ability to maintain forward progress in our R&D activities without disturbances or interruptions to our production facilities. We are pleased to be able to showcase a
few of the first developments from this facility in this catalog.

The first is the Ginspire spark detection system. A full-scale cotton handling system inside Rain Park allows our engineers to safely create sparks and fires in different air stream situations that would seldom, if ever, be permitted to be tested in a commercial cotton gin.

Most recently, the Desert Rain Humidaire has emerged from the full-scale moist air lab in Rain Park. Development of this moist air generator would not have been possible with our previous water supply. In addition, the interruptions to production operations would have posed a large obstacle, significantly extending the development period required.

Expanding our capacity to test, research and innovate new ideas, Rain Park provides our Research and Development team an environment where they can create new technology to better benefit you.
Access to the largest cotton moisture technical staff in the world is one call away.

Because our success depends on your success, we staff our sales and support positions with technically-trained personnel that are passionate about helping customers operate efficiently while maintaining a reputation for dependability and integrity. There are a lot of unknowns in the cotton-ginning business, but our goal is to make sure that our customers know they can count on us.
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Samuel Jackson Resellers have received special training and offer both new Sam Jackson products and technical support.
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Drying Products
“A strong drying strategy is your best weapon to gin challenging cotton.”
Drying Performance Can Make or Break a Gin

Gins do not have the luxury of ginning dry, clean cotton all season long. Having a strong drying system can make all the difference in your bottom line for both the gin and the farmer.

Effective drying results in more bales ginned per week while using less fuel. When cotton dries better, it cleans better, which means you are protecting your grades, too.

Effective drying has benefits such as:
♦ Increase ginning capacity
♦ Preserve grades
♦ Optimize fuel usage
♦ Improve turnouts

Make next year easier by using Samuel Jackson drying equipment. Give us a call and one of our sales staff would be delighted to help you develop the best drying strategy for your gin.
Re-engineered and Redesigned

*With a cobalt-blue flame, you know your fuel is being used efficiently.*

The cobalt-blue flame, is created by the right combination of burner design, gas flow, and air velocity.

With the capacity to handle high air volume drying systems, the Cobalt is designed for any gin - big or small. It has the flexibility to handle fluctuating air volumes with the constant velocity shutters, making it more forgiving when air volume changes as you are ginning.

The Cobalt will light 7-10 times faster than competing heaters and even twice as fast as our Delta Heater, providing heat exactly when you need it. Because it can light so quickly, you will feel comfortable allowing your heater to turn off when the incoming moisture is low, saving you even more fuel.

Combine the Cobalt with a TexMax 2 Module Moisture Sensor so the heaters can automatically light and be ready for wet cotton even earlier before it enters the gin.
New Look and Better Diagnostics

The Cobalt Cabinet was designed to be easier to diagnose and troubleshoot, meaning less downtime and faster service.

The Cobalt Heater can fulfill safety requirements of the Australian Gas Association (AGA), allowing cotton gins down under to enjoy fuel savings too.
Reliable and Dependable

Tried and true, this heater has a proven design and is made to last.

Onboard diagnostics allow easy testing of valves and switches.

Self-diagnostics that offer operator alerts.

Multiple gas pressure gauges aid the operator in monitoring performance.

Engineered components are part of the high turn down ratio design.

In line filter traps contaminants.

The Delta Heater can fulfill safety requirements of the Australian Gas Association (AGA).
For the Old and the New

*Made for high air volume drying systems, this burner body can be used with any of our Samuel Jackson heaters - no matter how old or new.*

A high volume of air is necessary to efficiently dry cotton. Because of this, the most important factor in designing a burner body is air flow.

A burner body that does not restrict or limit the air means your drying system will be stronger and more powerful. The Universal Burner Body uniformly heats the high volume of air, which helps reach target temperatures easier and increases fuel efficiency. Using the right burner body is an important step towards improving a drying system.

