## Standards:

| | |
|---|---|
| EN ISO 3580-A: | E CrMo 91 B 42 |
| EN 1599: | E CrMo 91 B 42 |
| AWS SFA-5.5: | E 9018-B9 |
| Mat.-No.: | 1.4903 |
| **Recovery:** | **130%** |

# capilla® P 91

## Product description:

CrMoVNb-alloyed basic coated stick electrode, good welding characteristics producing a creep and ruptur resistant high temperature weld metal

## Applications:

Designed for welding of quenched and tempered 9%-Cr-steels.

Base materials:

1.4903 (X10CrMoVNb 9 1),
ASTM A213-T91;ASTM A335-P91,
ASTM A387 Gr. 91, ASTM A182 F91.

## Typical weld metal composition:

[wt. - %]

| | C | Mn | Si | Cr | Mo | Ni | V | Nb | Fe |
|---|---|---|---|---|---|---|---|---|---|
| **Min.** | | **0,6** | | **8,5** | **1** | **0,6** | **0,18** | | |
| **Max.** | **0,1** | **0,7** | **0,3** | **9,5** | **1,2** | **0,8** | **0,24** | **0,07** | **Bal.** |

## Mechanical properties:

(Heat treatment: 760°C/2h; Minimum values at ambient temperature)

| | | |
|---|---|---|
| Tensile strength $R_m$: | 680 | [MPa] |
| Yield strength $R_{p0,2}$: | 550 | [MPa] |
| Yield strength $R_{p1,0}$: | - | [MPa] |
| Elongation (L=5d): | 17 | [%] |
| Impact strength (ISO-V): | 47 | [J] |

Positions: all except PD, PE and PG

Redrying: min. 320°C/2h

**Dimension:**

| Ø [mm] | Length [mm] | Welding current [A] | Polarity |
|---|---|---|---|
| 2,5 | 350 | 60 – 90 | =(+) |
| 3,25 | 350 | 80 – 120 | |
| 4,0 | 350 | 110 – 170 | |

**also available:**
find in table of content

Capilla P 91 MAG
Capilla P 91 WIG
Capilla G P91 BM (tubular wire)