

## Stainless steel electrode

### Classification

AWS A5.4-92 : E385-16\*  
 EN 1600-97 : E 20 25 5 Cu N L R 12

\* Deviation: see remarks

### Temperature Range

pressure parts: -10 ... +400°C  
 oxidation resistance: n.a.

### General description

A rutile-basic fully austenitic all position electrode

Smooth bead appearance

Easy slag release

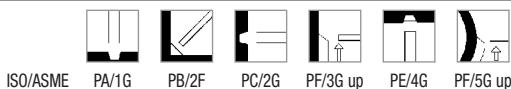
Especially developed for applications in:

- phosphoric acid and sulphuric acid
- paper mill equipment

World wide reputation for reliability

Weldable on DC+ polarity

### Welding positions



### Current type

DC electr. +

### Approvals

TÜV

+

### Chemical composition (w%), typical, all weld metal

C	Mn	Si	Cr	Ni	Mo	Cu
0.02	1.2	0.9	20.0	25.0	5.0	1.5

### Mechanical properties, all weld metal

Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
				+20°C	-10°C
Required: AWS A5.4-92	not required	min. 520	min. 30	not required	
EN 1600-97	min. 320	min. 510	min. 25	not required	
Typical values	AW 410	620	40	80	100

### Packaging, available sizes and identification

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	350	350	350
Unit: Box	Pieces / unit (nominal)	145	185	125
	Net weight/unit (kg)	2.9	5.7	5.9

Identification

Imprint:

Tip colour:

Jungo® 4500: rev. EN 15

# Jungo® 4500

## Materials to be welded

Steel grades	EN 10088-1/-2	EN 102 13-4	W.Nr.
Fully austenitic		GX7 NiCrMoCuNb 25-20	1.4500
NiCrMoCu- and CrNiMoCu-steel	X5 NiCrMoCuTi 20-18		1.4506
		GX2 NiCrMoCuN 20-18	1.4531
		GX2 NiCrMoCuN 25-20	1.4536
	X1 NiCrMoCu 25-20-5		1.4539
		GX7 CrNiMoCuNb 18-18	1.4585
	X5 NiCrMoCuNb 22-18		1.4586

## Calculation data

Sizes Diam. x length (mm)	Current range type (A)	Current	Arc time - per electrode at max. (s)*	Energy - per electrode at max. current E(kJ)	Dep.rate - H(kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal B	kg Electrodes/ kg weldmetal 1/N
2.5 x 350	40 - 75	DC+	43	72	0.96	19.9	79	1.59
3.2 x 350	60 - 105	DC+	53	133	1.3	32.1	52	1.69
4.0 x 350	80 - 145	DC+	61	220	1.8	48.0	32	1.56

\* stub end 35mm

## Welding parameters, optimum fill passes

Welding positions Diameter (mm)	PA/1G Current (A)	PB/2F	PC/2G	PF/3G up	PE/4G	PF/5G up
2.5	70	70	70	60	60	60
3.2	100	100	100	70	70	70
4.0	140	140	140	80		

## Remarks

Deviations: chemical composition:

Si = max. 1.0%

AWS: Si = max. 0.75%

## Application advice

Welding with heat input max. 1.5 kJ/mm

Interpass temperature max. 150°C