



UNIWELD IND. DE ELETRODOS LTDA

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COMMERCIAL NAME: ESSEN A3

Review: 01

STANDARD: AWS A5.10: 2012 ER4043 / ASME SFA5.10 ER4043 Edition 2015

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Chemical characteristic of the deposited metal	Si	Fe	Cu	Mn	Mg	Zn	Ti	Al
	4.50 to 6.00%	0.8% Max.	0.30% Max.	0.050% Max.	0.050% Max.	0.10% Max.	0.20% Max.	Rest

APPLICATION FIELD	This material may be rod-shaped or wire, for welding Tig process, Mig and oxy-acetylene, for welding of aluminum and its alloys in pieces of equipment for processing and handling of food, boats for navigation, silos, bus bodies and vans, household utensils, drums and tanks, pipes, fittings, rail wagons, suitable for chemical, petrochemical, aerospace, automotive, food, boiler. base metal 3003 and 6061.	
TECHNICAL CHARACTERISTICS	Wire or aluminum rod mostly used for welding and brazing of various aluminum alloy with high silicon content providing greater flowability in the weld pool resulting in an improved yield in solderability, achieving an excellent characteristic in flowability and penetration, this material is not intended to apply to parts that are subsequently anodised.	
OPERATIONAL CHARACTERISTICS	For oxyacetylene: Use flame fuel	
	welding position: All the positions	
	Gas used: Pure argon or He + to 0 - 5% Ar	
	Type of current: Tig CA, Mig / Mag CC +	
	Diameter of rod (mm)	1.60, 2.50, 3.25, 4.00, and 5.00
	Diameter wire (mm)	1.00, 1.20, 1.60
Current Range (A)	45-55, 55-65, 65-70	
Voltage (V)	13-15, 15-18, 15-22	
WELDING TECHNIQUE	Cleaning by mechanical process, not using sandpaper or emery preparing the joint to be welded, chamfering parts with greater thickness 4 mm, indirectly heating the workpiece in the brazing process using flux on the area to be welded and observe when the flow is signal which is liquid aluminum is to receive the hot rod, that in the case of oxy-acetylene welding, TIG and MIG process does not require flux.	