

# NANO-X Information

## Principle:

The product is a coating material for the protection of steel surfaces from oxide scale formation (high temperature oxidation) during hot forming processes.

## Scale protection - x-tec® CO 4000 Series



Bonded to the steel surface x-tec® CO 4000 products improve the efficiency of all the process steps from cold forming over hot forming up to the complete part.

## Product properties:

- Coating material for steel surfaces
- Single component material, shelf life > 6 months
- Application by dipping, spraying or roller coating (coil coating) etc.
- Viscosity (DIN 53211, 4mm cup) from 20sec (spray coating) to 90sec (coil coating)
- For any size and geometry of coil, sheet, part etc.
- Tribological properties provide for low friction during cold and hot forming
  - Protection of the forming dies
  - No lubricants necessary
- No oxide scale formation up to 950°C
- No inert gas necessary
- Spot welding possible after hot forming
- Short station times

## Fields of application:

Optimal solution for direct and indirect in-mold hardening

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