2022 COTTON GIN EXPERT PANEL

The Texas Agricultural Cooperative Council hosted a think-tank of cotton industry experts at the Cooperative Managers Conference on July 14 in Ruidoso, New Mexico. This panel revolved around automation and labor issues in the cotton industry. The four members of the panel were:

- **Dr. Ed Barnes**, Cotton, Inc.-Cary, North Carolina
- **Kelley Green**, Texas Cotton Ginners Association-Round Rock, Texas
- **Dr. Greg Holt**, USDA Gin Lab-Lubbock, Texas
- **Dr. Derek Whitelock**, USDA Gin Lab-Las Cruces, New Mexico

The following list includes some of the takeaways presented about the future in the ginning industry:

- Gin stands will be developed that will think for themselves, helping gin operators make decisions with machine vision. This will allow operators to better identify where the labor-intensive jobs are in their gins.
- Spark detection systems will become commonplace, another example of risk mitigation. This implementation will protect producer cotton and gin equipment.
- Automatic temperature logging instrumentation will take over to monitor cotton throughout the ginning process.
- There will be a more extensive module tracking system to eliminate the chaos around the gin yard, with RFID tags eventually being able to identify the cotton varieties that compose the module to allow for a more streamlined ginning process and increase traceability.
- Driverless module trucks are being developed and could be implemented in the next ten years as costs in the manufacturing process decrease.
- Gins will move towards more front-end automation and efficiency (i.e. the unwrapping of modules) using less labor.
- The placement of more cameras throughout the gin, will become more common, allowing operators to efficiently monitor the gin.
- More contamination–reducing instruments will be installed to increase efficiency and safety.
- Automated forklifts will increase efficiency and reduce labor costs in warehouses and gins.
- Gins must be able to access and incorporate open–sourced (free) storing and handling of data. Usage of this data will allow for more efficient, data-driven decisions.
- Technology being developed by the USDA will allow for pre-grading of cotton structure and quality at the gin to make warehouses and movement of cotton more efficient.
- Legislation will be developed surrounding the automation of equipment in the cotton industry, similarly to laws pertaining to self-driving cars today.
- Risk mitigation will become even more paramount, with gins garnering more control over employee safety.