"The Ceramic Anodizing Solution"

DiamonDyze™

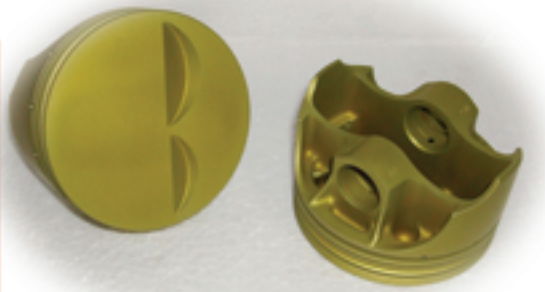
TECH LINE Coatings

DiamonDyze™

"Wears The Teeth Off Files!"

What is DiamonDyze?

DiamonDyze is a water based dye for enhancing type II colored anodizing. DiamonDyze is used in place of your normal dye. Specific Information on time and temperature settings for the dye tank is available in our "DiamonDyze Procedures" sheet.



Common Applications For DiamonDyze:

* Architectural Structures
* Automotive Components both Functional and Cosmetic
* Commercial, Residential and Industrial Appliances
* Commercial, Residential and Industrial Building Products
* Food Preparation Equipment
* Furniture
* Jewelry and Artwork
* Marine
* Sporting Goods

Examples:

* Building Interior and Exteriors, such as Aluminum Window Frames
* Door Frames, Handrails & Ornamental Structures
* Refrigerators, Air Conditioners, Dryers, Coffee Makers,
* Oven Ranges, Televisions, Microwaves, Heating & Cooling Vents,
* Awnings, Lighting, Wall Switch Plates for Buildings
* Boats, Camping & Fishing Equipment
* Automotive Parts such as Pistons, Pulleys, Valve Covers,
* Pumps & Impellers, Rocker Arms, Wheels, Trim Parts, Suspension Parts
* Watch Cases, Rings, Earrings, Necklaces
* Picture Frames, Sculpted Pieces, Ornamental Trim
* Marine Hardware, Trim, Masts, Pulleys, Window Frames, Hulls,
* Inboard & Outboard Engine Components, Seat Frames, Rigging

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How does DiamonDyze form the Harder Layer?

Type II anodizing forms an oxide layer by combining oxygen ions released by the electrode with the aluminum atoms at the surface of the part. The unique DiamonDyze Dye creates a harder and denser surface by adding to the surface structure of the aluminum oxide film formed in the initial anodizing process. Like standard type II anodizing, the final step is to use a Nickel Acetate Seal Coat after the color step has been completed.

DiamonDyze Comparison

DiamonDyze Compared to Type II Colored Anodizing

1. Greater Corrosion Resistance
2. Greater Chemical Resistance
3. Greater Wear Resistance
4. Increased Thermal Barrier Capabilities
5. Greater Surface Density
6. Greater Impact Resistance

DiamonDyze Compared to Type III Hard Anodizing

1. Uses Less Costly and Less Hazardous Type II Process
2. Available In A Variety Of Type II Colors
3. No Significant Dimensional Change In Part Size
4. Tighter Pore/Surface Structure
5. Better Wear Resistance Against Soft Surfaces

DiamonDyze Test Information

DiamonDyze is being Dyno tested using a 350 HP Chevy engine. Two engines have been tested and a third is underway at printing. Initial results from the pistons with DiamonDyze indicate significant improvement in HP, Torque and Leak Down. No evidence of galling or wear has been reported and carbon retention has been minimal.

Additionally, in separate lab testing, over 1600 hours exposure to Salt Spray and over 3000 hours to Humidity have shown no change in appearance. Abrasion testing has shown no wear after 40,000 cycles. Chemical testing has shown twice the acid and alkaline resistance compared to standard type II colored anodizing. Thermal testing is showing a 10% redcution in the rate of heat transfer.

Specific data is available from Tech Line Coatings.

DiamonDyze™

"The Ceramic Anodizing Solution"

- A Broad Array Of Applications!
- Get A Harder Denser Surface!
- Attain Greater Chemical Properties!
- Greater Mechanical Properties!
- Greater Thermal Properties!
- A More Cost Effective Process!

CALL Or Visit Our Website TODAY!

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