



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

# SELECTRODE 1251 Chromium Carbide

## INTERNATIONAL CLASSIFICATION

AWS/ASME NONE

EN14700 E Fe15

DIN 8555: E10-UM-60-GRZ

## FEATURES & APPLICATIONS

For protecting most iron base surfaces against severe abrasive wear and moderate impact.

Chromium carbide electrode for economical smooth overlays

- Ripple free surface doubles "grip resistance" to fine abrasive media.
- 3/32(2.5mm) and 1/8(3.2mm) provide position capability.
- Special formula totally eliminates the "Worm Tracking" type porosity common to this alloy group.
- Also available as a special tubular MIG wire as product code 7251. (see page 13.0)

## ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

**Microstructure:** In the as-welded condition, the microstructure consists of an austenitic alloy matrix (bulk hardness RC57) and chromium/complex carbides (hardness RA 77).

**Flux Color:** Grey

C	Ni	Mn	Cu	Si	S	P	Cr	Fe
3.8	.14	.13	.09	.59	.019	.017	34	Bal.

## TYPICAL MECHANICAL PROPERTIES

**Undiluted Weld Metal**

Hardness

Wear Co-efficient

**Maximum Value Up to:**

Rockwell C58-62

Vickers 670-700

2 %

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

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Minimum Amperage	65	110	160	210
Maximum Amperage	95	140	200	270

**Welding Techniques:** Use a stringer or wide weave technique. Deposit a maximum of 2 to 3 passes to achieve full hardness.

**Welding Positions:** Flat, Horizontal (smaller diameters can be used out of position)

**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)	.76 oz (21g)	21 (47)	32 (71)	80	180%
1/8 (3.25)	14" (350)	1.1 oz (31g)	14 (30)	23 (50)	120	180%
5/32 (4.0)	14" (350)	2.7 oz (76g)	6 (14)	17 (37)	175	180%
3/16 (5.0)	14" (350)	4 oz (112g)	4 (9)	13 (29)	250	180%

**APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS**

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Length (mm)	14" (350)	14" (350)	14" (350)	14" (350)
Electrodes / lb	15	9	6	4
Electrodes / kg	33	20	13	9