

## Exaton 22.12.HTR

Exaton 22.12.HTR is a covered electrode with rutile-acid coating. It gives a chromium-nickel weld metal that is scaling resistant in air up to 1150°C (2102°F). Spray transfer gives a bead with a finely rippled surface. There is little spatter and very good slag removal. Exaton 22.12.HTR is intended primarily for welding the high temperature steels Alleima 253MA (1) and Avesta 253MA, UNS S30815. It is also suitable for welding other high temperature steels, such as AISI 309 and EN 1.4828. The core wire used contains Ce. (1): 253MA is a trademark owned by Outokumpu Stainless.

### Specifications

<b>Classifications</b>	EN ISO 3581-A : E Z 23 10 N R 12
<b>Approvals</b>	CE : EN 13479 UKCA : EN 13479

Approvals are based on factory location. Please contact ESAB for more information.

<b>Welding Current</b>	AC, DC+
<b>Ferrite Content</b>	FN 4- 10
<b>Alloy Type</b>	CrNi stainless
<b>Coating Type</b>	Rutile

### Tensile\_Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
<b>ISO</b>			
As Welded	540 MPa	720 MPa	35 %

### Charpy Testing

Testing Condition	Testing Temp	Impact Value
<b>ISO</b>		
As Welded	20 °C	55 J

### Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.06	6	1.5	0.007	0.021	10.5	23	0.14	0.08	0.16

### Typical Weld Metal Analysis %

FN WRC-92	PREN
6	25

### Deposition Data

Diameter	Amps	Volts	Efficiency (Per)	Fusion time per electrode at 90Per I max	Deposition rate at 90Per
2.5 x 300.0 mm	50-90 A	26 V	55 %	44 sec	0.8 kg/h
3.2 x 350.0 mm	70-110 A	25 V	55 %	66 sec	1.0 kg/h
4.0 x 350.0 mm	85-150 A	26 V	56 %	77 sec	1.3 kg/h