

CLASSIFICATION

AWS A5.4 : E2595-15
 ISO 3581-A : E 25 9 4 N L B 42

TEMPERATURE RANGE

Pressurized parts : -50 ...+250°C
 Oxidation resistance : n.a

GENERAL DESCRIPTION

A fully basic all position "super duplex" electrode
 For welding Zeron 100 and other "super duplex" stainless steel grades
 Fully cored wire alloyed electrode (including W+Cu)
 High resistance to pitting and crevice corrosion, e.g. in seawater; PREN > 40
 High strength and reliable impact toughness
 Good weldability on DC+ polarity
 Only 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 + /-

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

C	Mn	Si	Cr	Ni	Mo	Cu	W	N	FN (acc.WRC 1992)
0.03	0.8	0.3	25.0	9.5	3.6	0.8	0.7	0.2	30-60

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Condition		0.2% Proof strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-V(J)	
					-20°C	-46°C
Required: AWS A5.4 ISO 3581-A Typical values	AW	not required min. 550 740	min.760 min. 620 920	min. 15 min. 18 24	not required not required 50	45

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	350	350	350
Unit: SRP	Pieces / unit	69	52	15
	Net weight/unit (kg)	1.4	1.8	0.8

Jungo® Zeron 100X

EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	EN 10213-4	Mat. Nr	ASTM / ACI A276/A351/A473	UNS
Regular and super duplex stainless steels					
	X2CrNiMoN25-7-4		1.4410		
	X4CrNiMoN27-5-2		1.4460		
	X2CrNiMoN22-5-3		1.4462	2205	S31803
		GX6CrNiMo24-8-2	1.4463		
	X2CrNiMoCuWN25-7-4		1.4501	CD-4MCu Zeron 100	S32550 S32760

Super duplex stainless steel grades: chemical composition approximately:

24-27% Cr, 6-9% Ni, 3-4% Mo, 0.10-0.25% N alloyed also with Cu and/or W

CALCULATION DATA

Sizes Diam. x length (mm)	Current range (A)	Current type	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	45-70	DC+	74	101	0.62	21.0	78	1.64
3.2 x 350	70-100	DC+	84	219	0.88	33.8	49	1.64
4.0 x 350	100-130	DC+	80	304	1.4	50.8	32	1.61

*Stub end 35mm

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions					
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G	PF/5Gup
2.5	60A	60A	60A	60A	60A	60A
3.2	85A	80A	90A	80A	80A	80A
4.0	120A	120A	120A	100A	100A	100A

REMARKS / APPLICATION ADVICE

Welding with Heat-Input max. 1.5 kJ/mm

Interpass temperature max. 100°C