# *Soudotec* 8105-8108-8112

### HARDFACING

#### DESCRIPTION

A continuous, flexible cord composed of a nickel-cored wire and a thick coating of Ni-Cr-B-Si alloy matrix wrapped around a high content of melted and crushed tungsten carbide particles. Recommended for hardfacing carbon steel, low alloy steel, high alloy steel, stainless steel and cast iron parts subjected to severe abrasion and corrosive acids and/or agents.

### CHARACTERISTICS

- 65% tungsten carbide content
- Formation of a compact and homogeneous deposit that bonds to the base metal
- Easy application with an oxyacetylene torch
- Good corrosion and heat resistance, up to 450°C (840°F)

Deposit rate scale										
ABRASION										
IMPACT										
HEAT										
CORROSION										
	1	L 2	2 3	3 4	4 5	5 6	5 7	7 8	3 9	) 10

Hardness (matrix): Tungsten carbides: Deposit thickness: 40 HRC 2000 - 2500 HV

1 pass (3 mm (1/8") thickness) or 2 passes (5 mm (3/16") thickness)

## TYPICAL APPLICATIONS

Protection of new and/or worn parts. Miscellaneous applications in industries faced with severe abrasion problems: ceramics, foundries, cement factories, paper mills, drilling, etc. Augers, valves, molds, elbows, pallets, scrapers, grader blades, couplings, rakes, dust collector fans, etc.

#### PROCEDURE

Clean the surface with a grinding wheel to remove any trace of grease, oil, dirt or oxides since these products only adhere to clean surfaces. Preheat the surface to be hardfaced to about 400-450°C (752-842°F) until the steel becomes light blue. Adjust the torch to obtain a low carburizing flame. Push the flexible cord through the handle to keep the hand well clear of the flame. Braze the cord on the surface to be hardfaced (cord and torch at a 45° angle with respect to the surface). Do not overheat the workpiece in order to prevent the carbide particles from coming up to the surface of the deposit. For improved adherence, we recommend applying a layer of **Fusetec** metal powder or **Soudotec F081** flux before depositing the cord.

#### WELDING PARAMETERS

Diameter: Type of flame: Granulometry: 6.3 mm (1/4'') Low carburizing 8105 = Fine particle

5.0 mm (3/16'')

8105 = Fine particles 8108 = Medium particles 8112 = Coarse particles

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Specialized welding alloys and technology. For technical assistance or for ordering:



info@fsh-welding.ca www.fsh-welding.ca 2204, 46° avenue Lachine (MtI),Québec Canada H8T 2P3

Tél: 514.631.7670 1.800.361.9097