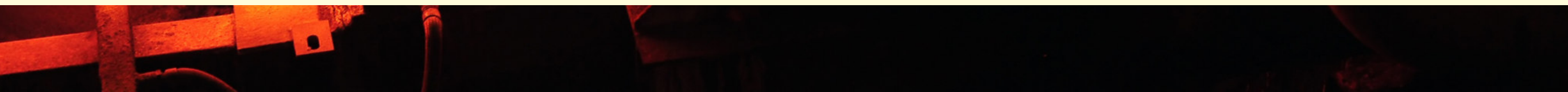




METAL PRODUCTION AND PROCESSING

Steel, rolling and pipe mills rely on **capilla**.



THE PROBLEM

Erosion, heat, pressure, fatigue, abrasion and corrosion slowly but surely reduce the product quality, increase maintenance and energy costs, and lead to a declining efficiency. Therefore, the risk of plant downtimes due to the breakdown of production facilities increases significantly.

As a result, operating costs rise to incalculable amounts.

THE SOLUTION

capilla-products reduce plant downtimes, increase product quality, and thus raise productivity and safety noticeably.

All **capilla**-products were created with more than 50 years of experience in forging, the most demanding welding application.

TYPICAL APPLICATIONS

Blast and melting furnaces, casting ladles, moulds, permanent casting plants, rolling mills, straightening rolls, descaling equipment, piercer plugs, draw rings, dies.

Demanding welders all over the world put their trust in the **capilla**-quality: in maintenance, repairs and production.

capilla always delivers the most suitable product.



capilla - The number 1 for all demanding metal-workers.

Below you can find a brief extract of the stick-electrode range manufactured by **capilla**, which are specifically used in Metal Production and Processing. A number of other products, as well as solutions for other welding processes can alternatively be provided by **capilla**.

	Product Description	Applications	Analysis [weight-%]
30 S AWS A 5.1: E 6013	Medium-thick rutile-cellulose coated stick electrode for assembly and maintenance welding in all positions, especially suitable for vertical down welding. Good bridging over of gaps. Using recommended welding parameters leads to self-removing slag.	Fusion welding of general purpose constructional steel, boiler plates, pipe steel, ship structural steel, high tensile steel and cast steel such as: S 185-S 355 JOC, P 235 GH, P 265 GH, P 295 GH, P 210 N-P 360 N, S 255 NH-S 355 NH, P 255 NH-P 355 NH, GS 38-GS 52	C max. 0,08 Mn max. 0,5 Si max. 0,3 Fe Rest
64 KBS EN 14700: E Fe 3-350-st	Basic-coated high recovery stick electrode for high-strength, heat treatable fusion and overlay welding. Also suitable as filler for difficult to weld steels. The weld metal is characterized by its high crack resistance and is extremely resistant against compressive and impact stress.	The electrode is used for repair and maintenance welding of all kinds of medium alloyed steels especially constructional and tool steels. Suitable for repair and manufacturing welding of dies, rails, crane rims, support rollers, various machine parts.	C max. 0,1 Cr 2,2-2,7 Si max. 0,5 Mo 2,0-2,5 Mn max. 1,0 Fe Rest
6000 AWS A 5.11: ~E NiCrFe-3	Basic coated high-recovery stick electrode for fusion and overlay welding. The weld metal is very ductile. Welding of nickel base alloys and tough at subzero nickel steels (cryogenic applications). Even at high temperatures no carbon diffusion from the ferritic base metal into the fully austenitic weld metal occurs. Good resistance to thermal shocks.	Especially suitable for dissimilar joints at service temperatures in the range of -196°C to $+650^{\circ}\text{C}$. Temperature limitations: Scaling resistant up to 1000°C ; in sulphurous atmosphere max. 500°C ; fully loaded welds max. 800°C . Material Nos.: 1.4876, 2.4870, 2.4867, 2.4816, 1.5662, 1.4429, 1.4539, 1.4922 and joints of these materials with low alloyed steels.	C max. 0,15 Cr 18,0-21,0 Mn 4,0-6,0 Nb 2,0-2,8 Fe 3,0-5,0 Ni Rest

Experts trust **capilla**.



TÜV NORD

CERTIFICATE

Management system as per
DIN EN ISO 9001 : 2015

In accordance with TÜV NORD CERT procedures, it is hereby certified that

Capilla Schweißmaterialien GmbH
Westring 48 - 50
33818 Leopoldshöhe
Germany

capilla
Internationale Schweißkompetenz
Made in Germany

applies a management system in line with the above standard for the following scope

Development, manufacture and sale of welding consumables

Certificate Registration No. 04 100 960464
Audit Report No. 3520 8477

Valid from 2018-02-20
Valid until 2021-02-19
Initial certification 1996

Jenssen-Landell
Certification Body
at TÜV NORD CERT GmbH

Essen, 2018-01-29

This certification was conducted in accordance with the TÜV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD CERT GmbH Langemarkstraße 20 45141 Essen www.tuev-nord-cert.com

IAF
INTERNATIONAL ASSOCIATION OF CERTIFICATION BODIES

DAKKS
Deutsche
Akkreditierungsstelle
D-2M-12007-01-01

capilla Schweißmaterialien GmbH

Westring 48-50 D-33818 Leopoldshöhe
T +49 (0)5202 97790-0 F +49 (0)5202 97790-19
info@capilla-group.com www.capilla-group.com