This universal design gives Delta Heaters a manual, easy-to-turn handle on the side so you do not have to open access doors to adjust shutters. When used with a Cobalt Heater, there is an actuator on the side, which allows the heater to adjust automatically.
Pull-through drying systems have a unique characteristic of being less restricted when pulling high volumes of air compared to pushing the air. As a result, less electrical energy is consumed making it more efficient to dry and clean the cotton.

Pull-through heaters have less turbulence and higher air flow capacities. The reduced turbulence alone is what makes them easier to light and better at maintaining temperature.

Check out our music video about pull-through drying at samjackson.com/gonepullthrough or use the camera on your smartphone to go directly to the link.
Push-Pull Installations

Versatile mounting options can easily accommodate push-pull applications.

Samuel Jackson heaters can be equipped with a push fan kit allowing them to be mounted on the outlet of a push fan. Push fan kits include an air-diffuser sheet to reduce turbulent air flow across the burner head for more reliable lighting and operation.

The Compact Air Diffuser provides a more advanced installation option for push-pull systems. The Compact Air Diffuser reduces turbulence through the heater, improving turndown and saving fuel. This compact design, equipped with a honeycomb style diffuser, gives you more room and flexibility when determining a location for your heaters.
For Those Regions that Require Fuel Oil Combustion

The Vulcain Heater is a great alternative when natural gas or propane is not feasible.

For our overseas customers, we offer a line of oil-fired heaters with controls tailored for you. With a Samuel Jackson oil-fired heater, you can expect robust components with easy-to-operate controls giving you reliability and performance.

Benefits:

♦ Industrial Grade Burner Package with a 20:1 turndown ratio
♦ Available in 4 and 7-million Btu models
♦ Compatible with Shed Technology
♦ Compatible in pull-through or push-pull drying system
♦ Simple test program for easy setup and troubleshooting
Find Out What’s Inside

Although the Hot Box is undoubtedly one of our simplest products, there is more to the Hot Box than what you might expect. It performs several key functions and performs them well.

Many Hot Box users are surprised to find out what is inside a module. We have heard stories of cell phones, ammo, wrenches, and even 20-pound rocks coming through the Hot Box. The Hot Box separates the junk from the cotton before it reaches the drying system, protecting your gin machinery from damage.

The Hot Box can also be equipped with a moisture sensor. This sensor measures the moisture of the cotton as it enters the Hot Box. This moisture sensor combined with our Moisture Mirror X gives you the ability to see what is coming into the gin easier and faster.

The Hot Box can be used before, after or even without a feed control giving you the flexibility to layout your gin how you want.
Round modules are more compact and densely packed than rectangular modules. Give yourself an edge by attacking wads of cotton before it hits your drying system.

Adding a Flail to your Hot Box can help break up those clumps and improve your drying and pre-cleaning efficiency. The flail sits on the Hot Box outlet where a series of heavy chains rotate at a high speed breaking up the cotton as it flows through.

Combine the Hot Box 3 with a Moisture Sensor, Moisture Mirror X, and a Flail to capitalize on your drying system.
A Powerful Pull-Through Dryer

Based upon decades of research of pull-through drying, the Scoop Dryer is a powerful and flexible solution for gins that are wanting to improve their existing drying system.

The Scoop Dryer does not have specific piping and fan requirements, which can save a significant amount of up-front costs on a new installation. Properly-sized pipes, cyclones and fans will improve any system, but the Scoop Dryer lets your gin make these changes at your own pace with a high level of forgiveness.

Designed to provide gins with an affordable and effective pull-through dryer, its flexible design allows it to perform well in a wide variety of system configurations.

The Scoop Dryer has impacted numerous industries by drying materials other than seed cotton due to its versatility and performance.
Cotton enters the dryer through a splatter back transition that breaks the wads of cotton and spreads it across the width of the dryer. The dryer scoops the cotton from one side to the other. Wet, heavier cotton is scooped further across the dryer for longer exposure time. Extra slippage occurs at the bottom as cotton speeds back up when exiting the dryer. The dry cotton is carried by the air stream to the exit sooner, having less residence time and resulting in selective drying.
A cotton gin’s performance is heavily dependent on its air systems. Fans move air, and in turn, that air moves the cotton. When the pipes are full of cotton, there is less air available to move the cotton.

