

Welding Electrode

Materials and Shape of Electrode

Materials of Electrode

The list below shows rough standards to choose materials for an electrode, though it may be changed according to its surface treatment or dimensions.

Electrode Number	Alloy Components	Electric Conductivity (IACS%)	Applicable Metal
02 (equivalent to RWMA-2)	Cu-Cr-Zr	around 80%	iron, nickel, chrome and their alloys
03 (equivalent to RWMA-3)	Cu-Ni-Be	around 50%	phosphor bronze, brass
00	pure Mo	around 31%	tinned copper wire, solder plating copper wire
11 (equivalent to RWMA-11)	Cu (30%)-W (70%)	around 46%	noble metal
13 (equivalent to RWMA-13)	pure W	around 32%	copper
20	Cu-Al2O3	around 80%	Battery Tab

RWMA stands for The Resistance Welding Manufacturing Alliance.

IACS stands for International Annealed Copper Standard.

Example: **EH - 250 - 02**
Shape Dimension Material

Shape of Electrode

Electrode Number	Shape	Applicable Weld Head	Electrode Number	Shape	Applicable Weld Head
EH-062-02A		NA-121 NA-141	EH-250-02A EH-250-03		
EH-125-02A EH-125-03 EH-125-20			EH-250-00C EH-250-11A EH-250-13C		
EH-125-00C EH-125-11A EH-125-13C		NA-121 NA-122 NA-123 NA-141 NA-142 NA-143 NA-60A	EO-250-02A EO-250-03		
CC Alloy (3.2φ)			EO-250-00B EO-250-11A EO-250-13C		NA-122 NA-123 NA-124 NA-142 NA-143 NA-60A NA-43
EP-711-00F EP-711-02F			EH-250-02S		
EP-406-00F EP-406-02FA		NA-131 NA-132 NA-141 NA-142	EO-250-00SB EH-250-13S		
Molybdenum Square Bar			CC Alloy (6.4φ)		

Example: **EH - 250 - 02**
Shape Dimension Material

■ Shape of Electrode

Electrode Number	Shape	Applicable Weld Head	Electrode Number	Shape	Applicable Weld Head
EH-80-00		NA-124	EL-125-02A EL-125-03		NA-54A
EH-60C			EL-125-00B EL-125-11A EL-125-13A		
EH-F-00		NA-125	EL-54LA		NA-54LA
EH-F-02			EH-57A-02A		NA-57A
EH-200-00A		NA-126			
EH-200-02A					
EH-125-02E EH-125-20E		NA-141 NA-142 NA-143			