

## INOX R318

Electrodes MMA [SMAW]

Stainless and high alloyed steels

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 3581-A : E 19 12 3 Nb R 12 DIN 8556 : E 19123Nb R 12 AWS A-5.4 : E 318-17 W.Nr. : 1.4576		Power generation industry Constructions & Engineering Metallurgy (Steelworks) Petrochemical and chemical industry

- Rutile Nb stabilized electrode for welding Ti or Nb stabilized steels and non-stabilized stainless steels.
- The deposit is resistant to intergranular corrosion up to 400°C, oxidation up to 800°C, and is also very resistant to cracking at high temperatures.
- Recommended for the petrochemical industry.

### Application

Used for acid, salt and alkali tanks, valves and pipes in the chemical, textile, dye and paper industries.

### Base material

PN	DIN	W.Nr.	AISI/ASTM
0H17N12M2T	X5CrNiMo17122	1.4401	316
	X5CrNiMo17133	1.4436	316
H17N13M2T, H18N10MT	X6CrNiMoTi17122	1.4571	316Ti
	X6CrNiMoNb17122	1.4581	316Cb, 318
	X10CrNiMoTi1812	1.4573	316Ti
	X10CrNiMoNb1812	1.4583	316Cb
	G-X6CrNiMo1810	1.4408	A157
	G-XCrNiMoNb1810	1.4581	318
	G-X 10CrNiMo18 9	1.4410	A 351 GradeCF3M
00H17M14M2	X2 CrNiMo17 13 3	1.4404	316L
	X2 CrNiMo18 12	1.4435	316L
	X6 CrNiMoNb17 12 2	1.4580	316Cb
	X5 CrNiMo17 13	1.4449	318

### Typical chemical composition %

C	Si	Mn	Cr	Ni	Mo	Nb
<0,04	<1,00	0,70	18,50	11,50	2,70	>8x%C

### Typical mechanical properties

Yield strength Re [N/mm <sup>2</sup> ]	>350
Tensile strength Rm [N/mm <sup>2</sup> ]	>550
Elongation A5 [%]	>25
Impact energy Kv [J]	>47J (20°C) /
Coating type	rutile
Ferrite content	FN = app. 10
Welding current	

| **Redrying** | 300 - 350°C / 2 h |
| **Additional description** | Austenitic microstructure with ferrite content at the level of 4-14 FN. Interpass temperature about 150°C |

#### **Welding parameters and packing**

<b>Ø</b>	<b>Length [mm]</b>	<b>Welding current [A]</b>	<b>Weight of packet [kg]</b>	<b>Weight of carton [kg]</b>
2,0	300 /	30-50	1,0	6,0
2,5	300 /	50-85	1,4	8,4
3,2	350 /	70-125	1,5	9,0
4,0	350 /	110-165	1,5	9,0
5,0	350 /	165-230	1,5	9,0

#### **METALWELD-FIPROM POLSKA spółka z o.o.**

ul. Mikołajczyka 57, 41-200 Sosnowiec

+48 (32) 297 75 50 - 51

+48 (32) 297 75 88

[export@metalweld.pl](mailto:export@metalweld.pl)