CEWELD ULTIMET Alloy Tig

certilas® THE FILLER METAL SPECIALIST

TYPE

Cobalt-based solid welding wire for hardfacing / rebuilding

APPLICATIONS

Wire can be used to weld ULTIMET wrought products and to overlay and clad carbon and low-alloy steels. The weld deposits harden very quickly by cold working. In addition, it is very easy to deposit a "crack-free" layer without a butter layer. The filler metal finish on the MIG wire is for a smooth feeding through welding equipment and reduces tip wear in contact tips.

PROPERTIES

-ULTIMET wires easily produces crack-free weld deposits (over-matching weld overlays, weld inlays, and claddings). -It is easier tot weld with ULTIMET wire than traditional cobalt-based alloys, allowing multiple layer build-ups with no pre-heating needed. -ULTIMET wire produces deposits wich harden quickly through peening, machining, power hammering, burnishing, or hard particle impingement. This hardness creates a tough, ductile, wear-, corrosion-, and high-temperature resistant surface. The hardness of 30% cold-worked wrought product is approximately RC50. -ULTIMET deposits exhibit extremely high resistance to metal to metal galling and seizing. -The pitting resistance of ULTIMET alloy in chloride solutions is equal to that of HASTELLOY C-22HS alloy, and is greater than that of C-276 alloy.

CLASSIFICATION

SUITABLE FOR

•Valve component overlay •"Make/break" seal welds in threades unions •Weld overlays to marine riser tensioners, shafts, and larger hydraulic systems pistons •Weld overlay to u-bends, piping and valves used in conveying sour crudes containing abrasives •Slurry, rock, and acid tumblers & mixers •Impellers •Fiberglass manufacturing

APPROVALS

WELDING POSITIONS

TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)

Co	Cr	Ni	Mo	Fe	W	Mn	Si	N	C
Rem.	26	10	5	3	2	0.5	0.08	0.08	0.08

MECHANICAL PROPERTIES

Heat Treatment	$R_{P0,2}$ (MPa)	Rm (MPa)	A5 (%)	Hardness
As Welded		917	13	HRc

REDRYING

Not required

GAS ACC. EN ISO 14175

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