New drum dumping system on offer

The new TIP-TITE™ drum dumping system from Flexicon automatically conditions fibreboard drums containing bulk solid material, dumps the material into downstream equipment, and accumulates empty drums on a roller conveyor for removal. According to Flexicon, the system is intended for low- to high-volume handling of drums containing material that has solidified or agglomerated during storage or shipment, while eliminating the dust, spillage, labour cost and potential injury associated with manual drum handling.

The powered roller conveyor moves each full drum into a conditioning station where hydraulic rams press and release it on opposite sides. A turntable then rotates the drum in user-selected increments for subsequent press-and-release cycles sufficient to loosen the material. The conveyor automatically sends the conditioned drum to a TIP-TITE® dumping station that hydraulically raises and seats the drum rim against a discharge hood equipped with a slide gate.

The second hydraulic cylinder lifts and tips the drum to an angle of 45, 60 or 90 degrees with a motion-dampening feature. Meanwhile, at full rotation, the slide gate opens to allow controlled discharge of material into downstream process equipment. Once the empty drum is returned to its upright position, the rollers are reversed, sending the drum to a pneumatically-actuated ram that pushes it onto a separate roller conveyor where empty drums are accumulated for removal.

Photoelectric sensors located along the roller conveyor relay the position of empty and full drums to the system controller, which powers the rollers to advance and stop drums as desired during each phase of the process. The system is designed to accommodate fibreboard drums of all popular sizes weighing up to 340 kg, and is also offered in high-lift configurations for dumping into elevated receiving equipment. The company manufacture dust-free and open-chute tippers offered as stand-alone units and as automated systems integrated with upstream and downstream equipment.

VpCI®-386 corrosion protection for manufacturers

Though it can be challenging to balance corrosion protection and worker safety in manufacturing, since many powerful corrosion inhibitors are hazardous chemicals.

Cortec® Corporation has repeatedly demonstrated the potential for replacing many traditional hazardous materials with more environmentally responsible, user-friendly alternatives such as Cortec's VpCI®-386 water-based coating.

Just last year, Cortec® was able to help a refrigerator coil manufacturer replace a solvent-based coating with a water-based coating for increased worker safety and better corrosion protection.

The manufacturer was using the solvent-based paint to coat new refrigerator coils. This exposed workers to a strong solvent smell and associated hazards.

To make matters worse, the paint did not provide the long-term level of corrosion protection desired. Cortec® was able to introduce VpCI®-386 to the manufacturer as a water-based corrosion inhibiting alternative, helping them reduce their solvent VOCs and providing the desired corrosion protection.

VpCI®-386 is a fast-drying water-based acrylic one-coat system topcoat that can be applied direct to metal for protection in harsh, outdoor, unsheltered applications.

The complex mixture of corrosion inhibitors offers protection that competes with most paints and zinc-rich primers. VpCI®-386 has excellent UV resistance.

It is also weldable and can be used to keep surfaces corrosion-free prior to welding. VpCI®-386 comes as a clear coat for minimal change to the surface appearance, or it can be matched to most custom colors.

Cortec® Corporation is the global leader in innovative, environmentally responsible VpCI® and MCI® corrosion control technologies for Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries.