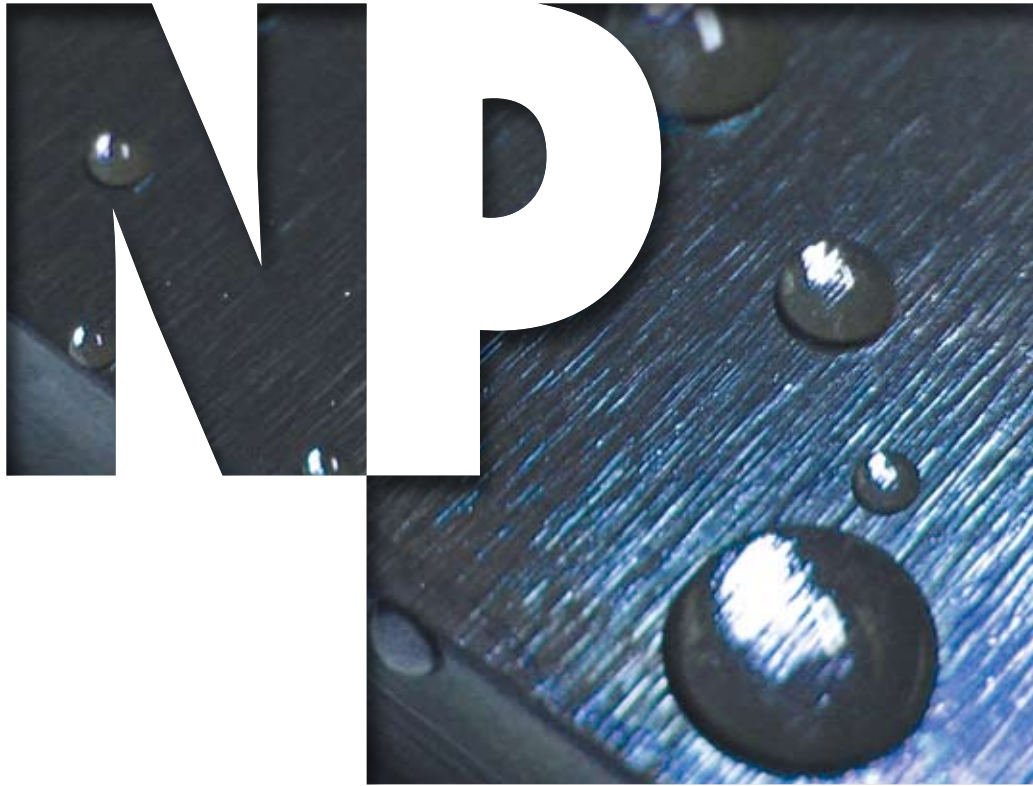


NovoPlan

The Coating Experts



Quality

Perfection

Expertise

Consulting

PlanoTek®
Functional layers

for
plastics processors,
injection moulders,
tool and mould makers
and mechanical engineers



PlanoTek®

The functional electroless nickel system.

For more than 20 years, NovoPlan has been the coating experts for functional electroless nickel layers. By coating with PlanoTek®, we provide your tool surface with the right function for every application.

Demoulding aid & scale inhibition

PlanoTek **CNPTFE**
30–35/45–50* HRC
PlanoTek **CNA**
180 HV/27* HRC
PlanoTek **CNB**
45–50/60–65* HRC



- Processing of soft thermoplastics (TPU, ABS, PP) and elastomers (silicone, LSR)
- Production without mould releasing agents

Typical layer thicknesses 3–10 µm**

Demoulding aid + wear protection

PlanoTek **CNBV**
54/70* HRC



- Processing of specialized engineered polymers and highly filled plastics (PPS, PBT, POM, PEEK, PA, ...)
- Production without mould releasing agents

Typical layer thicknesses 3–10 µm**

Slide and mechanism coatings

PlanoTek **CNB**
45–50/60–65* HRC



- Substitute for conventional lubrication
- Dry running of moving parts

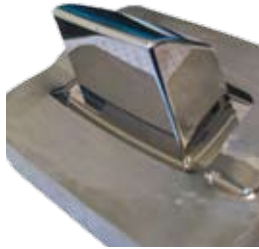
Typical layer thicknesses 3–10 µm**

* Heat-treated, 300 °C approx. 5 hours or 400 °C approx. 1 hour

Wear protection

PlanoTek HCN
62–63/70* HRC

PlanoTek CNV
50–52/72–74* HRC



- Processing of abrasive, highly filled plastics, thermoset plastics
- Protection against hot gas corrosion during plastic processing
- Protecting »soft« materials, such as copper/aluminium alloys