Air Control 8 monitors fans in a drying system and other key centrifugal fans. In a drying system, Air Control 8 can boost your hot air volume by 30% giving you the benefits of a higher air-to-cotton ratio. On a battery condenser and lint cleaners, Air Control 8 can help prevent chokes and backlash when ginning at top speed. Whenever there is a reduction or pause in your ginning rate, Air Control 8 reduces the airflow to a safe level to keep your fan motors from overloading.

All of this happens automatically and continuously, keeping your airflow optimized and helping you gin faster and more efficiently.
Humidification Products
“Cotton requires the control of moisture to maximize its value.”
Adding Moisture Increases Value and Efficiency

Controlling the moisture at different stages in the ginning process maximizes its value for the gin and the farmer.

Having an efficient and powerful moisture control system in each stage of the ginning process is vital in capitalizing on your gin’s potential. A powerful drying system prepares the cotton for cleaning. Adding moisture at the gin stands reduces static and maintains fiber qualities. Effective moisture restoration at the press adds value to the bale and reduces wear and tear on the press.

In the previous section, you read about several different options for high air volume drying. In the following pages, you will find several options to add moisture to your cotton at different stages in the ginning process. Give us a call and we will work with you to find the best solutions for your gin.
Generating Value

The success of your moisture applicator depends on your generator.

Behind every great moisture applicator is a great generator. Evaporating up to three gallons per minute, the King Mesa is prepared to generate enough moisture for even the driest of days. The King Mesa evaporates more moisture with less fuel than traditional moisture units allowing you to add more value to your bales; thus, giving your farmers what they deserve.

When combined with a Moisture Mirror X and a TexMax Bale Moisture Sensor, the King Mesa can be controlled automatically allowing your target bale moistures to be easily met and consistent all season long.

The King Mesa also has a heavy-duty purge system to reduce cleaning needs and an easy-to-access water tank that can be opened during operation.

Give your moisture applicator the generator it needs to successfully add value to your bales.

The King Mesa Humidaire is compatible with the Australian Gas Association (AGA) allowing our Australian customers to take full advantage of powerful moisture restoration.
Expanding our capacity to test, research and innovate new ideas, the “Rain Park Research and Development Center” provides our R&D team an environment they can thrive in. Just shortly after a year of constructing Rain Park, Desert Rain was designed, built and proved to be our most powerful Humidaire yet.

Desert Rain evaporates six gallons per minute, which is more moisture than any of our other Humidaires. While retaining the user-friendly and precise control system of the King Mesa, the Desert Rain exceeds our second strongest Humidaire, the Southwest, by 50%. In fact, it is so powerful that we have discontinued manufacturing the Southwest Humidaire.

Contact your Samuel Jackson representative today and learn more about the Desert Rain.
A Balance of Power and Simplicity

The Zephyr is a great option for those wanting to restore moisture with plans to upgrade later.

The Zephyr is a powerful and user-friendly option for the novice operator. The design allows the unit to be upgraded to a Sahara Storm as the gin’s needs for moisture output and controls grow.

Benefits:

- Oil Fired Commercial Grade Burner that burns either kerosene or diesel
- Burner can change from high fire to low fire with the flip of a switch
- Moist Air output is adjusted manually with the water valve located on backside of unit.
- Using selector switch interface, operators easily learn how to operate the Zephyr.
The Sahara Storm, our strongest oil-fired Humidaire to date, is the most popular humidaire in Africa. It can evaporate 75% more moisture using less fuel than traditional moist air units. It is powerful enough for larger gins but has a great turn down for almost all moisture restoration needs.

**Benefits:**
- Fuel meter and consumption statistics displayed on local color touchscreen
- Automatic heavy-duty purge system to reduce cleaning needs
- Target Bale Moisture Control with any TexMax and Moisture Mirror X.
- Remote control from any Moisture Mirror X.
- Can be equipped with Hot Air Mix Valve.
## OIL-FIRED HUMIDAIRE COMPARISON

Compare and Contrast to See What’s Right for You

From our simplest to our most powerful Humidaire, this chart can guide you to which model is best for your gin.

