NEW PRODUCTS INFORMATION

AFAQ ISO 9001 VERSION 2000

tubular brazing wires

FP SOUDAGE ODAM

www.fpsoudage.com

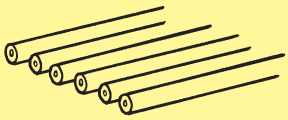
a member of FSH WELDING GROUP

aluminium

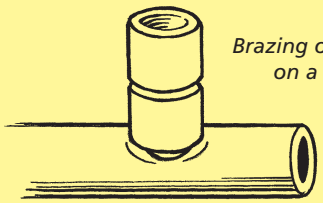
tubular brazing wires

Products

- **TBW HARASIL NC 7.5**
- **TBW HARASIL NC 10**
- **TBW HARASIL NC 12**



Tubular brazing wires in straight length



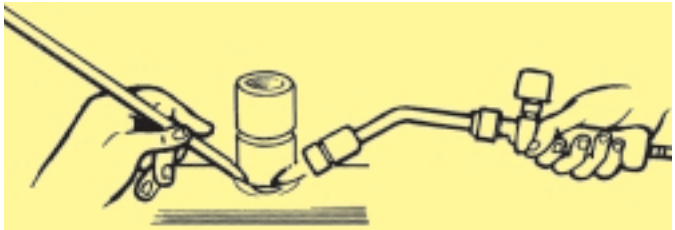
Brazing of a valve on a tube

Description

The products are seamless tubular flux cored wires used for joining aluminium and aluminium alloys. They are used most frequently in heat-exchanging and cooling equipment for the household goods and automobile industries.
The wires consist of an aluminium alloy with varying degrees of silicon. They are ductile, malleable and conduct both heat and electricity well. The silicon provides varying degrees of hardness and resistance to corrosion. As a result, these products have different melting temperatures. The flux used here is a product from the F.P. Soudage range, called ALUNOX NC, a non-corrosive flux made from aluminium and potassium fluorides.

Application

- Automobile manufacturers
- Air-conditioning unit manufacturers
- Refrigerator manufacturers
- Radiator and heater unit manufacturers
- Furniture manufacturers



Manual brazing with tubular brazing wire

Advantages

- **Made from seamless tubular wire**
  This ensures consistent flux to wire ratio and is especially important in the fabrication of pre-forms. Competing products are made from folded sheets and flux may be lost during fabrication or during transport. Our flux cored tubular brazing wires are made from seamless tubes, hence no loss of flux.
- **Less flux required**
  As there is no loss of flux, there is more filler metal allowing greater drawing capacity and greatly increasing the various diameters of wire available to our clients.
- **Improved joint strength**
  More filler metal in our aluminium tubular brazing wires mean greater strength to the joint.
- **Less labour required**
  Traditional applications require the flux to be applied first then the wire. By combining flux and filler metal, application of our aluminium tubular brazing wires require only one process, saving both time and effort.
- **Improved quality of work**
  The consistent flux to wire ratio of our aluminium flux tubular brazing wires reduces wastage of both materials in the production process. Our clients have reported better efficiency and better quality of output.
- **No post-braze cleaning required**
  Our aluminium tubular brazing wires contain ALUNOX NC, a non-corrosive flux. As a result there is no cleaning required after brazing.
- **Less water treatment cost**
  Without post-braze cleaning, there is also less water contamination which decreases your company's water treatment costs.
- **Increased savings = more profit**
  With our aluminium tubular brazing wires, you save time, labour, material and treatment costs. These savings contribute to increased profit.

Characteristics

PRODUCTS	% of Al	% of Si	FLUX	Melting °C
TBW HARASIL NC 7.5	92.5	7.5	Non-corrosive	600 - 620°C
TBW HARASIL NC 10	90.0	10.0	Non-corrosive	590 - 610°C
TBW HARASIL NC 12	88.0	12.0	Non-corrosive	580°C

zinc-aluminium

tubular brazing wire

Product

- **TBW ZINAL 4**

Description

Product in this category is seamless tubular flux cored wire used for soldering aluminium, stainless steels and other alloys. It is used most frequently in heat-exchanging and cooling equipment for the household goods and automobile industries.

TBW ZINAL 4 is made from seamless tubes of zinc-aluminium alloy packed with non-corrosive flux, a product from the F.P. Soudage range, called ALUNOX NCS, made from aluminium and caesium fluorides.

Application

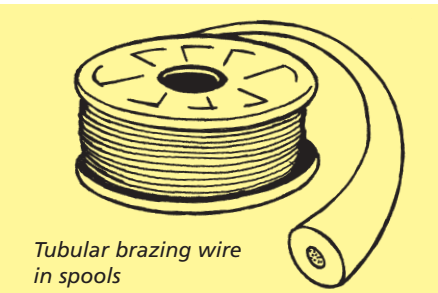
- Automobile manufacturers
- Air-conditioning unit manufacturers
- Refrigerator manufacturers
- Radiator and heater unit manufacturers

