

ROLLER GIN STAND UPGRADE DOUBLES THROUGHPUT

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Abstract

Advanced Sensing and Controls is releasing to commercial applications a new roller gin stand accelerator. The upgrade provides increase in through put, increase roller life while maintaining fiber properties. The upgrade fits on the last generation Lummus(tm) and Continental(tm) gin stands and is designed to operate with Pima and Acala types of seed cotton.

The gin stand accelerator allows the operator to speed up the rotation of the roller (pecking roll), the rotating knife and increase the feeding rate as much as twice the normal speed. This is done without affecting the quality of the ginning process and without increasing the demand on the lint re-claimer. The upgrade contains modern sensing and controls devices allowing to separately control the speed of the roller, knife and feed.

This upgrade enables to more than double the throughput of the stand while relieving stress and reducing the operating temperature of the roller and the rotating knife. Fiber qualities, such as staple and short fiber contents are maintained for the benefit of the grower. This offering is a result of more than two years of development and test, and most recent commercial installations and operations in two California gins.



Figure 1; Back view of roller gin showing roller and cowling.