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<thead>
<tr>
<th>Model Number</th>
<th>Zephyr</th>
<th>Sahara Storm</th>
</tr>
</thead>
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<tr>
<td>Max. Evaporation</td>
<td>1.5 US gpm</td>
<td>3.5 US gpm</td>
</tr>
<tr>
<td>Heating Efficiency</td>
<td>1,230 Btu/lb of water evaporated</td>
<td>1,170 Btu/lb of water evaporated</td>
</tr>
<tr>
<td>Max. Air Volume</td>
<td>2,500 CFM</td>
<td>4,000 CFM</td>
</tr>
<tr>
<td>Water Pump Motor</td>
<td>5 HP</td>
<td>5 HP</td>
</tr>
<tr>
<td>Burner</td>
<td>Beckett 2-stage burner</td>
<td>Maxon</td>
</tr>
<tr>
<td>Moisture Tunnel Technology</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>1600 Controls</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Combustion Controls</td>
<td>Honeywell/Relay-Based</td>
<td>PLC</td>
</tr>
<tr>
<td>Air Temperature Control</td>
<td>2-Stage Burner High and Low</td>
<td>User-Set Point PID controlled by PLC</td>
</tr>
<tr>
<td>Water Temperature Control</td>
<td>Manual or Optional User-Set point</td>
<td>Moisture Direct</td>
</tr>
<tr>
<td>Operator Interface</td>
<td>Selector Switches</td>
<td>Touch Screen</td>
</tr>
<tr>
<td>Ethernet Communication</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Moisture Mirror Remote Control</td>
<td>NO</td>
<td>Mirror 2X and higher</td>
</tr>
<tr>
<td>Mirror Compatible for Target Bale Moisture</td>
<td>Yes, Analog</td>
<td>Yes, Ethernet</td>
</tr>
<tr>
<td>Alarm/Error Interface</td>
<td>None</td>
<td>Touch Screen</td>
</tr>
<tr>
<td>Fuel Watch Diagnostics</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Water Watch Diagnostics</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Purge System</td>
<td>Manual</td>
<td>Automatic</td>
</tr>
<tr>
<td>Upgradable</td>
<td>YES to a Sahara Storm</td>
<td>NO</td>
</tr>
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<td>Suggested Use</td>
<td>Conditioning Hoppers and Lint Slide Grids</td>
<td>Conditioning Hoppers, Moisture Condensers and Steamrollers</td>
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Cotton has a unique characteristic of becoming stronger when wet. Taking advantage of this characteristic, the Conditioning Hopper applies moisture to the seed cotton just before it enters the gin stand. The moisture coats the fibers, encouraging the fibers to break at the base of the seed rather than midway along the fiber. The results are reduced short fibers, increased staple length, and greater uniformity.

Moisture at the stands can also improve your gin stand capacity up to 20% in dry conditions, allowing you to gin faster and easier.

The Conditioning Hopper is built out of stainless steel, which protects it from rust and extends its life. Moist air enters through two stainless steel valves and distributes the moisture uniformly across the entire width of the Hopper.

For more control, the Conditioning Hopper can be combined with the Maestro system, which allows moist air to be easily adjusted at each stand for powerful and balanced operation.
Make Your Gin Stand Sing!

Both the farmer and ginner will enjoy the benefits of seed cotton conditioning.

Restoring moisture to seed cotton is great for the farmer because it reduces short fibers, preserves staple length, and provides higher uniformity. Moisture at the stands helps you gin faster and can even improve bale moisture. However, one stand with too much moisture is like one person singing off key; it makes the entire choir sound bad.

The Conditioning Maestro adds moisture at the gin stands “making your gin stands sing” by giving you the ability to fine tune the amount of moisture at each stand. If a stand gets too much or too little moisture, the Maestro lets you adjust the moisture level with ease and precision from the console.

To achieve the full benefits of the Maestro, use with a Moisture Mirror 3X, 4X.
The Lint Slide Grid is easy to install, operate and maintain.