Advantages

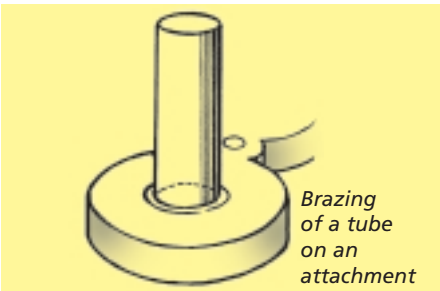
- **Lower active temperature**
  Our zinc-aluminium tubular brazing wires have a much lower melting temperature than the metals they are used to join. This results in two important aspects:
  1. Safety aspect
  2. Savings aspect
- **Safety Aspect**
  Our zinc-aluminium tubular brazing wires are active around 440°C to 460°C. This is considerably lower than the melting temperatures of aluminium or stainless steel. Hence, there is less risk of melting or deforming the base metal.
- **Heat Savings Aspect**
  For the same reason as above, our zinc-aluminium tubular brazing wires do not require as much heating. You save on heating costs.
- **Less labour required**
  Traditional applications require the flux to be applied first then the wire. By combining flux and filler metal, application of our zinc-aluminium tubular brazing wires require only one process, saving both time and effort.
- **Improved quality of work**
  The consistent flux to wire ratio of our zinc-aluminium flux tubular brazing wires reduces wastage of both materials in the production process. Our clients have reported better efficiency and better quality of output.
- **No post-braze cleaning required**
  Our zinc-aluminium tubular brazing wires contain ALUNOX NCS, a non-corrosive flux. As a result there is no cleaning required after brazing.
- **Less water treatment cost**
  Without post-braze cleaning, there is also less water contamination which decreases your company's water treatment costs.
- **Increased savings = more profit**
  With our zinc-aluminium tubular brazing wires, you save time, labour, material and treatment costs. These savings contribute to increased profit.

Characteristics

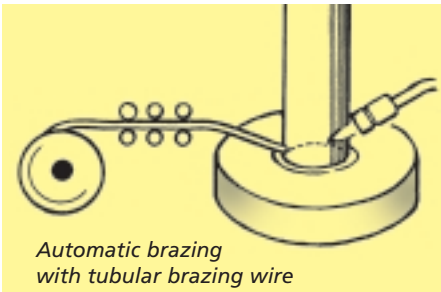
PRODUCT	% of Zn	% of Al	FLUX	Melting °C
TBW ZINAL 4	98.0	2.0	ALUNOX NCS	440 - 460°C



Tubular brazing wire in spools



Brazing of a tube on an attachment



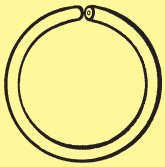
Automatic brazing with tubular brazing wire

silver

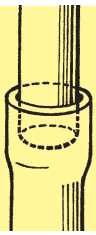
tubular brazing wire

Product

- **TBW ODARGENT 80-4**



Tubular brazing wire in preforms



Brazing of 2 tubes

Furnace or induction brazing with pre-formed tubular brazing wire

Description

Product in this category is seamless tubular flux cored wire used for high speed silver-brazing and silver braze-welding. It is used most frequently for steel and copper piping in combustible gas installations, and reparation or maintenance work for taps and drill bits.

TBW ODARGENT 80-4 is made from seamless tubes of ODARGENT 80-4 filler metal packed with BORINOX flux. Wire has good fluidity when melted while flux has excellent wetting properties.

Application

- Automobile industry
- Aeronautical industry
- Household electrical goods manufacturers
- Steel and copper piping
- Reparation and maintenance use on treated steels

Advantages

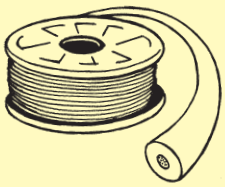
- **Made from seamless tubular wire**
  This ensures consistent flux to wire ratio and is especially important in the fabrication of pre-forms. Competing products are made from folded sheets and flux may be lost during fabrication or during transport. Our flux cored tubular brazing wires are made from seamless tubes, hence no loss of flux.
- **Less labour required**
  Traditional applications require the flux to be applied first then the wire. By combining flux and filler metal, application of our silver tubular brazing wires require only one process, saving both time and effort.
- **Improved joint strength**
  More filler metal in our silver tubular brazing wires mean greater strength to the joint.
- **Less flux required**
  As there is no loss of flux, there is more filler metal allowing greater drawing capacity and greatly increasing the various diameters of wire available to our clients.
- **Improved quality of work**
  The consistent flux to wire ratio of our silver flux tubular brazing wires reduces wastage of both materials in the production process. Our clients have reported better efficiency and better quality of output.

Characteristics

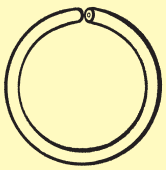
PRODUCT	% of Ag	Others	FLUX	Melting °C
TBW ODARGENT 80-4	40.0	Zn, Cu, Cd	BORINOX	590 - 730°C

GENERAL PACKAGING
All products are available in the following presentation:

RODS (5 kg/packet)
Ø 1.0 - Ø 5.0 mm in wire diameter.
Rods are sold in 500 mm lengths.
Different lengths available on request.



SPOOLS (10 kg/spool)
Ø 1.0 - Ø 3.0 mm in wire diameter.
Spools are sold in D300 form.
Different spools available on request.



RINGS (1000 rings per packet)
Ø 1.0 - Ø 3.0 mm in wire diameter.
Ø 5.0 - Ø 20.0 mm in ring interior diameter.
OTHER PRE-FORM SHAPES
Oval, clip, band-rings...

CONTACT INFORMATION
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