Typical layer thicknesses 3–20 µm**

Protection of polished surfaces

PlanoTek HoCN
58–60/72–73* HRC



- Surface protection for mirror finishes
- Base layer for mirror finishes

Typical layer thicknesses 3–20 µm**

Corrosion protection

PlanoTek KSCN
48–52/72–74* HRC



- Processing of aggressive plastics
- Protection against damp climate, hand perspiration
- Protecting the temperature control system (close-contoured cooling systems, e.g. laser-sintered, joined)
- Ultra-precision machining/diamond turnable

Typical layer thicknesses 3–30 µm**

Repair

PlanoTek HCN
62–63/70* HRC

PlanoTek HoCN
58–60/72–73* HRC



- Correction of measurements to final dimension up to 300 µm
- Alternative to manufacturing of new components

** thicker layers and combination coatings possible

Benefits

+ Manufacturing with secure processes

+ Guaranteed unit costs

+ Constant item quality

+ Increase in tool life

+ Reduced maintenance requirements

Coating temperature

- distortion-free max. 90 °C

Separation

- contour accuracy
- no edge build-up
- coplanar, even in holes, slots and indentations

Functional surface properties

- engineered material properties

Coatable materials and surfaces

- Steel (hardened, plasma nitrided), copper, aluminium, sintered metal, etc.
- Surface structures remain unaltered

Reworking

- Grinding, eroding (EDM) and polishing

Partial coating

- masking is possible

Layer removal/recoating

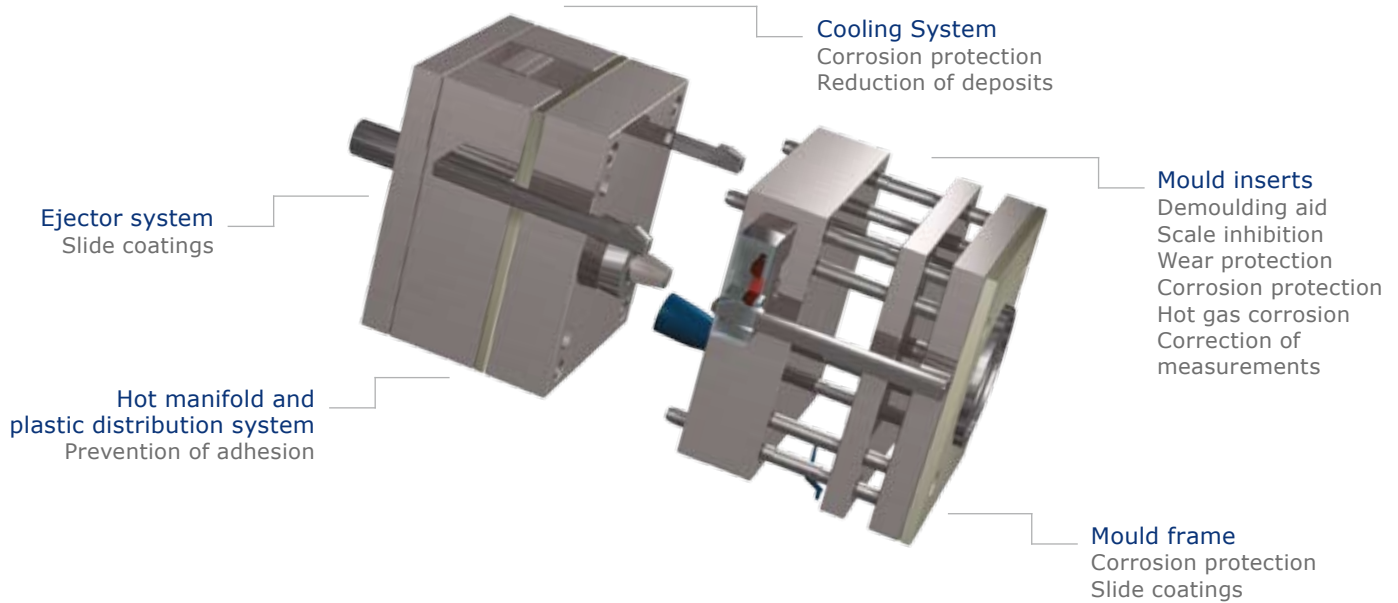
- routine operation



PlanoTek®

Functional layers. The solution ...

... for your tool system.



... for your sector.



Automotive
Electrical engineering
Aerospace
Medical engineering
Packaging technology

NovoPlan Services.

1. Customer portal
2. Process recommendations
3. Technological expertise
4. Express coating
5. Customer seminars
6. Specialist advice on site
7. Research and development



NovoPlan GmbH

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