



# Prototype Brake Rotor Coating Line

## Robots Improve Quality for Brake-Rotor Coating Lines

Recently, Nutro added a state-of-the-art, robotic chain-on-edge spray system to its liquid lab.

A leading supplier of brake-rotor coating lines—and a long-time Nutro customer—needed to ensure the consistency of its customers’ coating thickness tolerances. Nutro responded by installing a fully automatic, robotic spray chain-on-edge spray system. The system yielded consistent thickness tolerance and flexibility, eliminated set-up between rotor styles, and reduced materials costs. An added benefit was the ability to automatically clean the spray gun air caps and automatically purge the spray guns.



After several months, the process proved so successful that Tier I supplier asked Nutro to provide prototype coating services. The prototype line has the same process parameters as many of the Nutro-supplied coating systems in production around the world.

The types of coatings available to rotor manufacturers include:

- Water-based paint
- Zinc dust
- Dacromet or Geomet
- Magni



With the addition of its new prototype brake-rotor coating line, Nutro now covers the entire spectrum of coating applications and provides prototype coating services.

### Why use Nutro for prototype rotor coating?

- Low-cost way to develop rotor spray parameters
- Fast turnaround
- Certified coating thickness
- Ability to test different coatings in a production setting
- Ability to provide coated prototype rotors to customers without interrupting production cell
- Ability to spray and cure many different coatings

### Line Description:

- Fanuc P-50 paint robot with six-axis flexibility and analog controls for atomizing air, fan air and fluid pressure
- In-line induction, convection, IR & UV curing
- Chain-on-edge conveyor able to index or run continuously
- PLC that coordinates the chain-on-edge conveyor and paint robot

