

## SUPERCORE Z100XP

FCAW

## RUTILE ALL-POSITIONAL FLUX CORED WIRE FOR SUPERDUPLEX STEELS

## PRODUCT DESCRIPTION

Flux cored wire made with an alloyed stainless steel sheath and rutile flux system.

Supercore Z100XP combines easy operability, high deposit quality for both positional pipework and downhand welding.

Metal recovery is about 90% with respect to the wire.

## CLASSIFICATIONS

AWS A5.22M	E2594T1-4
ISO 17633-B	TS 2594-F M21 1
Approvals	DNV

## ASME IX QUALIFICATION

QW432	F-No 6
QW442	A-No 8

## CHEMICAL COMPOSITION (WELD METAL WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	W	N	PRE <sub>N</sub>	PRE <sub>W</sub>
Min.	--	0.5	--	--	--	24.0	8.5	3.5	0.5	0.5	0.2	40	40
Max.	0.04	1.5	1.0	0.02	0.03	26.0	10.0	4.0	1.0	1.0	0.3	--	--
Typical	0.03	1.0	0.5	0.005	0.02	24.5	9.1	3.7	0.6	0.6	0.22	41	42

Pitting resistance equivalent PREN = Cr + 3.3Mo + 16N

Pitting resistance equivalent PREW = Cr + 3.3Mo + 1.65W + 16N

## ALL-WELD MECHANICAL PROPERTIES

As welded	Min.	Typical
Tensile strength [MPa]	760	880
0.2% proof strength [MPa]	550	690
Elongation [%] 4d	15	27
5d	18	25
Reduction of area [%]	--	33
Impact ISO-V(I) -20°C	--	40
-50°C	--	32
Hardness [HV]	--	280
[HRC]	--	26

## TYPICAL OPERATING PARAMETERS

Shielding gas: 80%Ar-20%CO<sub>2</sub> at 20-25l/min. Proprietary gases may be used but argon should not exceed 85%.

Current: DC+ve ranges as below for Ar-20%CO<sub>2</sub>:

Diameter (mm)	range	typical	stickout
1.2	120 – 250A, 22 – 34V	180A, 29V	15 – 20mm

## PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
1.2	15	S300	SCZ100XP-12

## FUME DATA (WT % TYPICAL)

Fe	Mn	Ni	Cr <sup>3</sup>	Cr <sup>6</sup>	Cu	F	OES (mg/m <sup>3</sup> )
14	4	1	11	3	<1	10	1.0

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to [www.specialalloys.eu](http://www.specialalloys.eu) for any updated information.