

# TUNGCAST FLOPPY



## CHARACTERISTICS

Tungcast Floppy is a nickel cored flexible rod coated with both fused tungsten carbide (FTC) and NiCrBSi developed for oxyacetylene welding. The deposited alloy consists of approximately 65% FTC and 35% NiCrBSi matrix with a deposit hardness of 45 HRc. The overlay is highly resistant to acids, bases and other corrosive media and excessive wear conditions. The rod has a low melting range of between 950 - 1050°C (1.742-1.922°F) and characteristically it wets easily and flows extremely well producing a smooth, clean welded surface.

## APPLICATION

Hardfacing of ferritic and austenitic steels (steel castings), overlaying mixer blades, screws & conveyors in the chemical, dye and food industries and can also be used for stabilizer blades in the petroleum industry.

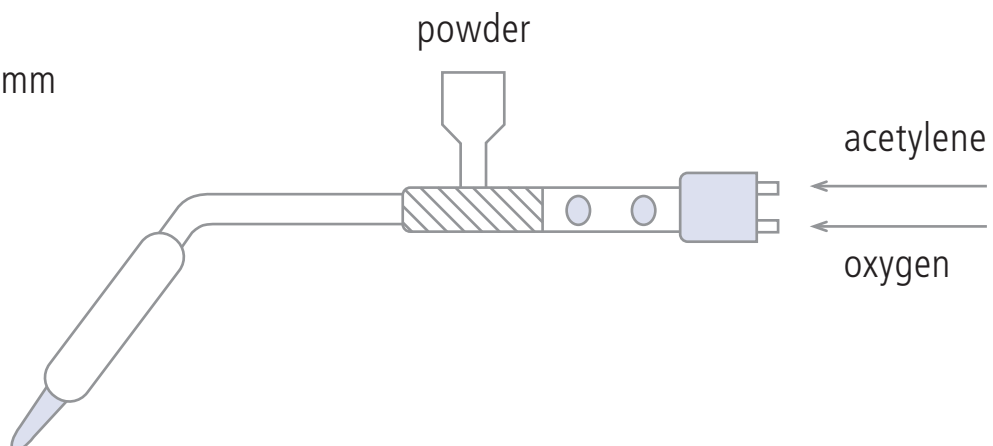
## PREPARATION AND PREHEATING

Every surface to be hardfaced with Tungcast Floppy must be clean and free of oxidation, dirt or other surface contamination. In some instances, a slight grinding operation might be necessary. All edges must be cleaned by grinding.

To increase the wettability and to avoid any oxidation during the hardfacing with Tungcast Floppy, apply a buffer layer of NiCrBSi powder of about 0.05mm thickness on the surface.



Preheating: 150°C  
Layer thickness: 0.05mm

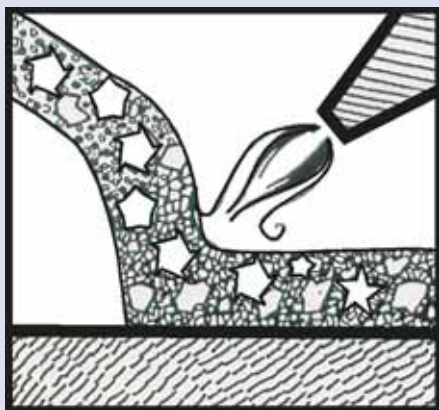


## DEPOSITING

- Preheat the part to about 300 - 350°C.
- Heat a small area to allow the buffer layer to melt, then apply Tungcast Floppy, and when it flows it will carry with it the tungsten carbide particles. The torch flame must form an angle of about 45°.
- At first all edge applications should be done, then an additional centre pass may be added.

## REMEMBER

- The flame must be directed onto the Tungcast Floppy Rod.
- The wire must be completely melted by the torch. The melting of the wire will transfer the proper bonding temperature to adhere permanently to the base material.



Our products and any recommended practices should be tested by the user under actual service conditions to determine their suitability for any particular purpose. The results obtained using this product / information are affected by variables such as welding procedure, base material composition, operating temperature, weldmet design, method of fabrication and service requirements which are beyond our control. It is the sole responsibility of the user to determine the serviceability of a structure using this product and the information contained in this data sheet. Please observe all appropriate safety regulations in force. The technical information given in this data sheet reflects the present state of knowledge. It does not form part of any sales contract as guaranteed properties of the delivered materials. Our delivery and sales conditions apply to all contracts included.



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