



I S O 9 0 0 1 R E G I S T E R E D

C L E V E L A N D B L A C K O X I D E

Case History – Cold Black Oxide On-Location

Several large steel fixtures, roughly 7'x16' and weighing over 4-5 tons each, fabricated by White Automation & Tool Co., in Romulus, Michigan, had posed a unique logistical challenge for Cleveland Black Oxide. The weight and structure of these fixtures were beyond Cleveland Black Oxide's ability to handle at their plant in Cleveland, Ohio.

Even though this was a processing challenge, it was technically and economically more feasible to travel 160 miles to White Automation instead. With experienced staff, specialized tools and equipment, and a safe chemical containment system Cleveland Black Oxide effectively treated these fixtures with a cold black oxide solution. It thereby saved White Automation a tremendous amount of time and shipping costs.

These steel fixtures will be part of an aqueous washing systems developed by Ranshoff, Cincinnati, Ohio for GE Locomotive, Grove City, PA. They'll be used to safely contain and securely hold locomotive diesel engine blocks and their front face cover components – washing, cleaning and spin-drying them 360°. The cold black oxide treatment will increase resistance to surface pitting and corrosion at an economical cost.



Why Cleveland Black Oxide

We have over 50 years of black oxide conversion coating experience. We process over 8-million pounds of carbon, alloy and stainless steels; brass, bronze, copper; cast zinc and cast iron each year. And we have the experience, technologies and services to solve your coating problems.

Tank Capacity, Part Handling & Processing

We have the largest tanks in the industry – 17' long for steel parts, and can go beyond that size on a case-by-case basis. For stainless steel we have 12' tanks, and for Copper, Brass & Bronze, and Die Cast Zinc - 4' tanks. We offer rack process for parts not suitable for barrel or basket processing. We also design custom fixtures and process menus to meet all your special needs.

QC/Lot Control

A processing menu is created for each order and carefully followed – paying strict attention to times, temperatures, concentrations of solutions, and all other process parameters. These parameters and job history are stored in our computers, making a permanent record of your jobs. Records of all solution concentrations are maintained for periodic report and analysis. Tracking procedures are in place for lot segregation when required.

Exclusive Processes

Cleveland Black Oxide has developed a number of unique black oxide coatings including Black Onyx™ which produces a high luster finish on heat treated and hot rolled parts, and our Bi-Met™ process which is a conversion coating for brazed parts and dissimilar metal assemblies.

Service, Research & Technical Assistance

Send us your prototypes and we'll test and recommend a black oxide coating system that meets your protection, appearance and performance needs.

Quotations & Rush Orders

Quotes are promptly submitted upon receipt of sample parts or prints. Approximately 80% of all orders are ready within 48 hours. Our plant is in operation 18 hours a day and emergency service is available.

Cleveland Black Oxide

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UNIQUE APPS