



WASHINGTON ALLOY'S Quality
Management System is
Certified to ISO 9001:2008
Cert # 05-R0925

NICKEL BRONZE ALLOY

U.S. ALLOY CO.
dba Washington Alloy
7010-G Reames Rd.
Charlotte, NC 28216
www.weldingwire.com



American Welding Society
Sustaining Company Member



ALLOY DESCRIPTION AND APPLICATION:

Washington Alloy Nickel Bronze (also referred to as Manganese Bronze) is similar to Naval Bronze; however iron, manganese and nickel have been added to the analysis. The iron and manganese increases the hardness and strength of the weld deposit while nickel ensures uniform distribution of iron in the deposit. Nickel Bronze is primarily used to braze or oxyacetylene weld steel, cast iron, brass and bronze. Also used for building-up wearing surfaces and bearings. Flux required. Use a boric acid or borax commercial flux. A neutral or slightly oxidizing flame should be used. Preheating may be required for some applications.

CHEMICAL COMPOSITION, Weight Percent:

Copper	56.0-60.0	Iron	0.25-1.20
Zinc	Balance	Manganese	0.01-0.50
Phosphorus	0.25 max	Tin	0.80-1.10
Silicon	0.04-0.15	Nickel	0.20-0.80
Total Others Elements	0.50 max including Pb of 0.05 and Al of 0.01 on each		

PHYSICAL DATA: Typical

Solidus	1590°F (866°C)
Liquidus	1620°F (882°C)
Brazing Range	1620-1800°F (880-982°C)
Color	Yellow Brass
Hardness as welded	80-110 Brinell
Tensile Strength	60-78,000 psi

AVAILABLE SIZES:

TCU NB/ =Bare Rods of 1/16, 3/32, 1/8, 5/32, 3/16, 1/4
Other sizes available – please inquire

SPECIFICATIONS:

AWS A5.8/A5.8M

ASME SFA5.8

CDA C68000

RBCuZn-B

RBCuZn-B

NOTICE AWS A5.27 HAS BEEN CANCELLED



EAST COAST

7010-G Reames Rd
Charlotte, NC 28216
Tel (888) 522-8296
Fax (704)598-6673

GULF COAST

4755 Alpine Drive #100A
Stafford, TX 77477
Tel (877) 711-9274
Fax (281)313-6332

WEST COAST

8535 Utica Ave
Rancho Cucamonga, CA 91730
Tel(800)830-9033
Fax (909)291-4586

dc2-2013

Warehouse Distribution Center – Dayton, Ohio

Head Office – Puyallup, Washington

Washington Alloy Company believes that all information and data given is correct. Use this information to assist in making your own evaluations or decisions and this information should not be mistaken as an expressed or implied warranty. U.S. ALLOY CO. assumes no liability for results or damages incurred from the use of any information contained herein, in whole or in part.