

AI-0777

Description and Applications

AI-0777 is an alloy comprising cast tungsten carbide particles in a Nickel Silver matrix, which is applied by the Oxy-Acetylene Brazing method. **AI-0777** provides the maximum wear resistance to high stress abrasion in components operating at high pressures.

AI-0777 is easily applied using conventional equipment. The Nickel Silver matrix melts easily (melting temperature approximately 850°C) and the Tungsten Carbide particles are evenly dispersed in a homogeneous weld deposit.

Applications include: Developed initially for stabiliser applications in the drilling industry many other applications have been found for this product. **AI-0777** has been used successfully in:

Industry	Applications
Brick and clay	Knives, Scrapers
Oil	Stabilizers, Fishing Tools
Mining	Scrapers, Blades, Teeth
Dredging	Teeth, Scrapers
Waterwell Drilling	Bits, Cutters

Typical Weldmetal Analysis

Zn	Cu	Ni	Wc
16.00	20.00	4.00	60.00

Mechanical Properties of Weldmetal

	As Welded
Cast Tungsten Carbides	2000-2400 HV

Welding Instructions

Surface to be coated should be clean and free of dirt, grease, scale etc. For ease of application a thin layer of nickel silver (AI-1106) should be used to tin the surface prior to applying the **AI-0777**. Use a neutral flame, but with plenty of heat, so the carbide chips can be moved around in the molten pool before it sets.

CAUTION: Be sure not to overheat the deposit as once the nickel silver has evaporated and the carbide has become oxidised it is difficult to recover the bond.



Available Sizes

1/16" x 1/8"	1/8" x 3/16"	3/16" x 1/4"
1/4" x 5/16"	5/16" x 1/8"	3/8" x 7/16"

Disclaimer

All figures in this datasheet should be considered indicative only. No guarantee is made as to their accuracy.
All figures subject to change without notice. Batch analysis is available for all products sold. Should you require any further information, please contact us at sales@alloysint.com.au

