



HUNGER
Hydraulik

EIN UNTERNEHMEN DER HUNGER-GRUPPE

Time for something new
Our new surface coatings



ChromePlus

The ChromePlus plating is a laser welded coating which consists of a metal matrix with embedded chrome carbides. By using the laser-welding **very thin layers** can be applied with **very high efficiency**. The **absolute pore and crack free coating** guarantees very good corrosion protection properties, which are far above the properties of hardchrome.



Cost-efficient alternative
to chrome plating



Corrosion resistance 10 times better than chrome
(1,000 hour salt spray test to DIN EN ISO 9227 [NSS])



Eco-friendly
chromium (VI)-free coating

Examples of use: Construction machinery and plant, municipal vehicle, Agricultural engineering, General Mechanical engineering



CeraplatePlus

The CeraplatePlus coating consists of a **two layer coating** design. The **stainless steel bonding layer** is applied by laser welding. The top layer is applied by **thermal spraying** with the APS-technology (Atmospheric Plasma Spraying). Therefore the CeraplatePlus coating **combines** the **excellent wear protection** properties of a metal oxide coating with the **outstanding corrosion protection properties** of a laser coating.



Outstanding corrosion protection
(3,000 hour salt spray test
to DIN EN ISO 9227 [NSS])



High surface hardness,
approx. 1,000 HV



Extremely high resistance
to abrasive and erosive wear

Examples of use: Heavy duty mechanical engineering,
offshore engineering, bridge construction, civil engineering,
open cast and deep pit mining



UltraplatePlus

The UltraplatePlus coating is the **next level** of our well-tried Ultraplate coating for the use in offshore applications. UltraplatePlus guarantees a **lifelong corrosion protection**, also in the splash zone or for permanently submerged piston rods. The coating will be applied by laser cladding. The UltraplatePlus layer is **absolutely impermeable, pore free** and shows an **extremely high adhesion** to the substrate material.



Utmost corrosion protection
or hardest conditions
(corrosion test according to ASTM G48, 40°C)

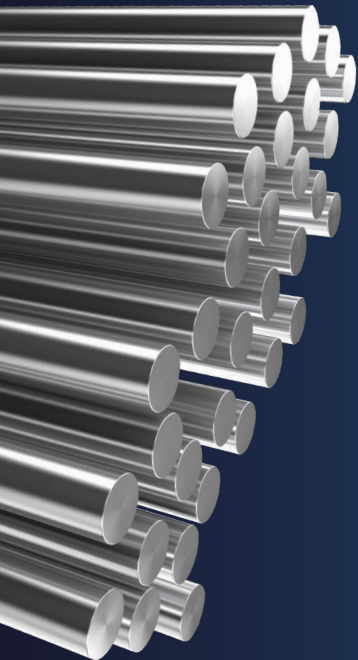


Hard wear-resistant surface
for extremely long service life



Extremely high adhesion
to the substrate material

Examples of use: Offshore engineering, coastal defences,
subsea applications, chemical industry, flue gas systems



Piston rods • Shafts • Guide pillars

	ChromePlus	CeraplatePlus	UltraplatePlus
Layer thickness	50 to 150 µm	Bonding layer 150 µm Top layer 200 µm	300 to 600 µm
Hardness	approx. 600 HV	approx. 950 to 1,050 HV	approx. 550 to 600 HV
Surface finish	max. Ra 0,15 µm	max. Ra 0,15 µm	max. Ra 0,15 µm
max. piston rod diameter	1,000 mm	1,500 mm	1,000 mm
max. piston rod length	25 m	25 m	25 m

Contract coating in described diameters



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Any questions? We are happy to help!

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