A Lint Slide Grid moisturizes the batt after it leaves the battery condenser and enters the slide. While there are a number of factors to consider, well-executed grids can typically restore an average of 1.5% moisture per bale and reduce hydraulic pressures by 30%.

We offer a variety of Lint Slide Grid configurations that can be used to retrofit an existing lint slide, making it easy to install.
As Samuel Jackson Humidaires have evolved, the demand for a more forgiving and powerful Lint Slide Grid has grown.

The Super Grid incorporates our best Lint Slide Grid enhancements into one package. A 1-million BTU heater generates hot air for the jacket surrounding the walls of the lint slide. The hot air jacket keeps out the cold preventing condensation and batt sticking on lint slide walls, minimizing cleaning.

The strength of the Super Grid is largely found in the power of the Humidaire. For those wanting to capitalize on their moisture restoration system, having a strong moist air generator is a must.

For those looking to someday upgrade to a Steamroller 2, the 1-million BTU heater and high-output Humidaire can be used for it as well, expanding the life of your investment.

For even more value, combine the Super Grid with a Moisture Mirror X and a TexMax Bale Moisture Sensor to take advantage of on the automatic bale moisture control features.
Moisturized cotton compresses easier, extending the life of the press and reducing maintenance. The Steamroller 2 reduces condensation and hairing problems by ensuring that hot moist air never comes into contact with cold air. It features aggressive doffing and compression rollers that do a superb job of taming a dry batt.

The Steamroller 2 is typically able to restore up to 20 pounds of moisture per bale, which is more than what most gins need.

If the after-drying moisture is 5% and the target bale moisture is 7%, approximately 10 pounds of moisture will need to be restored into each bale. Multiply 10 pounds by the price of cotton, then multiply that number by the number of bales during the season. You will quickly realize that the Steamroller 2 can pay for itself in under one season.
### Costs to Buy and Operate

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<td>$</td>
<td>Moisture Condenser</td>
</tr>
<tr>
<td>$$</td>
<td>Lint Slide Grid</td>
</tr>
<tr>
<td>$$$</td>
<td>Super Grid</td>
</tr>
<tr>
<td>$$$$$</td>
<td>Steamroller 2</td>
</tr>
</tbody>
</table>
Perfect for providing just the right amount of heat to tame condensation issues on moist-air applications, the 1701 Auxiliary Heater can be the difference between achieving great results or battling chronic hairing problems.

Without a dependable source of hot, dry air, your moisture restoration system will either need to run at lower outputs or be at risk of condensation problems and chokes.

Samuel Jackson technicians can now log into your auxiliary heater via Remote Access and troubleshoot remotely. The new model is also equipped with an oversized fine mesh air screen to better capture fine lint and reduce cleaning needs.

For our Australian friends, we offer a 1-Million BTU Heater with similar features to the 1701.
Sometimes a Lot, Sometimes a Little

The little package that packs a punch.

Designed for our overseas customers, this heater will significantly reduce condensation on your moisture applicator. You will find that using this heater with your moisture applicator helps achieve your target bale moisture easier and results in less wear and tear on your press.

Comparable to the 1701 Gas-Fired Auxiliary Heater, the Vulcain HO-1 has an integrated fan, burner body, fuel train, and control panel mounted on a skid.

Combine the Vulcain HO-1 with a Steamroller 2 for a top-of-the-line moisture restoration system.
Defend Your Humidaire

Get the water you want in your Humidaire without sacrificing savings or convenience.

Clogged nozzles, dirty pipes, and weak impellers reduce the performance of your Humidaire significantly. If your Humidaire has a lot of scale built up inside, you could be reducing its performance by 30%. If you are taking time to clean it, chances are you are spending almost 20 hours during ginning season maintaining your unit. When it is time to recondition your Humidaire, you may be spending from $15,000 to $25,000. You could avoid spending this money with the Kinetico Water Softener.

Kinetico is a top-of-the-line brand and your first line of defense for your Humidaire. Water softeners remove hard calcium and magnesium elements from the water preventing scale build up and increasing the life span of your unit.

