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EMS-TECH INC.®

mobile equipment and bulk
material handling systems

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An efficient Transfer Point starts with a Modular Enclosure but also has excellent belt support and sealing accessories (all pictures ©2023 Martin Engineering).

Modular transfer point for belt conveyors

faster installation and more options

A global expert in conveyor accessories has reimagined the bulk handling transfer chute to reduce downtime for installation and offer more options for future modifications. The Martin® Transfer Point Kit from Martin Engineering includes modular horizontal loading zone, settling zone, and stilling zone configurations, providing easier installation and a wider variety of chute options while facilitating future upgrades. The kit simplifies the installation process, reducing the amount of labor required for assembly and allowing the system to be pre-built prior to installation for reduced system downtime. The result is faster installation with less labor and shorter shutdowns, increasing the return on investment (ROI).

"This is a rugged one-kit solution designed to fit most standard conveyors and belt widths, regardless of what material is being transferred," said Dave Mueller, Conveyor Products Manager at Martin Engineering. "Our Center for Innovation (CFI) is constantly looking for ways to engineer equipment with safety and our customer's bottom line in mind. That's why the kit doesn't just streamline labour, time and production, but it's also a logistical solution by shipping it in one crate."

The Martin® Transfer Point Kit is a heavy-duty horizontal enclosure for the

loading zone. Each kit is either ordered as a loading zone, settling zone, or stilling zone. The width and length of the kit are determined by the receiving belt's width and speed and the dust characteristics of the material being transferred. Dustier applications may require a longer settling zone.

This innovation solves three common problems. The first is that transfer chutes are normally shipped in different packages that sometimes don't arrive at the same time. Upon delivery, inventory is stored until scheduled downtime, increasing the chance of loss or misplacement. Another problem is, for most new transfer chutes on the market, some components can be prepared and assembled beforehand, but generally, new chutes need to be completely fabricated during downtime. The inability to build the structure before a shutdown increases the project budget and contributes to lost production time. The third problem is, after construction, horizontal transfer point chutes are commonly a single system that requires significant engineering and construction to be modified. Changes to existing transfer points can be challenging, but to accommodate new belt support equipment or adapt to increases in production, the chute is often raised or lengthened.

To address these problems, the chute sections are 1) delivered in a single crate with every component for assembly included, 2) able to be assembled prior to the shutdown and installation, saving time and money, and 3) fully modular, making future changes easy without expensive construction projects.

The transfer point system accommodates belt widths of 18–72in. (450–1,800mm) and an internal chute width of 9–59in. (228–1,498 mm). Each modular section is either four feet (1.21 metres) or 6ft. (1.82m) long and constructed of mild steel, 304 stainless steel or 316 stainless steel, with a thickness of 0.25in. (6.35mm), 0.5in. (12.7mm), or 0.75in. (19.05mm) to accommodate a wide variety of materials and conditions.

The taller loading zone controls air turbulence and connects to both the drop chute and settling zone. When cargo hits a belt with great velocity, fines and lumps splash up the sides of the belt. Without a properly sealed enclosure, the material will spill underneath the conveyor, creating a hazard, restricting access and fouling other components. The settling zone follows the loading zone and helps mitigate dust emissions. Dust is collected, mechanically filtered or settled back into the cargo stream prior to leaving the stilling zone and

continuing as a conventional open air conveyor.

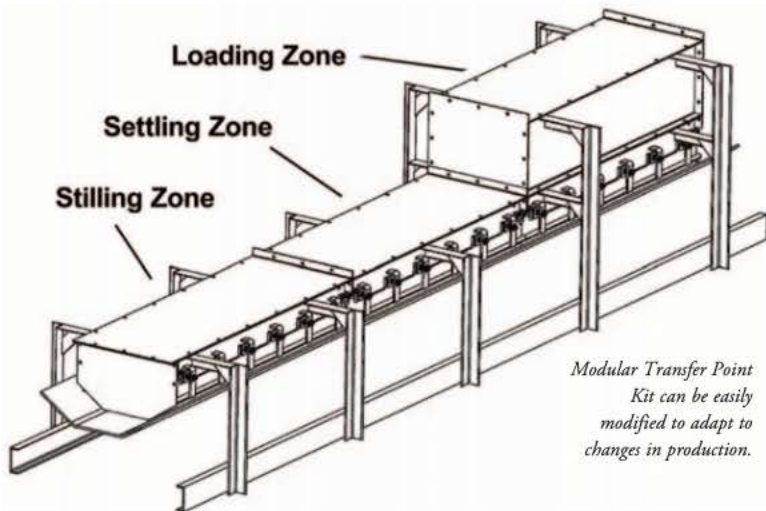
Listed under a single part number, the kit includes a chutewall weldment, wearliner assembly, wearliner plate, outer chute supports, top cover, tail panel/clamp/ rubber sheet, installation hardware and an owner's manual. The skirt seal is sold separately, since it is a single piece that runs the entire length of the chute and skirting is the most frequently replaced wear part in most transfer points.

The Martin® Transfer Point Kit installation is covered under the Absolutely No Excuses Guarantee as long as a Martin Engineering technician is involved in the installation process. Although assembly instructions are clear and easy to follow, another benefit of involving a factory-trained Martin expert is that customers who have ordered the kit have experienced a significant reduction in assembly and installation time. Moreover, once the system is started up and tested, there is a knowledgeable person on-hand to offer advice on adjustments to ensure optimum performance.

"After installation, Martin Territory Managers or partner distributors are available to offer support," Mueller added. "The feedback for the kit has been excellent. Customers get the heavy-duty Martin quality they've come to expect in a more convenient, efficient and sustainable package."

ABOUT MARTIN ENGINEERING

Martin Engineering has been a global innovator in the bulk material handling industry for more than 75 years, developing new solutions to common problems and participating in industry organizations to improve safety and productivity. The company's series of *Foundations* books is an internationally recognized resource for safety, maintenance and operations training — with more than 22,000 print copies in circulation around the world. The 500+ page reference books are available in several languages and have been downloaded thousands of times as free PDFs from the Martin website. Martin Engineering products, sales, service and training are available from 16 factory-owned facilities worldwide, with wholly-owned business units in Australia, Brazil, China, Colombia, France, Germany, India, Indonesia, Italy, Mexico, Peru, Spain, South Africa, Turkey, the USA and UK. The firm employs more than 1,000 people, approximately 400 of whom hold advanced degrees.



Modular Transfer Point Kit can be easily modified to adapt to changes in production.

Outer chute supports are provided in standard lengths and cut shorter or narrower on-site as needed.



The Transfer Point Kit can be assembled prior to installation or assembled during scheduled downtime.

