

Second conveyer for fertiliser facility

Baileys Fertilisers' manufacturing facility in Kwinana, Western Australia, recently ordered a second conveying system from Innovative Conveying Systems (ICS) International.

Baileys Fertilisers' general manager David Bonfield said the existing ICS conveyer, installed in August last year, had improved production output significantly by eliminating product spillage and had generally improved the operation of the plant.

ICS operates a policy of using data generated from actual field systems to aid in continually improving the design and manufacture of future products. The second conveyer system will therefore benefit from the ongoing improvements.

The second ICS will be installed to convey mulch, potting mix and soil conditioner at a rate of 10t/h from a feeder located outside of the manufacturing facility for a distance of 30m to a bagging machine inside the manufacturing facility.

The ICS will follow a straight conveying path with an incline of 45° before entering the manufacturing facility. Inside the plant the conveyer will be suspended from the roof. The material will then discharge into a hopper for bagging.

Innovative Conveying Systems International is providing a full turnkey solution, including a 12m³ hopper with feeder and full control integration with the bagging machine.

Additional covers will be incorporated to cover the section of the ICS that is located outside the building. The ICS will run below an existing conveyer which conveys material to another hopper. The existing generic conveyer is prone to spillage, which would fall



This hopper and conveyer was recently installed as part of a system to convey mulch, potting mix and soil conditioner to a bagging machine inside the plant.

directly onto the conveying path of the ICS affecting its safe and correct operation, creating the need for a cover. In normal operating conditions the ICS would not require a cover to be installed.

Apart from the chemical industry, ICS applications, for rates of 2000t/h and above, are also geared to mining, agriculture, construction, ports, power generation and waste-management industries. ■

Solving a problem of damp bread crumbs

Food product manufacturer, New Food Coatings, was facing an unusual problem, how to effectively and efficiently dry bread crumbs in order to prevent contamination, reduce the likelihood of mould setting in and ultimately prolong product life.

"This was never going to be an off-the-shelf fix," said Tony Webber, the managing director of iBulk, a process equipment and bulk handling solutions provider which was contracted by New Food Coatings to help solve their drying problem.

He said, to identify, develop and design the process that would provide the desired results, iBulk's R&D team worked closely with the client and its parent company which also provided valuable information to help ensure the project's success.

Webber said the solution involved the installation of a fluidised bed dryer and a Sweco separator. In the dryer air or gas is passed through a bed of particulate matter via a perforated plate. This process lifts and mixes the solids as required.

"We also added mechanical vibration to the system,"

explained Webber. "By continually agitating the material, the solids attain fluid like properties. This maximises the exposure of the particle surface areas to the process air, resulting in higher heat transfer rates and increasing operating efficiencies," he said. ■



New Food Coatings' factory in Wetherill Park, NSW, recently installed this fluidised bed dryer, supplied by iBulk.