

Proven solutions for Forging Tooling life

IBC Coatings Technologies offers lab tested, field proven solutions for extending the life of your Forging tooling. Our Ceratough® Coatings have demonstrated performance that meets or exceeds competitor's coatings.

DHSN- IBC Coatings' Salt Bath Nitriding has an enhanced white layer that improves lubricant retention and has been shown to increase punch life by **50%** versus other nitriding processes.

Punches: DHSN extends punch life.

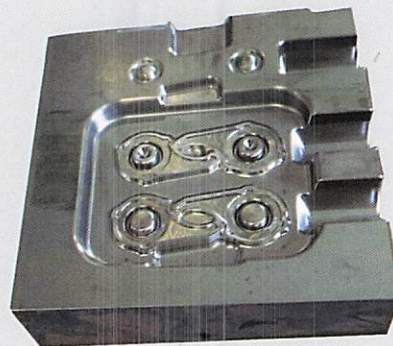
Hammer Dies: DHSN is the preferred choice for extended die surface life when shank welding is less critical.

Hammer Dies: DHIN is preferred in dies where shank welding is expected.

| Name | | Process Temperature (°C) | Thermal Stability (°C) | Thickness (microns) | Hardness (HV) | Friction Coefficient Dry (on Steel) |
|-------------|--------------------------------------|--------------------------|------------------------|---------------------|---------------|-------------------------------------|
| DHIN | Ion Plasma Nitriding per AMS-2759/8 | 400-550 | 400-500 | 25-300 | 500-1200 | 0.5 |
| DHSN | Salt Bath Nitriding For Forging Dies | 550 | 400-500 | 25-250 | 500-1200 | 0.5 |



Forging Punch



Hammer Die