

# SUPPLIERS' TIPS

## What's been the most significant equipment development in sanitary bulk material handling and processing?

Plastics formulation and development has produced the most significant gains in the industry. Plastics have eliminated the need for lubrication, increasing equipment sanitation. In addition, because the tensile strength has increased, plastics can be used in towing-chain applications where only metals were previously available.

Plastics have also been effective in other components of bulk material handling to ease and simplify buckets, sprockets, and belting wash-downs and make them more cost-effective. In addition, with the right formulation, some plastics offer excellent chemical resistance.

*Mark Gallagher, vice president  
sales and engineering,  
Gough Econ, 800-264-6864*

Horizontal Motion Conveyors were virtually unknown ten years ago, but today they've been applied in a wide range of sanitary applications.

*Jay Sullivan, president,  
Triple/S Dynamics, 214-828-8600*

The paddle mixer and dense-phase pulse conveyor.

*Jerome Auvinet, technical sales  
manager, Guerin Systems-Sidel,  
678-221-3189*

Dust-free sanitary discharging from bulk bags is the single most important bulk handling development in recent times, particularly in light of unprecedented bulk bag usage worldwide.

Since conveying, elevating, feeding, and weigh batching the discharged material is often an additional requirement of bulk bag sanitary material handling systems, 3A-compliant flexible screw conveyor designs are a significant ancillary development.

*David R. Gill, vice president,  
Flexicon, 908-859-4700*

The most significant development in sanitary screening is equipment designed specifically for rapid disassembly and thorough washdown, as well as for clean-in-place and steam-in-place sanitizing.

When considering drying, cooling, and moisturizing, the most dramatic advance is a circular fluid-bed dryer design that's significantly smaller and easier to disassemble than traditional rectangular units. This equipment has only a fraction of the interior weld seams, significantly reducing material hangup and allowing thorough washdown in 50 to 90 percent less time.

*Henry Alamzad, vice president  
sales and marketing,  
Kason, 973-467-8140*

## What current equipment developments are improving sanitary bulk material handling and processing?

The continuous improvements in clean-in-place systems and critical conveying and elevating equipment design enhancements, such as wash-through chains, are significant improvements. Such systems offer food plants more cleanable machinery while reducing process equipment expenses.

*Mark Gallagher, vice president sales and engineering, Gough Econ, 800-264-6864*

Historically, the sanitary bulk handling and processing industry relied heavily on gain-in-weight batching methods, but it appears to be moving toward or is becoming more receptive to continuous processes for economic reasons and, in some cases, enhanced performance.

For dust containment, loss-in-weight batching is beginning to be recognized as a better process than gain-in-weight batching. Because materials are “streamed” into the process equipment, the dust levels associated with a batch mass discharge are greatly reduced. By adapting to a loss-in-weight batch platform, production can be simplified and streamlined.

Also, the pharmaceutical industry is seeing more use of vacuum conveying from a bulk storage container or a mixer to a pill press.

*Tom Boilard, systems engineering director; John Winski, sales director; and Kathy Hunter, marketing director, K-Tron International, 800-203-5719*

New materials of construction, notably ultrahigh-molecular-weight polyethylene (UHMW), offer enhanced benefits to food processors in terms of improved sanitation maintenance,

reduced downtime for cleaning, and improved product quality.

*Jay Sullivan, president, Triple/S Dynamics, 214-828-8600*

New, automated systems are available to automatically insert poly bags and liners into cases to eliminate potential contamination caused by manual handling.

*Jon Donovan, marketing manager, Pearson Packaging Systems, 509-838-6226*

# On the web

## Keep up with the latest standards for sanitary bulk material handling

If your company manufactures food or dairy products, pet foods, pharmaceuticals, cosmetics, or other products that require hygienic handling, you know how important it is to keep up with mandatory equipment and processing standards, as well as to be well-informed on issues relating to the sanitary handling of dry materials. One way to keep up with the very latest information is to use the Internet. If you haven't used the Net to learn more about your business, this may be a good time to start. Be aware that there's lots of garbage on the Net, but if you stick with reliable sources and the links they recommend, you'll probably find what you need. Below, we've listed several Web sites that can help you keep up to date.

***www.3-a.org*** This site explains what 3-A sanitary standards are and how they came to be. You can download the standards from the site.

***www.ehedg.org*** The European Hygienic Equipment Design Group is a consortium of equipment manufacturers, food industries, research institutes, and public health authorities that promotes hygienic food processing and packing.

***www.fda.gov*** The Food and Drug Administration's massive site contains news, information, safety alerts, and standards for consumers and the sanitary industries.

***www.foodprotection.org*** The International Association for Food Protection informs members and the public of the latest scientific, technical, and practical developments in food safety and sanitation. The association's scientific journals, *Dairy, Food and Environmental Sanitation* and *Journal of Food Protection* are available on the site.

***www.iafis.org*** Maintained by the International Association of Food Industry Suppliers, this site links to "the world's largest virtual community and trade show for the food industry."

***www.nsf.org*** NSF is an independent, not-for-profit organization that develops national standards relating to food, water, indoor air, and the environment; provides educational opportunities and provides third-party conformity assessment services.

***www-nt.who.int/idhl/en/ConsultIDHL.cfm*** This World Health Organization site allows you to search the archives of *The International Digest of Health Legislation*.

***http://vm.cfsan.fda.gov*** The FDA's Center for Food Safety and Applied Nutrition site details the organization's programs, which focus on food additives, HACCP, food safety, cosmetics, regulatory compliance, and other topics. **PBE**