

# AUTOMELT B41

## AWS Classifications:

With Wire	AWS 5.17/5.23	AWS 5.17M/5.23M
Automelt EH10K	F7A8/P8 - EH10K	F48A6/P6 - EH10K
Automelt EH14	F7A6/P6 - EH14	F48A5/P5 - EH14
Automelt EA3	F8A4 - EA3-A3	F55A4 - EA3-A3

**Approvals:** ABS

## Characteristics:

Automelt B41 is Fluoride-basic type of submerged arc welding with high basicity. It is neutral flux, ideal for applications involving the alloyed wire, like the Automelt FC series. Due to the neutral design of the flux, pickup/burn-off of Si & Mn from the wire is almost negligible. The high basicity ensures excellent sub-zero impact properties, as well as good resistance to aging.

Basicity	Wall Neutrality No.	Grain Size (mm)
3.1*	5	0.25-1.60

\*-As per Boniszewski

## Flux Analysis:

SiO <sub>2</sub> + TiO <sub>2</sub>	CaO + MgO	Al <sub>2</sub> O <sub>3</sub> + MnO	CaF <sub>2</sub>
10 %	35 %	20 %	30 %

## All Weld Metal Chemistry, wt% (Typical):

With wire	C	Mn	Si	S	P
Automelt EH10K	0.06	1.40	0.30	<0.025	<0.030
Automelt EH14	0.06	1.50	0.20	<0.025	<0.030
Automelt EA3	0.07	1.70	0.30	<0.025	<0.030

## All Weld Metal Mechanical Properties:

With AWL wires	Condition	UTS MPa	YS MPa	E% (l=4Xd)	CVN Impact, J			
					-30 °C	-40 °C	-50 °C	-60 °C
Automelt EH10K	AW	>510	>420	>24	>90	>70	>50	>30
Automelt EH10K	PW	>480	>400	>24	--	>90	>70	>50
Automelt EH14	AW	>510	>420	>24	>60	>50	>30	--
Automelt EH14	PW	>480	>400	>24	>70	>60	>40	--
Automelt EA3	AW	>550	>470	>22	>60	>40	--	--

AW - As Welded; PW - After Post weld heat treatment of 620 °C for 1 Hr

## Typical Applications:

Automelt B41 is used mainly for the applications involving highest quality of SAW welds, including for nuclear, power, petrochemical and offshore sectors. When used with unalloyed and low alloyed wires makes this flux suitable for welding of pressure vessels, steam generators, reactor safety tanks, etc.

## Packing Data

	Net Wt. Kgs.
Poly lined paper bags (Standard)	30
Steel Drums (on demand)	100



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