



DYNAMIC
SURFACE TECHNOLOGIES

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THE MOST COST EFFECTIVE WEAR & CORROSION RESISTANCE- INCREASE TOOL LIFE AND REDUCE COSTS BY 50% OR MORE "THE BENCHMARK"

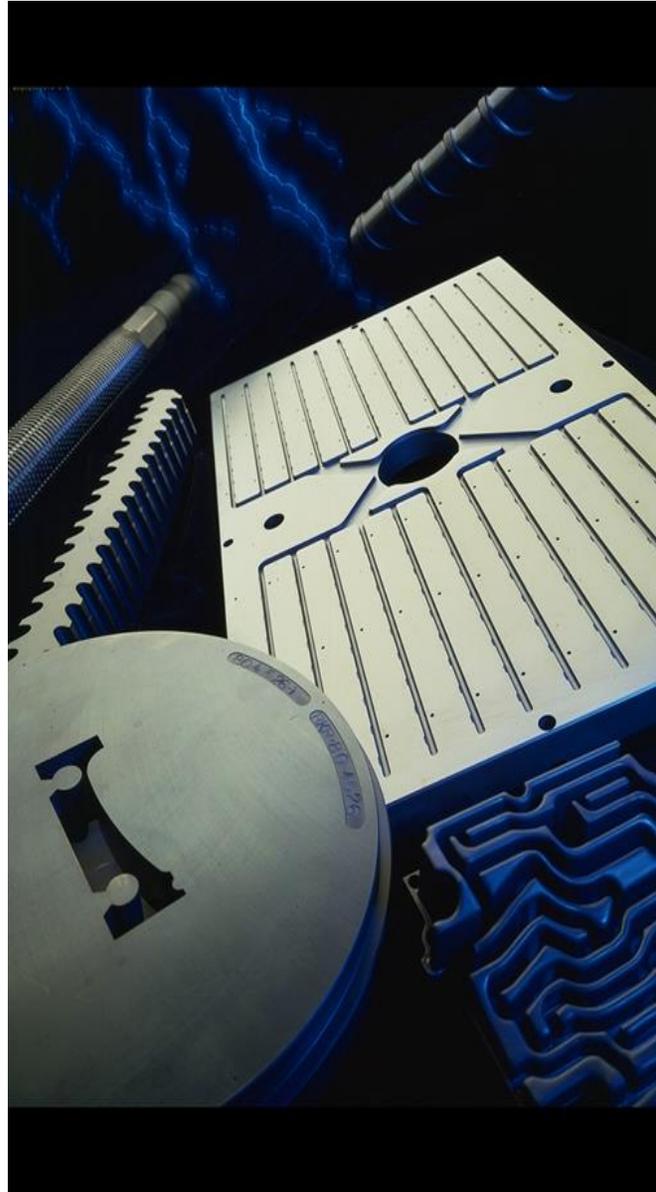
DYNA-BLUE® is a low temperature (as low as 950°F) engineered combination process incorporating fluidized bed Ferritic Nitrocarburizing and a controlled oxidation process. A compound layer with Vickers hardness up to 1880 (75+ Rockwell "C") supported by a diffusion zone is diffused into the steel. The oxide layer produced on the surface, resists corrosion and will assist in die lubricant retention and wear resistance. As new steels are developed, Dynamic has engineered a DYNA-BLUE process for each specific steel & application and now has over 100 variations of DYNA-BLUE.

DYNA-BLUE® resists wear, erosion, heat checking, cracking and soldering 2 –10 times longer than Ion/gas/salt Nitriding, or PVD/CVD Coatings even in the most aggressive environments such as casting structural components with aluminum alloys with Silifont 36™ Aural2™ or Mercalloy™. These grades of Aluminum have proven to significantly reduce tool life due to an acceleration of heat checking, soldering, erosion and breakout of the die surface but DYNA-BLUE has proven to prevent the attack and provide a dramatic improvement in Tool Life.

Call us today to dramatically reduce downtime, maintenance, increase part quality and tool performance with

DYNA-BLUE®

Increase your "return on investment" by increasing Tool Life up to 10 times longer than gas/ion nitride or other surface treatments with **DYNA-BLUE®**



"In God We Trust"

Die Casting

Benefits

- 75+ HRC COMPOUND LAYER WITH EXCELLENT TOUGHNESS PREVENTS HEAT CHECKING, SOLDERING & EROSION WITH NO BRITTLINESS
- RESISTS ATTACK FROM ALUMINUM, MAGNESIUM, ZINC
- INCREASES RESISTANCE TO THERMAL FATIGUE
- IMPARTS HIGH LEVELS OF RESIDUAL COMPRESSIVE STRESS TO RESIST CRACKING.
- LOW DIMENSIONAL VARIATION .0001"- .0002" GROWTH PER SIDE
- REDUCES ALUMINUM BUILDUP ON DIE- LESS MAINTENANCE
- BETTER RELEASE PROPERTIES
- BETTER WELDABILITY THAN ION/ GAS NITRIDE
- CAPACITY 77" X 120" UP TO 30,000 LBS.
- AS NEW STEELS ARE DEVELOPED
- CLAIMED BY MANY DIECASTERS AS "THE MOST COST EFFECTIVE PROCESS TO INCREASE TOOL LIFE"- THE BENCHMARK"
- EASILY REPAIRABLE- CAN BE PERFORMED ON USED TOOLS
- PARTNERED WITH WILLIE HORTON INC FOR MINORITY CREDITS

Tool Performance

A Manufacturer of Structural Automotive Parts was experiencing very poor tool life due to the aggressive nature of the Aluminum they were using. The dies were typically treated using a Nitride process which yielded 5,000-10,000 pieces before the die was unusable. By refining the DYNA-BLUE process and developing a deeper compound and diffusion zone the new process called DYNA-BLUE 8D has increased tool life by 8 times or more. Shot count is currently at 60,000. The tool is still running with a projection of over 80,000+ shots.

