



Welded Tubes, Aluminium, Copper & Brass  
for Radiator Systems

# Enfield Tubes



## About Us

Enfield Tubes is a leading international supplier of high frequency welded brass solder coated tube and cuprobrazed for high performance radiator applications.

We also supply copper, aluminium, brass and cupro-nickel products in all forms, for manufacture of heating and cooling cores and other heat transfer products.

Our extensive experience and ability to develop innovative services have allowed us to meet the growing demand for welded tubes, brazing products and cost effective alternative alloys. We provide a comprehensive range of lighter weight and corrosion resistant alloys to meet customer needs, guaranteeing the highest quality products.

## Products & Services

We stock an unrivalled range of coil, sheet, welded and bespoke tube in a variety of alloys and grades and are committed to providing a flexible and reliable service tailored to meet your needs. Our specialist in-house facilities allow us to shear coil and manufacture welded tubes to required sizes. This enables us to offer a versatile service to customers whether they require a couple of lengths of welded tube for a prototype or 10 pallets of sheet packed ready for same day despatch. Our renowned reputation is for providing exceptional products and services.

## Products

Enfield Tubes offers customers a full range of products for radiator, heat exchange and cooling systems from a single source; we work in partnership with our customers to provide and supply products to a unique specification, on time and to budget. As a trustworthy trading partner, all our material is fully traceable to approved and highly reputable sources guaranteeing total product security.

Through continuous improvement we are committed to providing outstanding operational excellence and have a registered Quality Management System that is approved to ISO 9001.

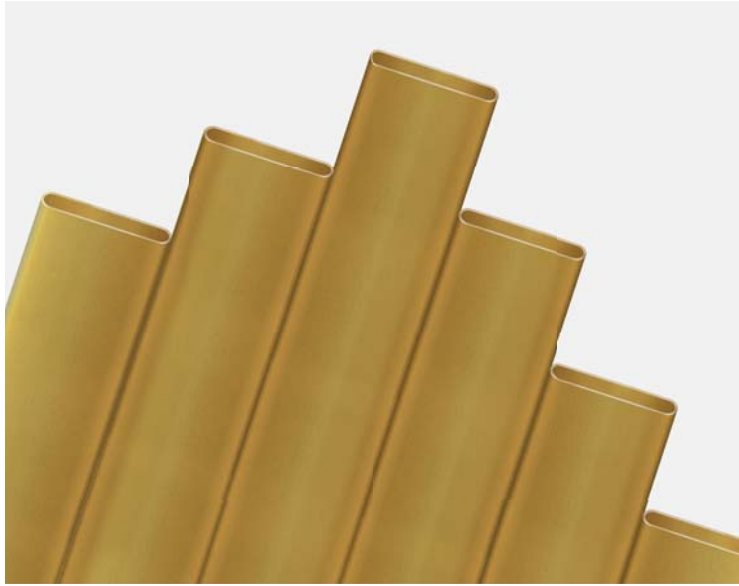


## Service Features

We are committed to the delivery of excellence and offer a wide range of quality services that include:

- Stockholding facilities, inventory control and material scheduling helping you to increase available space and reduce your stockholding overheads.
- Quick and efficient deliveries.
- Processing of coil, sheet and tube.
- Our experienced supply chain management takes the strain out of dealing with mills lengthy lead times and minimum order quantities.
- Our dedicated and experienced sales team can help you develop new products and ideas.

# Welded tubes



## Cuprobrazed Welded Tubes

Enfield Tubes manufactures flat-oval Cuprobrazed welded tubes. Cuprobrazed is a technology that uses both brass tubes and copper fins.

Cuprobrazed welded tubes are used for manufacturing a new generation of high-performance heat exchangers providing automotive manufacturers with a way to produce heat exchangers of high strength and durability.

## Brass Welded Tubes

Brass with its superior heat conductivity and durability continues to be the material of choice when heavy-duty performance is demanded. Flat-oval solder-coated brass tube is made from corrosion-resistant arsenical 70/30 brass with 25/75 solder (tin/lead).

Enfield Tubes processing capabilities include regular or plain brass, as well as dimpled profile tubes for low-flow applications. We offer a cut-to-length service enabling customers to buy finished components and eliminate in-house process scrap.



Please note the list below gives an indication of the range of tubes for which tooling is currently available. We are able to undertake bespoke orders, please contact Claire Lucas or John Perry on 01900 601166.

Cuprobrazed Welded Tubes	Dimension
Major axis (A)	12.5mm - 20.0mm
Minor axis (B)	1.9mm - 4.2mm
End diameter	1.8mm - 4.0mm
Wall thickness	0.15mm - 0.40mm

Brass Welded Tubes	Dimension
Major axis (A)	12.2mm - 20.0mm
Minor axis (B)	1.9mm - 4.2mm
End diameter	1.8mm - 4.0mm
Wall thickness	0.12mm - 0.40mm



## Lockseam

When it's a lockseam it's one of the rest...

- ✗ Re-work costs
- ✗ Seam leaks
- ✗ Process scrap
- ✗ Labour intensive
- ✗ Wasted metal
- ✗ Tube to header leaks



## Welded Tube

When it's an Enfield Welded Tube... it's the best.

