GURTLER'S NEWEST INNOVATION: WORK*SMART LOW ALKALINE WASH TECHNOLOGY

Gurtler introduced at Clean 2019 their newest addition to the **Work*Clean Team**: Work*Smart, a non-phosphate soil/water conditioner developed to enhance the performance of their eco-friendly detergent, Work*Clean. This new, proven, low alkaline technology delivers superior results without the use of harsh caustic-based builders, even on the toughest of soils.

Work*Smart is a unique, synergistic blend of non-phosphate additives that help emulsify and suspend soils and condition water hardness contaminants, making the overall soil removal process easier and more effective.

IMPROVED SOIL SUSPENSION

Industrial soils, such as graphite, iron oxide, diatomaceous earth, and other particulates cannot be dissolved and washed away, they must be removed from the fabric, suspended and then flushed away. Gurtler engineered Work*Smart to prevent the redeposition of these soils onto adjacent fabrics, making the washing process more effective, resulting in brighter colors and whiter whites.

In addition, water hardness ions and other soluble soils can interfere with detergents or builders, reacting to create insoluble salts. Work*Smart contains additives that 'sequester' these materials and keep them from interfering, improving their cleaning performance. Also, Work*Smart will prevent potential insoluble salts from redepositing on the fabric which can create a micro-encrustation that could cause fabric harshness, skin irritation and even fiber degradation.

On following page, the photo on left shows traditional high alkaline technology and how it reacts with (from left to right) graphite, iron oxide and water hardness. See how the graphite and iron oxide has settled to the bottom of the graduated cylinders and imagine that material settling on otherwise clean textiles.

Traditional Alkali and Builder Technology

Work*Smart Advanced Technology

The photo on the right shows Gurtler's Work*Smart Advanced, Low Alkaline Technology. Note how Work*Smart suspends the graphite and iron oxide, even after 24 hours. And note how the water in the beaker is crystal clear, as all the hardness is chemically isolated and kept in solution, versus the cloudy beaker in the photo above/left.

REDUCED USE OF HARSH CAUSTICS

Gurtler's unique application of the Work*-Clean-Work*Smart technology allows for a significant reduction or elimination of the use of harsh alkalis on most industrial uniform classifications. Low alkalinity promotes textile longevity by reducing the potential for polyester chemical degradation or alkaline hydrolysis. Plus reducing the alkali use reduces or eliminates the need for pH adjustments of laundry effluent.

CASE STUDY A: An industrial, mixed plant processing uniforms, food service garments and bulk items wished to lower the use of caustic/alkaline builder and reduce the acid treatment in the effluent stream. Gurtler successfully introduced the Work*Clean technology, reducing the use of alkali by two-thirds, 67%. The acid injection to the effluent stream was reduced to zero. Plus, the quality/cleanliness of the bulk items, including bar towels and industrial towels significantly increased.

CASE STUDY B: A large hospitality and healthcare laundry wished to lower their pH profile to meet compliance for their effluent quality. A combination of Work*Clean and Work*Smart resulted in bar mops being processed at pH 10, achieving their effluent discharge goal.

Work*Smart low alkaline technology delivers superior results without harsh caustic additives

- Proven performance—even on the toughest oily soils.
- Low alkalinity promotes textile longevity.
- Prevents water hardness build-up, enhancing fabric softness.
- Controls soil redeposition for brighter whites and colors.
- Low-alkaline washing eliminates effluent pH compliance issues. TS