Kinetico Water Softener Benefits:
♦ Non-electric meaning operation is simple and reliable, and there are no electrical parts that can fail.
♦ Works on demand, which allows systems to regenerate based on actual usage. This helps to reduce the water and salt use while always having clean, soft water when you need it.
♦ Twin tank system keeps one tank always in service, even during regeneration, for an unlimited supply of soft water.
♦ SmartDisk™, a feature that lets you set your specific water conditions to accommodate your gin.
Measurement & Control Products
“High-speed control demands high-speed measurement.”
It’s Not Just ROI, It’s the Reason Why

It is not what you own, but what you control that affects your bottom line. The labels that you see first do not indicate how well a gin can perform. It is what controls that equipment that determines your success.

If you control the air, you will have higher production rates. If you control the sparks, you will see fewer fires. If you control the heaters, you will save big on fuel. If you control the Humidaires, you will see your farmers come back year after year. No matter what the circumstance is, controlling your gin will make a difference.

No other equipment in your gin preserves your capital like Samuel Jackson products. Give your board and farmers peace of mind by letting them know that behind all that equipment are controls that add to the bottom line year after year.
The Moisture Mirror technology has been put to the test since 2001. With years of feedback and updates, the Moisture Mirror X has set a standard. A tried and true product, the Moisture Mirror X brings peace of mind and confidence to ginners all over the world.

The Moisture Mirror X not only displays vital moisture information in one place, but it gives you the ability to manage moisture throughout the entire gin. The Moisture Mirror X makes it possible to handle the most challenging cotton effortlessly.

The Moisture Mirror X can see changes in incoming moisture instantly and automatically changes the heater temperatures saving on fuel consumption. It can also detect when the bale moisture is getting too high or too low and change the Humidaire settings to meet your target bale moisture.

Packed with many more features, the Moisture Mirror X brings a lot to the table for users who want the security of technology that is tried and true.
A Moisture Mirror for Every Gin

Build and configure the ideal Moisture Mirror X for your gin.

The Moisture Mirror X has three different models, the Moisture Mirror 2X, 3X and 4X. Each model builds on the other and offers more than the previous model.

The Moisture Mirror X models range from budget friendly to fully loaded giving you the ability to determine which has the best ROI for your gin. From automatically controlling heater temperatures to adjusting bale moisture, the Moisture Mirror X gives users the information they need to successfully run their gin.

Customize your moisture control system by choosing the options best suited for your gin. When it is time to grow, know that the Moisture Mirror X will grow with you. We make it easy to add additional sensors and options, as well as provide easy model upgrade options that preserve your original investment.
With more data becoming available it is critical that managing data is easier and more user-friendly. GinData does just this, giving you the tools to find correlations and make better decisions.

GinData combines the Moisture Mirror X data with other data such as USDA bale records, eCotton reports, and PCCA information. GinData even has the flexibility to incorporate your farmers’ harvester data. With easy-to-import technology, GinData can extract and analyze the data for you. It can also collect all of your information in one place, then select the variables you want to compare for a clearer view of the relationships.

With GinData you can do all of the following. Discover which farmers bring you the best cotton and offer them a ginning discount. Find out if the speed the stripper/picker ran during harvest correlates to the trash count and affects bark calls. Determine how many bales had an incoming moisture between 12-15% and what the color grade was. Compare the moisture output on your Conditioning Hopper Humidaire to the staple length. For those with more than one gin, you easily compare all your gins side by side.

With GinData, it is easy to focus in on the information that is important to you.
Remote Access Service allows our technicians to remotely access your ethernet-enabled equipment and troubleshoot problems in the shortest period of time. You will get back to ginning faster and save money on a service call.

With the Remote Access Service, you are also able to take advantage of the SJI Connect iPhone® app. With SJI Connect, over 70 gin variables are on your iPhone such as incoming moisture, current BPH, heater temperatures, and bale moisture.

From the other side of the gin to the other side of the world, your iPhone® can keep you connected to your gin.
Measure Twice, Dry Once

Make the most of your drying system by measuring moisture twice.

Those familiar with our TexMax Bale Moisture Sensor may be surprised to learn that we use the same technology to measure module moisture.

