

That's what we see as efficiency:

DELTA-PROTEKT® KL 105.



Save time, money and effort.

What is more efficient than a product with which you can save an entire process? DELTA-PROTEKT® KL 105 is an innovative zinc flake system with integrated lubricant, that provides high corrosion protection for components that are subjected to a high degree of friction. In this way, the coating process becomes simple and efficient because you neither have to provide additional sealing, nor do you have to change the material.

Why less product does not mean less performance.

The DELTA-PROTEKT® KL 105 microlayer corrosion system is particularly suitable for screws and other connecting elements. The material can be integrated without problems into existing processes and be used immediately – especially because it has a long shelf life. Handling costs are ever more important, particularly with small components. At the same time, clear savings in material and time lead to best value for money.

Thus, the zinc flake basecoat provides an additional property and can provide the friction coefficient in compliance with the specifications of many automotive manufacturers. This was previously only possible with multiple coating systems. The coating is applied in just two stages using the centrifugal dip process and then cured at a temperature of 240 degrees – this saves a further sealing layer to set the coefficient of friction.

In addition, the low curing temperature generates a very small dispersion in the coefficient of friction. In this way, a very high degree of process accuracy is achieved, by comparison with the competition.

DELTA-PROTEKT® KL 105

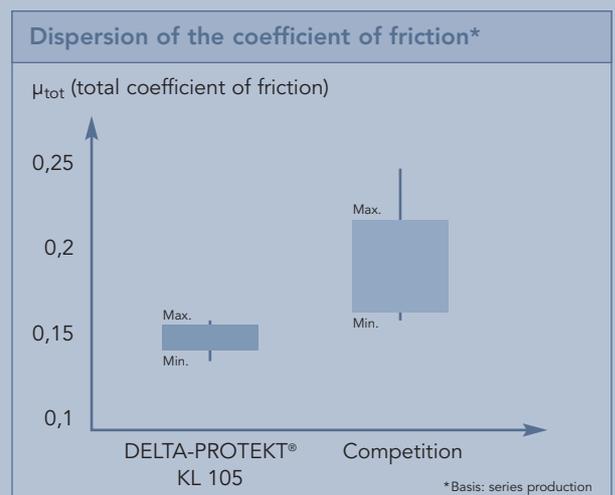
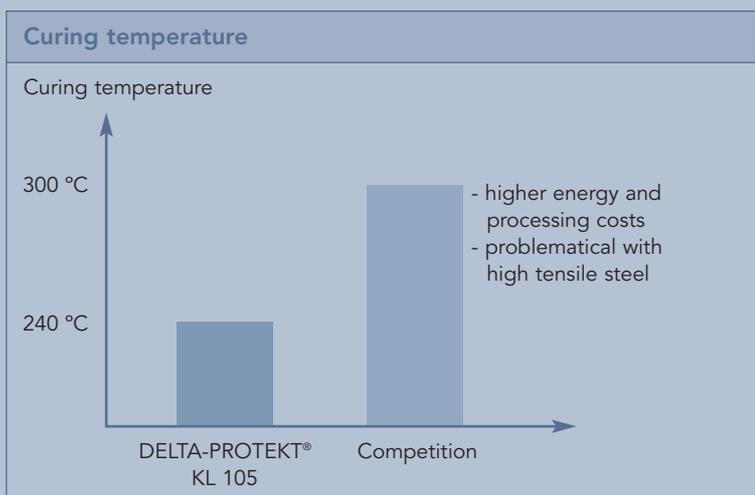
Product description	solvent-based basecoat with integrated lubricant
Free of heavy metals, EC 2000/53/EG	free of nickel, cadmium, lead, chromium, mercury, molybdenum
Cathodic corrosion protection SST (red rust)*	2 layers at 6-8 µm: > 720 h 3 layers at 8-10 µm: > 1000 h
Coefficient of friction, DIN EN ISO 16047*	μ_{tot} 0,15 (median value)
Loosening under temperature, VDA 235-203	✓
Multiple screwing	✓
Chemical resistance	good
Curing temperature	240 °C
Temperature resistance, in compliance with VDA 235-104	200 °C

*Depending upon geometry and system set-up

The coating process with DELTA-PROTEKT® KL 105 is so simple and efficient that it was awarded the 2006 German Material Efficiency Award by the Federal Ministry of Economics and Technology.

Depending upon the geometry and build-up of coats, it is possible to achieve the following savings with DELTA-PROTEKT® KL 105:

- Material saving, thanks to the avoidance of additional sealing
- Saving in time, because of no need for a further coating process with expensive material changes
- Energy saving, because of an additional coating and curing process not being required
- A cost saving of approx. 30% because of clearly lower handling costs



The details stated in this technical leaflet are based upon our current knowledge and experience. They do not release the user from the testing that is inevitable, given the diversity of possible influences in the processing and application. Liability for specific properties or suitability for any concrete operational purpose may not be assumed from the information provided.

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