

# COMWELD COMCOAT N

PRODUCT DATA SHEET

SELF FLUXING NICKEL BRONZE FILLER ROD





# **GAS AND TIG WELDING CONSUMABLES**

### COMWELD COMCOAT N

- Flux Coated Nickel Bronze Rod.
- High Strength, Excellent Wear Resistance.
- High Strength Braze Welding of Steels and Cast or Malleable Irons.
- Fusion Welding of Copper Based Alloys of Similar Composition.
- Pink Flux Colour for Instant I.D.

### **CLASSIFICATIONS:**

AS 1167. Parts 1 & 2:	R Cu Zn-D
AWS/ASME-SFA A5.8/A5.27:	RB Cu Zn-D

### **JOINING PROCESS:**

Gas (Fusion and Braze) Welding only.

### **TYPICAL WELD DEPOSIT PROPERTIES:**

Weld Metal Tensile Strength	560 MPa
0.2% Proof Stress	250 MPa
Elongation	18%
Hardness	170 HV
Approximate Melting Point	910°C
Weld Metal Density	8.39 gms / cm <sup>3</sup>



### **DESCRIPTION AND APPLICATIONS:**

Comweld Comcoat N ( sometimes termed Nickel Silver) is a 'self fluxing' Nickel bronze filler rod recommended for the high strength braze welding of steel and cast or malleable irons.

It is also an excellent choice for the fusion welding of Copper based alloys of similar composition and for the brazing of Nickel based alloys where high temperatures are allowable.

Because of its high strength and excellent wear resistance, Comweld Comcoat N is regarded as the number one maintenance brazing alloy. It produces joints in mild steel which, when tested to destruction, fail in the parent metal. Its superior wear resistance makes it ideal for the build up of worn ferrous metal components including gear teeth, valve seats, bearings and shafts etc.

### PROCEDURE FOR BRAZE WELDING:

- 1. Thoroughly clean all areas to be joined.
- 2. Adjust flame to slightly oxidising.
- 3. Preheat the edges to be joined to a dull red colour. Melt the end of the flux coated rod and, at the same time, heat both edges of the job to an equal degree. Ensure that 'tinning' has taken place on the required joint surfaces.
- 4. Continue adding the rod to build up the joint to the desired size and shape.
- Allow the joint to cool and remove the flux residue with a wire brush or by immersion in a dilute acid solution followed by a water rinse.

### **TYPICAL ROD ANALYSIS:**

Zn:	43.5%
Mn:	0.20%
Si:	0.20%
Ni:	10.0%
Cu:	Balance

## **COMPARABLE CIGWELD PRODUCTS:**

Comweld Nickel Bronze Bare Rod AS 1167.1 & .2: R Cu Zn-D

## **PACKAGING DATA:**

ROD SIZE (MM)	PACK Weight / Type	EASYWELD Handi Pack	BLISTER PACK	APPROXIMATE Rods / Kg	PACK Part no.
2.4 x 500			3 Rod Blister Pack	-	322208
2.4 x 500		10 Rod Handi Pack		-	322029
3.2 x 750	2.55kg Pack			-	321215