Better late than never, the Universal Resistance Sensor measures the moisture after the blended cotton has passed through the module feeder. The Universal Resistance Sensor can be enhanced if used with the TexMax 2 module moisture sensor for an earlier warning.

The TexMax 2 measures the moisture of the module before it enters the feeder, giving the drying system 30 to 120 seconds of advance notice when wet cotton is about to enter. This means the heaters will get a head start in ramping up the temperature and ensures that wet spots are dried down to your target after-drying moisture.

The TexMax 2 should always be used with a Universal Resistance Sensor. After a few shifts, you will quickly realize that the strengths and weaknesses of each sensor balance each other out, making them the perfect combination.

Give your drying system the advance notice it needs to dry and clean your cotton better.
Confident in Every Bale’s Moisture

Your handheld moisture sensor is great at some things, but it is not great at controlling your Humidaire.

In just seconds, the bale is scanned thousands of times as it moves down the conveyor. An average of those scans is calculated to give you the average bale moisture for that bale. Highly repeatable, the TexMax is known for being reliable and consistent.

Combined with the Moisture Mirror X, the TexMax works with your Samuel Jackson Humidaire to automatically control your bale moisture. You will find the TexMax adds value to your cotton all season long and pays for itself in no time.

NOTE: A TexMax cannot protect you against problems from bales that have been subjected to water spray systems. Because water spray systems apply moisture unevenly, extreme wet spots can and do exist within a bale that has an average moisture of less than 7.5%. Problems from these wet spots can arise before the moisture can equilibrate throughout the bale. Samuel Jackson reserves the right to refuse a sale of a TexMax to any gin using a water spray device. We want to make sure your automatic control experience is a good one.

Do NOT use with water spray devices!
Control Your Moisture

Knowing and controlling the moisture throughout the gin gives you the ability to perform at your best.

Measuring moisture at different points in the gin gives you an inside look at how well your drying system and moisture applicators are performing and gives you more knowledge on how to run your gin better. Each sensor is specifically placed so your gin is always one step ahead.

**Gin Stand Moisture Sensor (Patent Pending):**

Ginners will tell you that the saws run smoother, and the gin stands run faster when the moisture at the gin stands is at the sweet spot, which is why the Gin Stand Moisture Sensor is purposely placed at the sweet spot. This sensor combined with the Maestro system can help restore moisture in the Conditioning Hoppers.

**Seed Moisture Sensor:**

The Seed Moisture Sensor gives you the moisture content of a seed so you can protect its value. Knowing the seed is wet allows the ginner to move the seed to the seed barn or straight to the trucks to get it to the oil mill faster.

**Universal Resistance Sensor 2:**

Another valuable sensor is the Universal Resistance Sensor 2 (URS2). The URS2 can measure the incoming, after-drying, gin stand, and seed moisture in any Samuel Jackson control system. A switch on the front panel helps the operator perform a quick check to verify the source of any observed measurement problem, which helps make sure that you are not running blind or misinformed. The URS2 delivers fast and accurate moisture measurement, which is critical to optimizing cotton gin operation.
Uster Technologies and Samuel Jackson worked together to give you the ability to control your heaters based on trash count.

Wet cotton tends to hold onto the trash, intermingling the trash further with the lint, making it more difficult to remove. Because of this, drying the cotton before cleaning it allows the cotton to release the trash easier.

The Rapid Trash Monitor automatically controls your Samuel Jackson heaters resulting in better grades and higher turnouts. Heaters quickly and automatically respond to changes in leaf trash to match the target you set. With real-time data, the Rapid Trash Monitor optimizes fuel usage and drying.

If you combine the Rapid Trash Monitor with GinData, you can compare the USDA grades with the Rapid Trash Monitor data to find the correlation.
Although a simple idea, it is important to understand that air is what moves your cotton. By weight, a gin moves more air than cotton, making air the strongest component in the gin.

Yet, air is one of the most difficult things to control because you can not see it. Air Tools act like a traffic map for your gin, showing you which intersections are congested. Looking at the map, you are able to control the congestion, thus allowing you to focus your attention on other things.

