ARCTIC CRYOGENICS

Arctic Himart®, Highly Futuristic

One Stop Surface Solutions For Increasing Tool Life Multifold Time

Make your tools and components strong and long life with Arctic Himart treatment for longer life of Punching, forming, cutting tools and components.

Arctic cryogenics is a Pune based firm offering state of the art Arctic-Himart® DCT furnace from USA patent which is capable of processing tools & Components at -196 Deg. Centigrade.

Arctic cryogenics is extension of our surface treatment division where we already providing different surface treatment services like Plasma nitriding, Gas Nitriding, High gloss polishing.

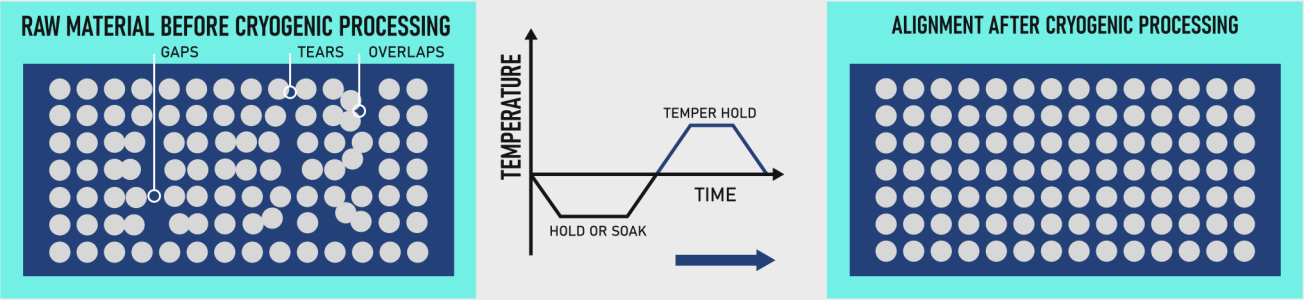
Our Industrial grade, computerized DCT processing system controls the entire process from start to finish.

Arctic cryogenics providing surface treatment right solutions by studying failure mode of customer tools and component

ARCTIC HIMART®-DCT

Arctic Himart® DCT services specialize in the Deep cryogenic treatment of tools and components by exposing them to temperature below -150 deg. Centigrade.

Target benefits include increased resistance to wear, abrasion, pitting and spalling while reducing residual stresses for longer use life.



ARCTIC HIMART®–DCT Benefits

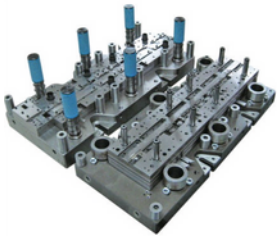
Complete the Austenite to martensite without embrittlement.	Environ friendly process.	Complete Automated process.	Lattice phase change from face centric to body centric tetragonal.
Increase in wear resistance of cutting & forming surfaces.	LN2 is used	From start to finish it is computer programmed and controlled.	Stabilization of dimensions though tight mfg. tolerances
Surfaces treated with ARCTIC-HIMART® can still be modified and repaired.	Green process	Lower tool cost because of increase in tool life	Less production cost due to less machine downtime.
Precipitation of fine primary and secondary (eta) carbides.	Tooling costs reduces through significantly higher anti-wear surface quality that requires significantly less rework		Reduction in machine downtimes and correction maintenance costs through low maintenance

ARCTIC HIMART® for cutting tools, Punching and forming tools, Surgical & pharma applications
Improved productivity and manufacturing process reliability as well as conservation of resources

SURFACE SOLUTIONS FOR EVERY APPLICATIONS




Cutting Tools




Forming tools





Blades and Knives for all applications

Pharma & Surgical tools




Automotive & Racing

Copper welding tips

Rollers for all applications

Specifications :-

Treatable Materials :-

- ARCTIC HIMART is applicable for metals and non metals, ferrous and non ferrous materials.
- Most of the materials can be cryogenically treated depending on applications where it has been used.

Treatment temperature:-

ARCTIC HIMART Treatment is process of treating various materials at extremely low temperature(-196 D.C).

Treatable surfaces:-

This is supporting process to heat treatment and PVD coating. This process can be done after heat treatment or can be done before PVD coating or after PVD coatings. This process can be done on final tool surface also.

Post treatment :- All post treatment like final grinding, machining, polishing , Micro blasting and even coating also possible.

Combinations with other coatings:- Depend upon applications different PVD coatings are possible after this process on final tools.

Tool dimensions :- **1000 MM x 350 MM x 350MM**

PART WEIGHT UPTO 400 KG .

Lead time ARCTIC HIMART® DCT Treatment:- 4 to 5 Days

Tool Life improvements:-

Tool bits, Drills , Taps , End mill cutter	80-275%
Gear Cutting Tools	50-145%
Cutting blades, Shear knives	75-230%
Thread rolling dies	90-195%
Press working tools	130-500%
Pressure Die casting tools	70-245%
Bearings	75-250%

ARCTIC CRYOGENICS

www.arcticcryogenics.in

Factory address:-
Atlas automotive compound, Plot No 58,59/20/5, Saint tukaram industrial estate, Opp. Dali & Samir company, D-2 Block, MIDC Chinchwad, Pune-411019

Phone no:- + 91-8669090149
+91- 9850489896
+91- 9850189894

Email ID :- info@arcticcryogenics.in
arctic.cryogenics@gmail.com