



**DYNAMIC**  
SURFACE TECHNOLOGIES

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**Increase your “return on investment” by increasing tool life up to 10 times longer than Gas/ Ion Nitriding or Chrome with **DYNA-BLUE®****



**COST EFFECTIVE - “THE ULTIMATE PROTECTION AGAINST WEAR & CORROSION”**

**DYNA-BLUE®** is a low temperature (950–1050°F) combination process incorporating fluidized bed Ferritic Nitrocarburizing and a controlled oxidation process. A compound layer with a Vickers hardness up to 1880 (75+ Rockwell “C”) supported by a diffusion zone is produced in the base material. The surface has an oxide layer, blue in color that resists corrosion and will assist in mold release and wear resistance but the wear resistant layer is below the surface.

**DYNA-BLUE®** resists erosion and abrasion 2 –10 times longer than ion/gas nitriding, chrome or nickel plating in plastic molding applications where glass and mineral fillers are added. For Rubber & PVC Molding applications, the process prevents hot hydro-fluorocarbons from attacking the base material. When test coupons were subjected to a salt and humidity chamber per ASTM B-117, **DYNA-BLUE®** performed better than stainless steel for corrosion resistance.

Also if a design change is needed there is no problem welding like Nitriding which exhibits porosity in the weld.

**Call us today to dramatically reduce downtime and maintenance, increase tool life & performance with**

**Benefits**

- Resists wear from glass filled plastics up to 10 times longer than Ion Nitride.
- Resists attack & corrosion from harsh environments such as PVC
- Penetrates deep holes and ribs-not line of sight like Nitriding.
- Low growth .0001”-.0002” per side
- Anti-galling & anti- sticking properties
- Maintains excellent microfinishes
- **Better weldability than Ion/Gas Nitride**
- Enhanced parting line durability
- **New Furnace: 77” x 120” up to 30,000 lbs.**
- Overnight service available
- ISO 9001:2008 Accredited by TUV Rheinland
- Meets GM, Ford, Chrysler, Honda, Magna, IAC, HP Pelzer, Inteva, US Farathane, Johnson Controls, Denso, Valeo, Inalfa, Webasto, Rousch, Cooper Standard, SMR, Novo, Summit, II Stanley, Whirlpool, Steelcase specifications.
- “The Global Standard– Benchmark”

**Incoming Material Requirements**

**Materials:** All ferrous metal such as P-20, H-13, D-2, S-7, A-2, M-2, Stainless Steels, Cast Iron, Carbon & Alloy Steel are suitable for **DYNA-BLUE®**.

**Pre-heat Treatments:** To insure dimensional stability, it is recommended that the mold or mold component be tempered or stress relieved at 975 ° F or higher.

**Surface Condition:** Parts or components submitted for **DYNA-BLUE®** should be finished machined and ready to be put into service. Dies or molds should be free of rust, burrs, grinding burns, glue, paint, plating,, etc.

**Request **DYNA-GLOSS™** (oxide removal) for Textured Surfaces with Gloss Level requirements**

**High gloss levels and Class A surface finishes for Lens Tools may require a **DYNA-BRITE™** process and a post polishing operation.**