



## **DELTA-PROTEKT KL100**

**Description:** Delta Protekt KL100 is an inorganic micro layer zinc flake coating.

Delta Protekt KL100 is composed of an inorganic binder system using zinc and aluminium as well as special organic compounds.

Delta Protekt KL100 does not contain any heavy metals such as cadmium, chromium or lead etc.

Following stoving (15min./230°C temperature of part)

Delta Protekt KL100 provides metallicly bright silver coating with a high corrosion protection.

**Properties:** The outstanding corrosion resistance of Delta Protekt KL100 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 Protekt KL100 film under corrosion loading.

As a result of these corrosion features Delta Protekt KL100 affords higher corrosion resistance in marine and industrial environments than many other conventional corrosion protection systems with comparable coating thickness/weights,

Coating with Delta Protekt KL100 will **not** result in hydrogen embrittlement. Since the stoving temperatures are between 220°C and 240°C, changes in metallurgy are practically excluded. Delta Protekt KL100 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 Protekt KL100 is used as a base coat for ferrous components processed in a basket or on jigs.

**Products processed 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 atypical example.

**Scale/Rust:** All the more well-known chemical pickling processes using suitable abrasives may be adopted unless they are detrimental to the parts in question. Shot blasting can also be used on suitable components.

**Coating thickness:** The corrosion resistance of Delta Protekt KL100 will increase with increasing coating thickness and number of coats.

Standard protection – salt spray test according to ASTM B-117 over 480 h. 20 to 26 g/m<sup>2</sup> dry coat weight equivalent to 6 to 8 μ dry coat thickness

Improved protection – salt spray test according to ASTM B-117 over 1000 h. 32 to 38 g/m<sup>2</sup> dry coat weight equivalent to 10 to 12μ dry coat thickness