- ✓ High strength
- ✓ Leak free
- ✓ Easy core assembly
- ✓ Faster core production
- ✓ Lower labour costs
- ✓ Improved productivity
- ✓ More radiators per tonne of tube
- ✓ Optimum tube to header fit



# Unclad Aluminium



## Unclad Aluminium

We have a wide range of alloys to satisfy the increasing demand for specialised lightweight construction materials. Our rolled products help make cars lighter for increased fuel-efficiency, offer corrosion resistance for greater durability in military applications, and give a high quality surface finish. We can supply unclad sheet and strip in a variety of forms, dimensions (widths and thicknesses) and tempers ranging from fully soft to fully hard, rolled or back-annealed.

“We have been using Enfield Tubes for over 20 years. The product is of a high quality but more importantly the staff are always supportive. This is what we appreciate”

Caribbean Radiator Works  
Saud  
Owner

## Unclad Aluminium



### Alloy Grades

We stock a range of non clad aluminium, most common include:

- 3003
- 3903
- 1050
- 8006
- 6082

Specialist alloys available on request.



### Temper

- Soft - O
  - H/H - H14
  - Hard H24
- Or to specified customer requirements.



### Coil Dimensions

- Widths from 2mm up to 610mm
- Thicknesses from 0.05mm up to 2mm
- Coil sizes as required



### Sheets

We stock a variety of sheet sizes to suit your requirements, sheets can also be cut to customer specifications.



### Tubes

O/D from:  
- 0.5mm up to 90mm  
Wall thicknesses to suit customer requirements.

# Clad Aluminium



## Clad Aluminium

Enfield Tubes offers a range of brazed aluminium sheet and coil for vacuum brazing applications and controlled atmosphere brazing applications (CAB). Maximum flexibility is produced by our versatile rolling equipment which is able to supply aluminium sheet to many different tempers. Our experienced and dedicated sales team can help assist whether you require a high strength magnesium containing core alloy or a high purity magnesium free core alloy and our stockholding facility maintains your stock levels to your optimise your business.

## Summary

Working in partnership with you to understand your unique requirements, our highly experienced team is committed to providing exceptional service and customer care enabling us to deliver quality products on time and to budget. To maintain our technological

superiority, we continually develop and invest in our stock, plant and equipment to secure a long-term and highly competitive future.

Enfield Tubes can shear widths in-house to specified coil sizes, cut blanks from sheet and manufacture bespoke tubes. We hold an unrivalled range of stock that ensures continuity of supply, high standards and superior products; our stockholding services are tailored to maximise your organisational efficiency reducing your overheads.

We have extensive experience in the design of cooling systems and components for a varied and diverse customer base proving that our expertise and experience can provide solutions for your most challenging thermal requirements.

## Clad Aluminium



### Alloy Grades

We stock a range of core and clad alloys, most common include:

- 3003
- 4045
- 4545
- 4343

Specialist alloys available on request.



### Temper

- Soft - O
  - H/H - H14
  - Hard H24
- Or to specified customer requirements.



### Coil Dimensions

- Widths from 2mm up to 610mm
- Thicknesses from 0.05mm up to 2mm
- Coil sizes as required



### Sheets

We stock a variety of sheet sizes to suit your requirements, sheets can also be cut to customer specifications.



### Clad Ratios

5% to 15% clad, one side or both, on either coil or sheet.



# Other Products



## Copper, Brass & Cupro-Nickel

Enfield Tubes specialise in the development of high strength high corrosion resistant alloys to exacting standards that conform to our rigorous in-house testing. We stock an extensive range of grades and tempers in coil, sheet and tube in a variety of forms to meet your specific requirements. Our skilled manufacturing processes supply superior products that make us a first choice for your heat and cooling systems.

Our stockholding facilities and inventory control means that your stock is held and monitored allowing you to reduce your stockholding overhead.



## Heat Exchange Tubes

We have the facility to manufacture tubes from a range of aluminium, copper, brass and cupro-nickel alloys for the heat exchanger industry.

With over a 100 years experience, we have a deep understanding and knowledge of the customers and products has contributed to the development of specialist tubes.

We manufacture seamless drawn, finned and bi-metallic tube for use in refrigeration systems, oil coolers and condensers that are available in a range of specifications and bespoke sizes. Tubes can be manufactured to Naval Engineering Specification NES 780 and to all other relevant International Standards, maintaining high quality components to exacting standards.

## Copper, Brass & Cupro-Nickel



### Alloy Grades

We stock a range of alloys, most common include:

- (CW004A)-C101
- (CW204A)-C106
- (CW508)-CZ108
- (CW505)-CZ106
- (CW707)-CZ126
- 70/30 (cupro-nickel)
- 90/10 (cupro-nickel)



### Temper

- Soft VPN 45-65 (copper)
  - Half hard VPN 65-95 (copper)
  - Full hard VPN 95- 140 (copper)
  - Soft VPN 80 max (brass)
  - half hard VPN 80-105 (brass)
  - Full hard VPN 130 min (brass)
  - Soft VPN 100 max (cupro-nickel)
  - Hard VPN 130 min (cupro-nickel)
- Or to specified customer requirements.



### Coil Dimensions

- Widths from 2mm up to 610mm
- Thicknesses from 0.05mm up to 2mm
- Coil sizes as required



### Sheets

- Common Standard Sizes:
- 2m x 1m
  - 8' x 4'
  - 4' x 2'
  - Thicknesses from 0.5mm up to 6mm
- Used for tube plates and baffles, sheets can be cut to customer requirements.



### Heat Exchange Tubes

- O/D from:
- 0.5mm up to 90mm
- Wall thicknesses to suit customer requirements.



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