



# SELECTARC B76

## High Strength Basic Electrode

### Classification

AWS A5.5 : E 10018-D2

ISO 18275A : ~ E 62 4 Mn 1 NiMo B 42 H5

### Characteristics

Basic coated low hydrogen electrode highly resistant to cracks , recommended for welding of castings, fine grain steels and steels with increased yield strength (Rm up to 800MPa). Welds of high security, very low deffusable hydrogen content < 5 ml / 100g. Regular fusion, Stable arc, Low spatters, Good removal of the slag and Uniform weld bead.

### Applications

High strength low alloy steels and castings

#### Base materials

EN - Designation	GS-30CrMoV64	
	E500T* , E550T* . E620T* , E690T*	StE 500* , 590* , 690* .
	1.7220 ; 1.7225	34 CrMo4, 42CrMo4
	15CD4* . 25CD4* . 35CD4* .	
ASTM	A487-4Q	A497 4B , 4D, 6A
ANSI	4130	

### Typical Weld Metal Composition (%)

C	Si	Mn	Ni	Mo	P	S	Fe
0.10	0.40	1.80	0.80	0.35	0.025	0.020	base

### All Weld Metal Mechanical Properties

Conditions	UTS	YS	Elg A=5d(%)	Impact (kv)	
	Rm (MPa)	Re (MPa)		Temp. °C	J
PWHT	750	650	25	+ 20 - 50	100 45

PWHT : After heat treatment at 620°C / 1hr

### Welding Current & Instructions

Electrode	ØxL (mm)	2.5 x 350	3.2 x 350	4.0 x 450	5.0 x 450
Current	(A)	70 - 90	110 - 120	140 - 160	180 - 200

Redrying of electrode for 2 hrs. at 350°C prior to welding. Eventual Preheating depends on the thickness and nature of the steel (100°C). Interpass temperature : < 200°C. Thermal stress relieving heat treatment is advised in most cases (600°C/2h).



1G/PA



2F/PB



2G/PC



3G/PF



4G/PE

= + ~ 70V

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