



# CEWELD ULTIMET Alloy Tig

**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 to weld with ULTIMET wire than traditional cobalt-based alloys, allowing multiple layer build-ups with no pre-heating needed. -ULTIMET wire produces deposits which 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 HASTELLOYS C-22HS alloy, and is greater than that of C-276 alloy.

**CLASSIFICATION**

**SUITABLE FOR** •Valve component overlay •"Make/break" seal welds in threaded 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** No Approvals Found

**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

**ALL WELD MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> MPa	R <sub>m</sub> MPa	A <sub>5</sub> (%)
As Welded /		917	13

**REDRYING TEMPERATURE** Not required

**GAS ACCORDING EN 14175** I1