



Removing Machining Oils before the Next Step in Production

Background

The customer is one of the largest manufacturers of auto and truck components in the world. They employ over 50,000 people and make everything from suspension frames, to axles, to sealing components.

Problem

The plant in question makes precision stampings...they have relatively high speed lines (approx. 40 FPM) where steel comes off a coil, parts get stamped, the stampings get cleaned and dried, then coated, and finally oven cured. They were adding new lines and needed a better system for cleaning and drying the parts. The previous systems they bought were not dependable.



Solution

The parts had to be very clean (no oil film...better than 60 dyne surface tension) and very dry for the subsequent coating to properly adhere. Furthermore, the parts could not get scratched by moving around. The solution was to build a six (6) stage system with top and bottom belts. The bottom belt conveyed the stampings. The top belt laid on top the stampings to prevent the parts from moving around and getting scratched.

System

C-48 Cyber-Jet: 48" wide conveyor belt, top hold down belt, six (6) modules (one wash module, three (3) rinse modules, and two (2) hot air drying modules). The system included an RO (reverse osmosis) water filter to generate high quality rinse water, air knives at the end of each stage to minimize carry-over, all wetted parts are stainless steel.