

Stainless steel electrode

Classification

AWS A5.4-92 : E2209-15
EN 1600-97 : E 22 9 3 N L B 22

Temperature Range

pressure parts: -40 ... +250°C
oxidation resistance: n.a.

General description

A basic electrode for 22% Cr duplex stainless steel welding
Excellent weldability for filling as well as for root runs
Applicable up to a service temperature of 250°C
High resistance to general corrosion, pitting and stress corrosion conditions
High yield strength > 500 N/mm²
Weldable on DC+ polarity
Also available in vacuum sealed Sahara ReadyPack® (SRP)

Welding positions



ISO/ASME PA/1G PB/2F PC/2G PF/3G up PE/4G PF/5G up

Current type

DC electr. +

Approvals

CTL	DNV
+	+

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

C	Mn	Si	Cr	Ni	Mo	N	FN
0.025	1.6	0.5	23.5	9.0	3.0	0.15	30-60

Mechanical properties, all weld metal

	Condition	0.2% Proof strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)			
					+20°C	-20°C	-40°C	-50°C
Required: AWS A5.4-92		not required	min. 690	min. 20	not required			
EN 1600-97		min. 450	min. 550	min. 20	not required			
Typical values	AW	650	800	28	80	75	70	45

Packaging, available sizes and identification

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	250	350	350
Unit: SRP	Pieces / unit (nominal)	69	55	30
	Net weight/unit (kg)	1.4	1.8	1.5
Unit: Box	Pieces / unit (nominal)	112	152	103
	Net weight/unit (kg)	2.3	5.0	5.0

Identification Imprint: 2209-15/Jungo 4462 Tip colour: red

Jungo® 4462: rev. EN 15

Jungo® 4462

Materials to be welded

Steel grades	EN 10088-1/-2	W.Nr.	ASTM / ACI A240	UNS
Duplex- stainless steel	X2 CrNiMoN 22 -5-3	1.4462		S31803
		1.4417		S31500
	X3 CrNiMoN 27-5-2	1.4460		S31200
		X2 CrNiN 23-4	1.4362	

Dissimilar joints such as un- and low alloyed steel to duplex stainless steel

Calculation data

Sizes Diam. x length (mm)	Current range type (A)	Current	Arc time - per electrode at max. current - (s)*	Energy 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	50 - 80	DC+	74	101	0.62	21	78	1.64
3.2 x 350	70 - 110	DC+	84	219	0.88	33.8	49	1.64
4.0 x 350	100 - 140	DC+	80	304	1.4	50.8	32	1.61

* 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	60	60	60	60	60	60
3.2	85	80	90	80	80	80
4.0	120					

Remarks

- interpass temperature depends on construction

SMAW