



T e C a e e

Whenever a manufacturer in the agriculture industry runs into a backlog of specific parts for a lawn maintenance device, they often need to store those parts before moving them to the next step. Unfortunately, the parts will sometimes rust and discolor while waiting for either further processing or shipment. Environments such as high humidity and acid fumes that are present in many metal finishing applications can quickly cause flash rust or oxidation on the surface of the parts. This creates issues for the manufacturer, who will require further processing of the parts such as coating processes or simply providing parts in sellable condition.

T e A ac

This particular manufacturer previously de-rusted the affected parts on its coating line, using its hydrochloric acid tank and shutting down all processing while the rusted parts went through the finishing process. This process did effectively de-rust the parts but at the cost of decreases in line throughput, along with contributing to further rusting of parts and plant equipment because of the fuming acid being used.

The Hubbard-Hall team introduced the idea of removing the flash rust using a non-acid-based de-ruster and sent several of the rusted parts to its new pilot line in South Carolina for testing. It was determined



