

NICKEL ALLOY WELDING WIRE

ABSTRACT OF THE DISCLOSURE

In accordance with a first embodiment of the present invention, a nickel alloy welding wire is made from a material comprising from about 4.75 to 5.25 wt% chromium, from about 5.5 to 5.8 wt% aluminum, from about 5.6 to 6.2 wt% tungsten, from about 8.0 to 8.3 wt% tantalum, from about 1.7 to 2.1 wt% molybdenum, from about 9.5 to 10.5 wt% cobalt, from about 2.8 to 3.2 wt% rhenium, from about 0.07 to 0.30 wt% carbon, from about 0.02 to 0.04 wt% boron, from about 0.08 to 0.12 wt% zirconium, from about 0.08 to 0.12 wt% yttrium, from about 1.0 to 1.5 wt% hafnium, and the balance nickel. In a second embodiment of the present invention, a nickel alloy welding wire is made from a material comprising from about 4.75 to 5.25 wt% chromium, from about 5.5 to 5.8 wt% aluminum, from about 5.6 to 6.2 wt% tungsten, from about 8.0 to 9.0 wt% tantalum, from about 1.7 to 2.1 wt% molybdenum, from about 9.5 to 10.5 wt% cobalt, from about 2.8 to 3.2 wt% rhenium, from about 0.18 to 0.30 wt% carbon, from about 0.02 to 0.04 wt% boron, from about 0.08 to 0.12 wt% zirconium, from about 0.08 to 0.12 wt% yttrium, from about 1.0 to 1.5 wt% hafnium, and the balance nickel.