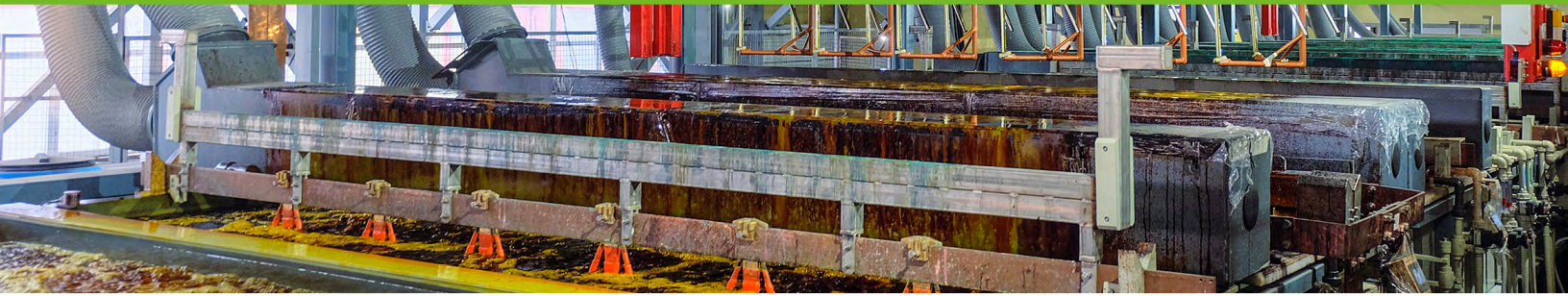


# NYSP2I Helps NY Manufacturer Eliminate Usage of PFAS Chemicals



## Challenge

A NY electroplating company sought to eliminate the use of per- and poly-fluorinated alkyl substances (PFAS) to lower operating costs and reduce potential PFAS legacy impacts. PFAS are a class of chemicals that are persistent in the environment and present other health and environmental hazards as well. They are found in many commercial and industrial products including fume suppressants used to control metal air emissions from electroplating operations. PFAS are used in fume suppressants because they are effective at lowering the surface tension and creating a foam blanket that prevents release of droplets or mist into the air.

## Solution

NYSP2I worked with the company to transition plating operations to a PFAS-free fume suppressant, Atotech Fumalock, which became commercially available in 2022. Once it was confirmed that this new suppressant did not contain any PFAS or other chemicals of concern, NYSP2I developed a test program to evaluate usage, performance, and cost of Fumalock. The evaluation period took place over approximately one year.

## Results

The work performed by NYSP2I and the company led to the following results:

- The company successfully transitioned to a PFAS-free fume suppressant with no significant operational changes, negligible impact to production, and lower operating costs.
- For this particular plating operation, much less Fumalock was needed to maintain an adequate foam barrier than was suggested by the manufacturer. Maintaining the bath with Fumalock was as easy as with the old fume suppressant.
- The cost to use Fumalock was lower than that of the traditional PFAS fume suppressant (~\$80/year savings).
- Samples taken of the plating tank indicate a decrease in residual PFAS over time.

Because the required surface tension measurement technique used to monitor the plating bath may be different from the set-up with traditional PFAS fume suppressants, any company looking to transition to this type of PFAS-free suppressant may need to communicate with the appropriate regulatory agencies to determine permit requirements.

## Partners



## For more information please contact us:

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