

# AG-40

UNIVERSAL ALLOY TO BE USED IN THE FOOD PROCESSING INDUSTRY. SILVER TYPE ALLOY WITH NO CADMIUM. LOW FUSION POINT. TO BE USED WITH FERROUS AND NON FERROUS METALS

CLASSIFICATION A.W.S: BAg-4

IDENTIFICATION: NAVY BLUE TIP

**APPLICATIONS:** For fine flow applications with alloy steel and carbon steel, stainless steel, tungsten carbide, copper and copper alloys, nickel, and nickel alloys. It is to be used when a low fusion point alloy is needed. Ideal for lap T- welds, for flanges and for square butt welds. Excellent for delicate parts with small metal thicknesses and for parts which have been submitted to heat treatment. To be used with gas torch, oven or induction unit. The resulting weld is cadmium-free which makes it the right choice to weld steel and vessels in the food processing industry. Cadmium has proved to be hazardous to human health since it can even cause poisoning

**CHARACTERISTICS:** Fine flow silver type alloy. Good resistance to corrosion and suitable electrical conductivity. Resulting welds are resistant, ductile and leakproof. It is specially suitable for long butt welds or for large square butt welds. **YOU NEED NOT MELT THE BASE METAL WITH THIS WELDING ROD. USE THE LOWEST POSSIBLE HEAT ON THE BASE METAL.** It is ideal to weld metals of a different kind together with no distortion risks.

**PROCEDURE:** Parts to be welded should be carefully degreased to allow the alloy to flow freely. Square butt welds and lap welds should have a 0.04mm - 0.08 mm gap ( 0.0015" to 0.003") to attain maximum resistance. Dip the welding rod tip in S-20 flux and put some flux on the areas to be welded before you start. Fix the parts to be welded with clamps if necessary and heat well with a neutral flame. Keep the flame cone between 1" to 3" away from the base metal and continue heating till the flux melts down. Moving the torch from one side to the other, heat the alloy till it starts flowing completely through the joint. This will result in a smooth weld fillet on both sides. Let the part cool down and remove the flux traces.

<b>TENSILE RESISTANCE:</b>	6,468 Kg/ CM 2 ( 90,000 PSI )
<b>WORKING TEMPERATURE:</b>	621 °C
<b>SPECIFIC GRAVITY:</b>	9.11 Grs/Cm3
<b>ELONGATION:</b>	34 %
<b>KIND OF FLAME:</b>	NEUTRAL

FILLER METAL CHEMICAL ANALYSIS %				AVAILABLE SIZES
Ag	Cu	Zn	Ni	1.6 mm - 1/16"
39-41	29-31	26-30	1.5-2.5	2.4 mm - 3/32"
				3.2 mm - 1/8"