



elektrode jesenice d.o.o.

Classification:

EN 1600: E 19 12 3 Nb B 22
DIN 8556 : E 19.12.3 Nb B20+
AWS A-5.4: E 318-15
EN ISO 3581-A: E 19 12 3 Nb B 22
W.Nr.: 1.4576

INOX B 19/12/3 Nb

Description and application:

Austenitic basic, Nb-stabilised electrode for welding nonstabilised and stabilised stainless steels.

Resistant to intergranular corrosion up to 400°C, resistant to oxidation up to 800°C and good hot cracking resistance of the weld metal.

Base materials:

	DIN:	W.Nr.:	AISI/ASTM:
Chemical corr.resistant steel:	X 5 CrNiMo 17 12 2	1.4401	316
	X 5 CrNiMo 17 13 3	1.4436	316
	X 6 CrNiMoTi 17 12 2	1.4571	316Ti
	X 6 CrNiMoNb 17 12 2	1.4581	316Cb
	X 10 CrNiMoTi 18 12	1.4573	316Ti
Alloyed steel castings:	X 10 CrNiMoNb 18 12	1.4583	316Cb
	G-X 6CrNiMo 18 10	1.4408	A157
	G-X 5 CrNiMoNb 18.10	1.4581	316L

Coating type:

Basic

Welding current:

DC +

Welding positions:



Redrying temperature:

300°C / 2h

Ferrite content: FN ≈ 9

Typical all weld metal properties:

Chemical composition, wt %:

C	Si	Mn	Cr	Ni	Mo	Nb
≤0.04	0,6	1	19	11	2,7	> 8 x %C

Mechanical properties:

Yield strength	R _{el} / Rp 0.2:	> 400	MPa(N/mm ²)
Tensile strength	Rm:	> 600 – 750	MPa(N/mm ²)
Elongation	A5:	> 30	%
Impact energy	Av :	> 47 J (+20°C)	typical: 70J

Welding and packing data:

Approvals:	Welding parameters			Packing		
	φ mm	Length mm	Current A	Weight/ Packet Kg	Weight/ carton kg	Weight/ 1000 pcs kg *
/	2	250/300	40 – 60	3.5/3.4	14/13.6	
	2.5	300	50 – 80	4	16	18.1
	3.25	350	80 – 110	4.5	18	35.4
	4	350	110 – 140	4.5	18	53.6
	5	350	140 – 180	4.5	18	81.8

* approximate data