

Client Success Story: R.J. Reynolds Tobacco Company

Company profile

Application: R.J. Reynolds Tobacco Company in Winston-Salem, North Carolina, operates a plating shop that produces chrome-plated cylinders that are etched by a proprietary mechanical process. The finished cylinders are then inked and used in the printing presses.

Wastewater Description: Wastewater contaminants include Ar, Ba, Cd, Cr, Cu, Pb, Se, Ag and Zn.

Waste Disposal Goals: The company's waste disposal goal was to reuse wastewater in the plating process or discharge it into the sewer permit free.



Wastewater treatment challenge

Former Process: After the printing run is complete, the cylinders are chrome stripped, cleaned, resurfaced, plated then etched with a different pattern, producing wastewater from the cylinder engraving plating facility.

CASTion solution

CASTion installed a CAST 1500 Flash Distillation System (acid resistant) with a 1500-gallon-per-day capacity (input) GAC and Service Deionization Cylinders. The CAST distillate is post treated with GAC and SDI. The resulting product is of high quality (1-5 Mega-ohm resistivity) and can either be reused in the plating process or discharged to the sewer permit free. The concentrate from the CAST system is removed as F-006 waste.

Raw

Distillate

Post SDI

	Raw	Distillate	Post SDI
Ar	ND	ND	ND
Ba	0.252 ppm	0.0027 ppm	ND
Cd	0.028 ppm	0.0053 ppm	ND
Cr	2.320 ppm	0.007 ppm	ND
Cu	349 ppm	1.59 ppm	ND
Pb	ND	ND	ND
Se	ND	ND	ND
Ag	ND	ND	ND
Zn	1.62 ppm	0.051 ppm	ND

Contact CASTion

R.J. Reynolds Tobacco Company met their recovery and discharge goals. Contact CASTion today to learn how we can help your company achieve its waste disposal and recovery objectives.