



Conveyor System For Steel Tubes

Alfred Priess A/S of Denmark, which is the leading supplier of components for the electric companies, has started using a new conveyor system. This plant has streamlined the manufacturing process in the part of the production where masts for lamp post are manufactured. Additionally, the working environment has been much improved as all heavy liftings and other kinds of straining manual handling have been eliminated.

Much improved indoor climate

Before the new Q conveyor system was installed the transport of the heavy bundles of steel tubes from the outdoor raw materials storage to the machines was done by forklift trucks and portal cranes. The gates were often open and it was difficult to maintain an agreeable indoor temperature in the production hall.

The cold and draught issue is solved by the installation of the new handling system having its in-feed end in the open air.



The iron tubes of up to 12.5 m length are placed on the in-feed conveyor by fork lift truck and the tubes are transported automatically to the working machines.



The tubes are transported into the production area through a passage in the wall so that as little cold air as possible is let in.

The transport of the bundles of steel tubes of length up to 12.5 m to the in-feed end of the conveyor system is carried out by forklift truck. Here the driver will push one tube at a time onto a chain conveyor. The tubes are automatically transported ahead and transferred to a narrow transverse roller conveyor by means of a pneumatic pusher.

Via a passage in the wall the tubes are transported to a plasma cutter for cutting the service hatch hole for the electrical installations. Using a push button the operator will advance one tube at a time; the tube is raised and placed in the cutter. When the holes are cut, the operator will push the tube onto some runners which are an integral part of the conveyor system. The tube will roll towards a blade stop and is now ready for finishing.

In total there are 4 in-feed lines, two of them leading the steel tubes to a plasma cutter, the other two to a tube metal cutter and after cutting to a machining station for robotic beading and welding.



Reduced turn around time and improved ergonomics

“Both the management and the employees are very happy with the new conveyor system; the automation of the in-feed and machining process has reduced the production time and the straining manual pushing and pulling that were previously unavoidable are now eliminated,” Allan Steffensen, the plant manager, says.

And he continues: “As a curiosity I can tell you too that more than twenty years ago we purchased a similar conveyor system from Q-System. This system has been moved from one location to another more times and we still use it. The new conveyor system seems to be just as solid, so we consider this a long-term investment.”

The tubes are ready for pickup after being finished in the plasma cutter.