

CASE STUDY

Metal Finishing

Improved Operating Efficiencies for Growing Aerospace Company's Metal Finishing Wastewater Needs

CHALLENGE

An aerospace company in central California had two 470mm filter presses for a total capacity of 4 cubic feet. They started-up these filter press operations ~30 years ago.

As they grew, the two 470mm presses could not keep up with their production needs and they had to have an employee solely dedicated to emptying out the cakes every hour on the hour.

They were happy with filter press technology for their metal finishing wastewater needs but wanted a solution that better matched their operational needs.



BEFORE

SOLUTION

The customer contacted us initially to simply improve upon their existing presses to better deal with operational challenges for the growing business. Our technical filtration experts worked closely with them on-site to assess the benefits of moving to a single, larger capacity filter press.

Footprint was an issue in the facility so we carefully examined the tradeoffs of different size/capacity presses, e.g. a 1000mm, 25 ft³ press versus a smaller capacity press with a larger stack of filter plates. We determined that a 1000mm, 25 ft³ filter press would best address their space issues and allow them multiple operating advantages.

With our 1000mm, 25 ft³ filter press with 27 chambers, the customer needed to only empty the cakes 1-2x per shift, allowing the employee to work on numerous other value-added tasks for the growing metals milling and machining business. We would estimate these direct savings alone to be \$20-30,000/year.

Our 1000mm filter press solution utilized a semi-automatic pneumatic plate shifter so the operation could still rely upon a single filter press operator to safely and reliably open the press and move the plates. Otherwise, for a press of this size, two operators would be needed to move the plates and dump the sludge.

With our filter press solution using our semi-automatic plate shifter, the customer is now generating 5x the cake output per opening!

Contact Micronics, now a part of Cleanova, and let our team of filtration experts help to optimize your liquid filtration operation.



AFTER