

## Ni-base electrode

### Classification

AWS A5.11M-97 : ENiCrMo-6  
 ISO 14172-03 : E Ni 6620 (NiCr14Mo7Fe)

### General description

Basic high recovery all position electrode for welding low temperature steels  
 Recovery of approximately 150%, providing high deposition rates  
 Especially developed for welding 9% Ni steel  
 Linear expansion coefficient equivalent to that of 9% Ni steel  
 Excellent impact toughness at -196°C, reliable 0.2%-Yield strength  
 Weldable on AC as well as DC+ polarity  
 Also available in vacuum sealed Sahara ReadyPack® (SRP)

### Welding positions



### Current type

AC / DC electr. +

### Approvals

GL	TÜV
5680	+

### Chemical composition (w%), typical, all weld metal

C	Mn	Si	Ni	Cr	Mo	Nb	W	Fe
0.05	3.0	0.4	68	13	6	1.5	1.5	6

### Mechanical properties, all weld metal

	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
					+20°C	-196°C
Required: AWS A5.11M-97		not required	min. 620	min. 35	not required	
ISO 14172-02		min. 350	min. 620	min.32	not required	
Typical values	AW	475	725	40	100	90

### Packaging, available sizes and identification

Unit: SRP	Diameter (mm)	Length (mm)			
		2.5	3.2	4.0	5.0
	Length (mm)	350	350	350	450
	Pieces / unit	62	52	27	10
	Net weight/unit (kg)	1.7	2.2	1.8	1.5

Identification Imprint: NiCrMo-6 / Nyloid 2 Tip colour: white

Nyloid 2 SRP: rev. EN 15

# Nyloid 2 SRP

## Materials to be welded

Material type	EN 10028-4	W.Nr.	ASTM
9% Ni steel	X8Ni9	1.5662	A353/A353M
9% Ni steel			A553/A553M Type I
8% Ni steel			A 553/A553M Type II
5% Ni steel	X12Ni5	1.5680	
3.5%Ni steel	12Ni14	1.5637	A333/A333M Grade 3

## 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	70 - 95	AC	54	128	1.3	26.5	53	1.39
3.2 x 350	85-145	AC	63	229	1.8	43.6	31	1.37
4.0 x 350	120 - 190	AC	73	355	2.4	65.8	21	1.33
5.0 x 450	180 - 280	AC	94	764	3.7	133.5	10	1.35

\* stub end 35 mm

## Welding parameters, optimum fill passes

Welding position: Diameter (mm)	PA/1G Current (A)	PB/2F	PC/2G	PF/3G up	PE/4G	PF/5G up
2.5	90	80	90	85	80	80
3.2	145	140	135	115	100	100
4.0	140	150	155	130		
5.0	210	215				