

Riazzino, 24th October 2024

Press Release PR-35

About our system safety

Safety in Avancon conveyors systems

It is of the utmost importance to guarantee the safety of all conveyor systems used for the transportation of goods of varying types. In many cases, it is necessary for employees to pass through these conveyor systems or work directly on the conveyor.

During the inspection of traditional systems, numerous issues are identified that may no longer meet the current safety standards. The issues with the drive elements (O-belts, V-belts, timing belts, or - in seldom cases chains etc.) at driven roller conveyors are readily apparent. These drives are visible from the outside and require the installation of a finger guard for each roller. It is not possible to implement a safe solution in this instance. In the majority of cases, these additional elements are fitted from above. However, in some special designs, the drive system is fitted below the powered rollers (as line shaft drive). The installation of these drive elements from below on the underside of the conveyor without separate protection carries an inherent risk of injury, particularly when someone needs to retrieve an item that has fallen beneath the conveyor belt.

In many cases bigger AC gear motors stick out or need additional coverage. The photocells are mounted on top of the frame profiles, which could potentially damage the goods being conveyed, especially in curves. The control boxes may be screwed onto or under the U or C profiles and protrude from the conveyors, which presents a safety hazard for operators who work in close proximity to the conveyors. The same problem arises with control boxes and pins for holding the guide profile that protrude. The frames are often not closed, but open in design, which allows for easy access to all components. When the frames are not closed. You can see all the elements, cables, control elements, connectors, etc. No one is allowed to walk bear these conveyors. Therefore, in most cases, the whole conveyor line and system must be secured by fences. Some of those expenses systems are produced still today!

You can forget all that with the modern Avancon ZPC conveyor concept.

The Avancon frame construction made of anodized aluminum is completely closed, which is great because it means it's completely sealed and therefore totally safe! The outside is very smooth and free of any protrusions. There are no pinpoints! - Not even a screw head! The best part is that people can safely walk alongside the conveyor! The fine aluminum frames are sleek, streamlined, and feel as smooth as silk!



Let's look at this case, if someone walks by the Avancon conveyor line and wants to pick up something that has fallen under the conveyors, they don't have to worry about getting hurt by the drives or drive systems, because there are none! Everything is hidden installed inside the Avancon ZPC conveyor frame! This is truly remarkable! All elements, drive systems, control elements, cables, and photosensors and even the flat DC gear motors are mounted inside the closed frames of each Avancon roller- or belt-conveyor.

The photo sensors are inserted in a transparent and protected housing inside the profile frame. These fit easily into the profiles from the outside and won't damage the goods even when transporting around curves. They can be adjusted easily from outside. Avancon ZPC (zone-powered concept) conveyors are generally built in zones, this means you get automatically pressure-less accumulation, allowing you to accumulate at any position! And there's more! This also saves the operator of an Avancon conveyor system 30% to 84% energy, which is a fantastic additional benefit for the user. And there's more! All patented drive elements are installed without any tools inside the closed profile frames, which is safe and maintenance friendly! And there's more! The entire Avancon ZPC conveyor system operates with low voltage of 30.5 V and 48V DC, which also is safe. All the zones communicate with each other. It's also important to remember that Avancon does not use any parts made of PVC. This is because PVC is toxic in the event of fire.

The best part? All the necessary cables are already installed inside the frames, out of sight. This not only eliminates the hassle of cable pulling on-site, but it also makes the central control cabinet obsolete! Every system integrator knows that this kind of work on the construction site can easily save up to 30% of the total investment cost of a conveyor system!



In summary, if you are looking for a safe conveyor system, the Avancon conveyor design offers the complete protection. Ask your system integrator or conveyor producer to use the Avancon system for your next Logistics Warehouse. – Why not?

About Avancon: Avancon is a renowned leader in providing innovative conveyor solutions that prioritize simplicity, efficiency, and reliability. With a comprehensive range of conveyor concepts for systems catering to various industries, Avancon aims to reshape the conveyor market and drive optimized productivity while reducing operational costs. Avancon products are available through conveyor producers or integrators.

For the editors:

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