



# Product Data Sheet

E 'Manual metal-arc welding'

OK 67.51

Prepared by Claes Gillenius	Qualified by Tero Tolonen	Approved by Tapio Huhtala	Reg no EN005951	Cancelling EN005275	Reg date 2012-12-20	Page 1 (2)
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## REASON FOR ISSUE

EN 1600 replaced by EN ISO 3581-A.

## GENERAL

High recovery stainless electrode for welding ferritic-austenitic (duplex) stainless steels, e.g. UNS S31803 or similar.

Also excellent for joining duplex to CMn steels.

**Min AC OCV:** 60

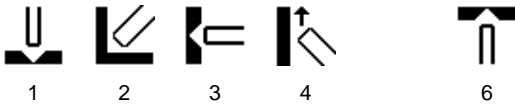
**Polarity:** AC, DC+

**Alloy Type:** Ferritic-Austenitic

**Coating Type:** Acid Rutile

**Ferrite Content:** FN 30-45

## WELDING POSITIONS



## CLASSIFICATIONS Electrode

EN ISO 3581-A E 22 9 3 N L R 5 3

SFA/AWS A5.4 E2209-26

Werkstoffnummer 1.4462

## APPROVALS

DNV

For Duplex SS

## CHEMICAL COMPOSITION

### All Weld Metal (%)

	Min	Max
C		0.03
Si	0.50	1.00
Mn	0.50	1.20
P		0.025
S		0.020
Cr	21.5	23.5
Ni	8.5	10.5
Mo	2.70	3.30
Cu		0.20
N	0.12	0.20



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## MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO	AWS	
	As welded Min	As welded Min	Typ
Rp0.2 (MPa)	550	550	645
Rm (MPa)	700	700	800
A4 (%)		20	25
A5 (%)	20		
Charpy V at 20°C (J)	40	40	50

### Comments:

Interpass temp < 150 °C

All weld specimen.lateral expansion -20 °C > 0.5 mm.

## ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
2.5 x 300	60	100	2.5	142	0.59	69	1.4	38	27	1,2,3,4,6

**W** = Weight (kg / 100 electrodes)

**η** = Efficiency (g weld metal x 100 / g core wire)

**N** = Effective value (kg weld metal / kg electrodes)

**B** = Changes (number of electrodes / kg weld metal)

**H** = Deposit rate at 90% of max current (kg weld metal / hour arc time)

**T** = Fusion time at 90% of max current (s / electrode)

**U** = Arc voltage (V)

## OTHER DATA

Redrying: 350 °C, 2h.