

FIRE TOOLS - ARGUS SPARK DETECTION

Your next fire will be started by the spark Fire Tools could have caught.

The Argus Fire Prevention System consists of a Control Panel and Spark Detectors. Each Control Panel can support up to 10 zones when equipped with an equal number of zone cards. A zone is considered any location in the gin that sensors are monitoring and would typically consist of two to four sensors. Zone examples might be above the module feeder pick-up point, before the pre-cleaning system, behind individual gin stands, in the lint flue riser or any other spot that fires are prone to break out.



Fires cost gins a lot more than a few pounds of charred cotton.



A 23401 Argus Z-1 Control Panel is economical and easily expands to monitor up to 10 Zones.



A single 23400 Argus Infrared Spark Detector.

Spark Detectors mount flush to the side of a pipe or duct and monitor through a small sealed cutout. They use infrared technology to pinpoint single sparks at speeds up to 200 feet per second. By comparison, cotton typically flows at 75 feet per second in gin pipes. Upon detection, a control action can be used to contain further spread of the spark in 1/20th of a second. The infrared field is produced at a ninety degree angle from the detectors giving it a very wide viewing area. Additional sensors can be added for better coverage and protection.

Field Notes

Inexpensive protection

Easy to install

Extensively field tested in 2009

Users report dramatic reduction in problems caused by fires

See demonstration videos and installation videos on YouTube by searching for Argus and SamJacksonCinema

The cost of the Argus gear is so small compared to what they save in downtime and hurt machinery. I just don't think I can gin without them.

**Dennis Flowers
Sudan Farmers Coop Association**

Protecting Your Gin With Argus Spark Detectors is as Easy as 1, 2, 3!

Step 1 - Select the number of zones you want to monitor.

A zone is any point in the gin that you want to monitor for sparks or fires. Examples include: after the cotton pick-up point, behind gin stands and lint cleaners, after the overflow, before and after pre-cleaning equipment and the lint flue riser. A control panel is chosen for the desired number of zones with panels available from one zone (Z-1 Panel) to ten zones (Z-10 Panel). Any panel can be field upgraded to monitor additional zones.

Step 2 - Select the number of detectors for each zone.

Each zone can accept spark inputs from up to ten detectors. Most zones will require from two to four detectors for adequate coverage.

Step 3 - Select the system accessories.

Each Spark Detection System can be equipped with a Horn/Strobe Combo to alert the operator when an alarm has been tripped.

Example:

Let's say you wanted to equip your gin with a Spark Detection System with monitoring at:

Step 1: the initial cotton pick-up = 1 zone
the overflow return pipe = 1 zone
the lint flue riser = 1 zone
for a total of 3 zones, requiring a Z-3 Control Panel
For each zone you need an adequate number of detectors:*

Step 2: 3 - Detectors at the cotton pick-up zone
3 - Detectors at the overflow zone
6 - Detectors at the lint flue zone
for a total of 12 detectors needed for your system.

Select your system accessories:

Step 3: Only one Horn Strobe Combo would be needed for the entire system.

* Recommended number of detectors varies by pipe size.

FIRE TOOLS - PIERCE SAWSAVERS

SawSavers put your mind at ease about gin stand rib fires.



An original Pierce SawSaver Controller.

In 1995, Pierce Electrical Construction developed an innovative device to address a problem that has plagued ginners for years...gin stand tags. Tags occur when lint sticks between two ribs in a gin stand breast. The resulting friction between the tag and gin saw cause the temperature to rise and a fire will result if left unattended. Pierce's solution, the SawSaver uses temperature sensors to detect tags quickly. These downtime and money saving devices are now available from Samuel Jackson.



Sensor selection and mounting location are specifically designed for your ginstand.

SawSavers use two infrared sensors to measure temperature across the gin stand. Sensors are precisely positioned to measure across the saw teeth at the ginning point. A controller on each stand displays the temperature and allows the ginner to set an alarm set point. When a tag occurs, the temperature rises quickly and trips this set point, which kicks out the respective gin breast. The ginner can quickly locate and remove the tag and continue ginning safely and fire free.

Get the most from your SawSavers with ROC Technology!

In addition to offering the original Pierce SawSaver controls and sensors, Samuel Jackson has developed an automatic SawSaver control package with ROC Technology. ROC is an acronym for Reduced Operator Changes. The Samuel Jackson controls operate automatically instead of requiring ginner adjustment when there are fluctuations in ambient and system temperatures.

Tag detection is visualized by indicator bars on both sides of the interface. When a bar rises quickly, a tag has formed between two ribs. The dotted line on the indicator bar is user definable and sets the responsiveness of the ROC Technology. When either bar crosses this line, the alarm is triggered, the gin stand kicks out and the interface turns red. An arrow also indicates which side of the stand the tag is located. The ginner can then safely remove the tag and press any button on the interface to clear the alarm and resume ginning.



The SawSaver with ROC Technology interface.



The SawSaver interface with the left side in an alarmed state.

Upgrade Note: SawSavers with ROC Technology use a Samuel Jackson control package coupled with Pierce Electrical sensors. Original Pierce Electrical SawSavers can be upgraded with the Samuel Jackson controls package while retaining existing sensors. Contact your Samuel Jackson Representative for details.

New! Ask About SawSavers for Sentinel Lint Cleaners.