



**Description:** Delta-Tone 9000 is an inorganic micro layer zinc flake coating. The cured coating has greater flexibility than Delta Protekt KL100 and is therefore more suitable to be used on components such as springs or spring steel pressings.

Delta-Tone 9000 does not contain any heavy metals such as cadmium, chrome and lead.

Delta-Tone 9000 is recommended for high tensile fasteners or other components where hydrogen embrittlement needs to be avoided.

Delta-Tone 9000 provides metallically bright silver coating with a high corrosion protection.

**Properties:** The outstanding corrosion resistance of Delta-Tone 9000 is derived from various protection mechanisms:

- Sacrificial cathodic protection
- Barrier-effect due to zinc and aluminium flake.
- Reaction of binding systems with base
- Consolidation of Delta-Tone 9000 film under corrosion loading.

As a result of these corrosion features Delta-Tone 9000 affords higher corrosion resistance in marine and industrial environments than many other conventional corrosion protection systems with comparable coating thickness/weights, Coating with Delta-Tone 9000 will **not** result in hydrogen embrittlement. Since the stoving temperatures are between 200°C and 220°C changes in metallurgy are practically excluded. Delta-Tone 9000 has an excellent penetration capacity combined with extremely good substrate surface wetting characteristics so that even components of a complicated geometry such as tension springs may be effectively coated.

**Uses:** DELTA-Tone 9000 is used as a base coat for ferrous components processed in a basket or on jigs

**Products processed by in a basket by dip-spin:** Bolts, Nuts, Dowels, Clips, Clamps, Tension Springs, Pins, Small Castings as well as other fixing elements for the automotive industry, building industry, Steel construction, and many other industries

**Products processed on jigs by dip-drain:**

Larger components such as stampings and pressings, large compression springs, chains guide rails, mounting rails, fixing plates trailer couplings connectors, materials handling components etc.

**Pre-treatment:**

**Degreasing:** all the more well-known processes that have no detrimental effect on parts may be used. Alkaline degreasing is a typical example.

**Scale/Rust:** All the more well-known chemical pickling processes or using suitable abrasives may be adopted unless they are detrimental to the parts in question.

**Application:**

- Products processed in a basket
- : dip/centrifuging
- Products processed on racks:
  - (a) Dipping
  - (b) Spin coating
  - (c) Spraying

**Coating Thickness:** The corrosion resistance of Delta-Tone 9000 will increase with increasing coating thickness and number of coats.

1. Standard protection – salt spray test according to ASTM B117 over 250 h. 20 to 26 g/m<sup>2</sup> dry coat weight are equivalent to 6 and 8 μ dry coat thickness

2. Improved protection – salt spray test according to ASTM B117 over 600 h. 32 to 38 g/m<sup>2</sup> dry coat weight are equivalent to 10 and 12μ dry coat thickness