Air Tools is designed to show you key points in your gin and if there is too little or too much air at that location. It even goes one step further with an alarm output for each point, allowing you to design a control action so Air Tools can respond to a given situation automatically.
The auto industry has created technology that now automatically brakes your car when it detects pedestrians or other vehicles coming too close, preventing accidents and saving lives.

Now the ginning industry has something similar. Choke Finder detects and prevents chokes by measuring air in key locations and stopping your feeder automatically, saving you downtime and hassle.

Choke Finder uses the same components as Air Tools; however, it offers a user-friendly interface that requires no knowledge of air measurement, allowing even the newest ginners to understand what is happening.

Choke Finder allows ginners to confidently run faster because they know they will be alerted of potential chokes sooner.
Although lost opportunity cost is one of the hardest things to measure, it is one of the most important things to calculate.

As a gin manager, you have finite resources to process the cotton quickly and effectively. Every bale per hour adds up and each bale per hour lost is more time spent ginning at the end of the season. Keeping every gin stand at full capacity throughout the shift increases production rates and profits.

Flow Tools monitors the same type of variables ginners use and then uses those variables to adjust the incoming flow of cotton. It can make fast adjustments in response to changes, resulting in more consistent production and freeing your ginner up to tend to other things that keep your gin running smoothly.

Here are a couple of real-life scenarios that we have collected from our customers about the effect that keeping your gin stands full can make.

**Scenario 1:**
♦ 40,000 bale season
♦ 32 bph average without flow control
♦ 34 bph with flow control

Production savings of more than $45,000.

**Scenario 2:**
♦ 100,000 bale season
♦ 43.5 bph average without flow control
♦ 46 bales per hour average with flow control

Production savings of more than $78,000.
A fire costs more than just a bale of cotton. With downtime, equipment damage, and personnel safety, a fire is just not worth the risk.

When we talk to ginners, most say they experience two to six fires a year and spend anywhere from four hours to one and a half days cleaning up and repairing machinery. Sometimes small, sometimes big, each fire adds up on the cost of downtime.

After determining the downtime cost per hour for your gin, you will quickly realize that Argus Spark Detection pays for itself.

Argus is so popular that we encourage you to call your ginning friends who have Argus and see what they have to say about it. While you are at it, talk about the cost of downtime and find out how others calculate it. We are always surprised at how high some of the numbers are.

Argus Spark Detection does not just detect sparks before they become fires; Argus Spark Detection protects your cotton, reduces downtime, and offers peace of mind for both you and your farmers.

See Argus in action using the camera on your smartphone to go directly to the Argus page on our website.
Insurance for your gin comes in a variety of ways.

With almost 300 gins that use Argus, it has become well-known and well-loved in the ginning community. An Argus Spark Detection System provides ginners with the security of knowing their ginning process is protected.

These protection benefits flow both upstream and downstream. The cotton farmer benefits from more timely ginning and the economic benefits of increased ginning efficiency in the form of increased rebates and dividends. The cotton warehouse benefits from receiving cotton bales that are far less likely to contain hot spots or embers. It is a win-win for both.

Argus detectors may be used with a classic Argus control panel (ideal for small gins taking their first steps with spark detection) or with the new GinSpire control system. GinSpire offers users the advantages of more comprehensive spark alarm annunciation with email and text alert options, historical records of alarms, and the ability to mix a variety of different spark and fire detectors within the same system.
We want to thank Dr. Eric Hequet and Dr. Nouredine Abidi with the FBRI at Texas Tech for the gift of their collaboration and friendship with our team through the past two decades. We also want to congratulate them on the recent addition of a micro-gin laboratory to their facility and their generosity in sharing it with Samuel Jackson engineers. These gentlemen and world-renowned researchers have done so much to assist us in better understanding the nature of cotton fiber as it is impacted in the processes which we influence and control. This has allowed Samuel Jackson to focus on preservation of fiber properties along with improving ginning capacities and turnout, all of which are important to the economic health of the modern cotton gin.

Sincerely,

The Staff of Samuel Jackson, Incorporated