



Manufacturers of Custom Welding Lines for Resale  
www.selectrode.com

# SELECTRODE 1201

Cobalt Grade 1 Electrode

## INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.13 E CoCr-C      EN 14700 E Co3  
DIN 8555: E20-UM-55-CTZ

## FEATURES & APPLICATIONS

Hardest cobalt based electrode with very low coefficient of friction.

Extremely smooth running Alloy 1 Cobalt electrode

- Extra hardness for maximum edge retention.
- Slag is self releasing.
- Weld deposits are unusually fine rippled and uniform.
- Available bare as product code 1291.
- Special technology also performs on AC current.

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** Cobalt based austenite with some carbides and other complex phases.

**Flux Color:** Grey

**Tip Color:** Orange

C	Mn	Si	Cr	Fe	Mo	Ni	W	Co
2.1	.8	1.0	30	4	1	3	12.5	Bal.

## TYPICAL MECHANICAL PROPERTIES

**Undiluted Weld Metal****Maximum Value Up to:**

Hardness

Room Temperature: 68°F (20°C)

Rockwell C57

Work Hardened

Rockwell C60

Elevated Temperatures: 750°F (400°C)

Rockwell C49

1110°F (600°C)

Rockwell C45

1475°F (800°C)

Rockwell C42

1620°F (900°C)

Rockwell C40

**WELDING CURRENT & INSTRUCTIONS****Recommended Current:** AC or DC Reverse (+)

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Minimum Amperage	65	80	100
Maximum Amperage	85	110	130

**Welding Techniques:** Preheat massive parts to 570°F (300°C). Minimize amperage during welding.

**Welding Positions:** Flat, horizontal

**Deposition Rates:**

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Settings	Recovery Rate
3/32 (2.5)	14" (350)	.80 oz. (22g)	20 (44)	19 (42)	75	130%
1/8 (3.25)	14" (350)	1.2 oz (33g)	13 (29)	14 (31)	95	130%
5/32 (4.0)	14" (350)	1.56 oz (44g)	10 (22)	11 (24)	115	130%

**APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS**

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Length (mm)	14" (350)	14" (350)	14" (350)
Electrodes / lb	18	11	7
Electrodes / kg	40	25	16