

Dear Reader,

What does it take to completely automate a heat treatment facility, a traditionally labour intensive process, so that just one person can run it? And to design a system that the customer describes as "beautiful"?

Read the short article below to find out exactly how SEW's MOVITRANS® contactless energy transfer system was used to achieve all that and more!

madhura

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Drive technology TODAY

Ipsen Upgrade Reduces Labor, Increases Safety - with MOVITRANS® Contactless Energy Transfer

Challenge

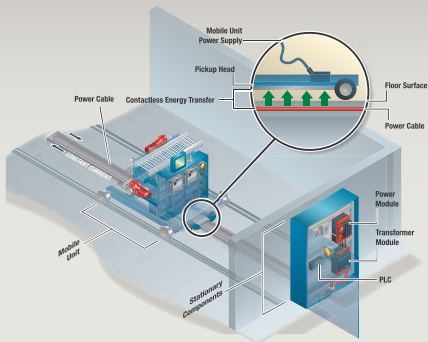
► Upgrading and Fully Automating Heat Treating

Ipsen International was challenged with upgrading the heat-treating facility for a company that is automating their entire facility to make their productivity and company more competitive. They wanted more fluidity in the factory. Tim Adams, Ipsen's Southeast Sales Representative, says, "We had to ensure that the

upgrade was in line with their philosophy of automating efficiency and productivity. Our objective was to bring heat treating up to this standard."

An added challenge is that the client would be changing the process, taking it from a nitrogen methanol to a "Supercarb" process because of increased supplier cost of the nitrogen methanol.

Contactless Energy Transfer





Solution

MOVITRANS® Contactless Energy Transfer

Ipsen worked with SEW-EURODRIVE to jointly design a fully-automated, lights-out heat-treat facility. "Key to the successful automation was taking the work from the staging area to the proper furnace and then back to the unloading area where it would be redistributed back to the shop for the next manufacturing procedure," says Tim. "The fully automated cart becomes the focus or centerpiece of that automation system. What the SEW system did was position the cart at the proper time at the proper location; it was also able to maintain the workflow from the staging area to the equipment and back out again."

"The advantage of having MOVITRANS® as a key element for the automation of the entire system is that it doesn't require any festooning or overhanging utility," says Tim. "It's a compact underground system with no trip hazards, no carriage tray to run out on the shop floor, no pits that have to be dug to drop in trailing utilities - all of these are strong benefits. It was a one-unit, on-resolution piece to a multi-faceted problem of not only locating the cart but the heat-treating work itself."



Results

Flexibility, Huge Labor Savings, and "a Beautiful System"

Tim says, "In today's manufacturing environment, customers demand jobs on time in their circumstances, which puts pressure on the manufacturer to build parts that weren't in the schedule, making flexibility a necessary component of your heat-treat environment. With the MOVITRANS® we certainly have that advantage. Flexible process times, flexible process loads - all these are a function of how the system - powered by MOVITRANS® - will handle the staging work. The system also calibrates which piece of equipment or furnace to put the load in, and when that furnace will be ready."

Also, labor has historically been a significant cost consideration in the heat-treating process. Labor was required to handle the parts, load them into baskets and fixtures, put that work in the furnace, take it back out and move it to its next station. The parts often have to be handled individually because they are very delicate - they can't be bumped, nicked, thrown in together, etc.

"The MOVITRANS® has resulted in a huge labor savings," says Tim. "It has allowed us to take that labor down and focus on one area - loading and unloading the basket and prepping the work to go to or come from its next or previous manufacturing step. The heat-treating process now requires only one person - the operator or staging individual, who simply stages work as it goes in and comes out."

"The other thing we've been able to do is eliminate overhanging festoons, trip hazards, huge amounts of cable, coils, wires - all that stuff goes away with the wireless system," says Tim. "It's a beautiful system." ◀