

The Tube. It should be precise. It should look elegant. In fact, an all round performer...

**Quality that has radiated throughout
our production for over 30 years.**



“So how is it possible for seamless, drawn tubes to originate from an old brickworks?”



1977. All beginnings ... you know the rest.

The spark of an idea ignited into the passion to create a new, non-ferrous tube mill. Therefore an ideal site had to be found, but not any old building with four walls and a roof. Access to nearby water was necessary and the building had to have an optimum size and height. This was discovered by our founder Josef Barth in the unoccupied, old brickworks of Olpe.

It was time to roll up the sleeves. The pits to locate the furnace and the pickling baths had to be dug out by hand. Cables for electricity, channelling for water, ducting

The old brickworks seen more than 30 years ago.



for air and heating all had to be installed from first principles. It was planned, constructed, modified and finally tweaked in the "Schwäbisch" way.



2010. Today, more than 30 years later, seamless tubes are still produced in this converted, original building now with an area of over 6000 m². High-quality workmanship has been achieved through continuity and flexibility...

Shortly afterwards a basic, but effective tool shop followed.

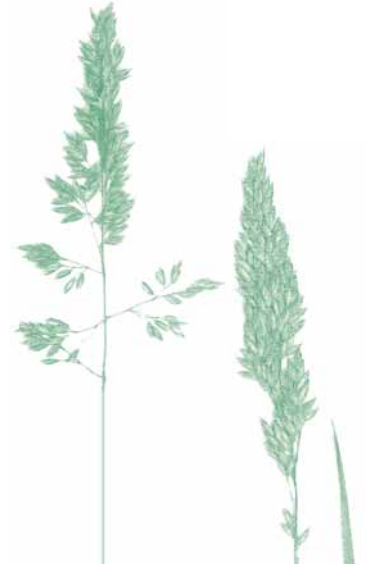
Apart from one second hand machine, Josef Barth and his two man team built the first five draw benches from scratch. Cranes were expertly planned, built and erected. The furnace was assembled and the pickling baths were welded.

"The rolled up sleeves were soon left outside, because daily we had to toil really hard" said Josef on reflection. Of major importance was the ability to commence polishing the tooling for our first tube drawing trials. In just under four months the first 100 kg of brass tubes were sold.



"Since stability and perseverance radiates throughout ..."

Josef Barth

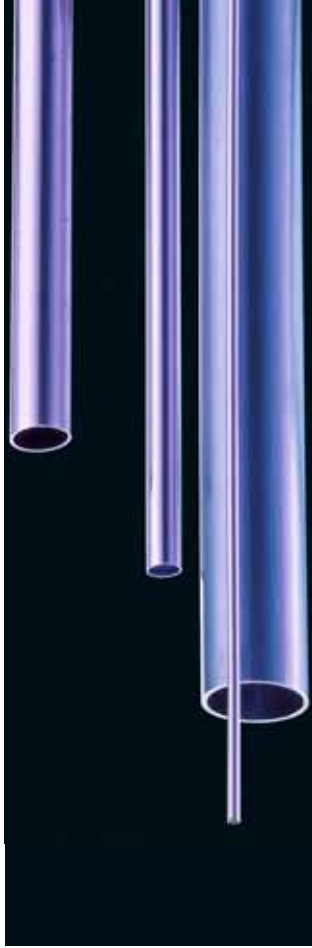


That is how a brickwork became a tube mill.

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In the beginning there was the circle...



It began with the circle. Everything. Without a circle, no wheel. Primitive man, bound together with nature, started his early craftsmanship by observing nature. Even the tube was 'discovered' by looking at the stems of grasses, reeds and rushes. It has been a very long journey from the first attempts at drawing a metal tube to the current time of precision tube production.

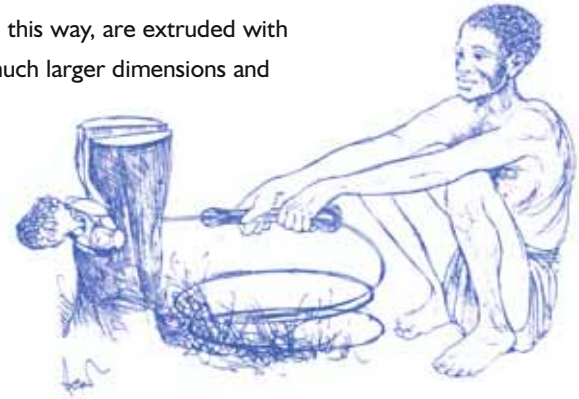
In early Africa lead or tin was drawn out of a heated lump of ore, through a perforated piece of iron, which was jammed into a split tree trunk. Much later during the

production has now developed considerably and looks very different when compared to these earlier attempts. The production of the pre-draw tube is performed by extruding a heated billet over a mandrel. Those alloys which

controlled micro-structure. We here at Barth Metallwerke, as a prerequisite to producing our high quality tubes, insist on the same high standards and fault free pre-draw tube from our suppliers.

... and very soon the tube

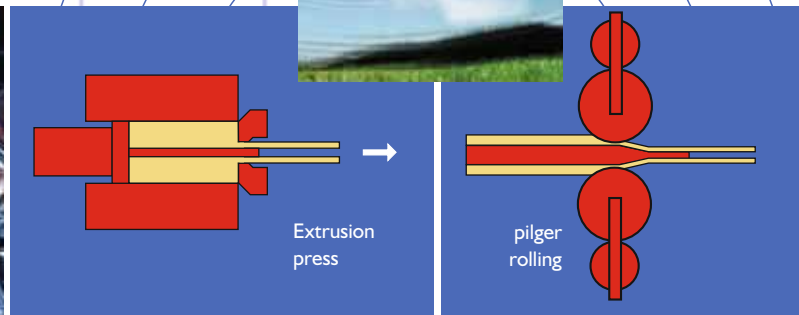
are more difficult to extrude in this way, are extruded with much larger dimensions and



15th Century, the universal genius that was Leonardo da Vinci invented the first drawing-machine for copper and lead profiles. Modern tube

then rolled down to the pre-draw tube size. The importance of the extruded tubes can be found in the purity of the alloy and the carefully

followed ...



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For further processing of our tube to the specific finished item, the know-how and experience of Barth Metallwerke is needed, especially through professional organisation and carefully controlled drawing sequences.

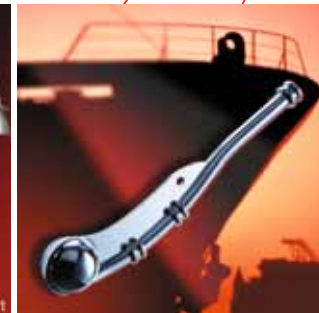
This begins with the selection of the raw material. The pre-draw material, in coils as used in wire drawing, is reduced in size to the next diameter with a thinner wall thickness. The tube work hardens during the drawing process and could tear if not softened, or annealed in a furnace. This is necessary for subsequent reductions.

There can be up to 20 draws

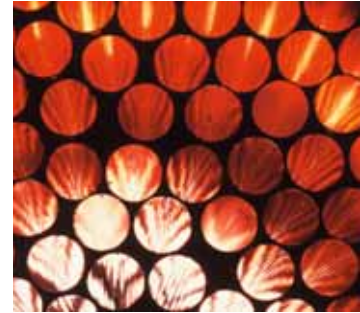
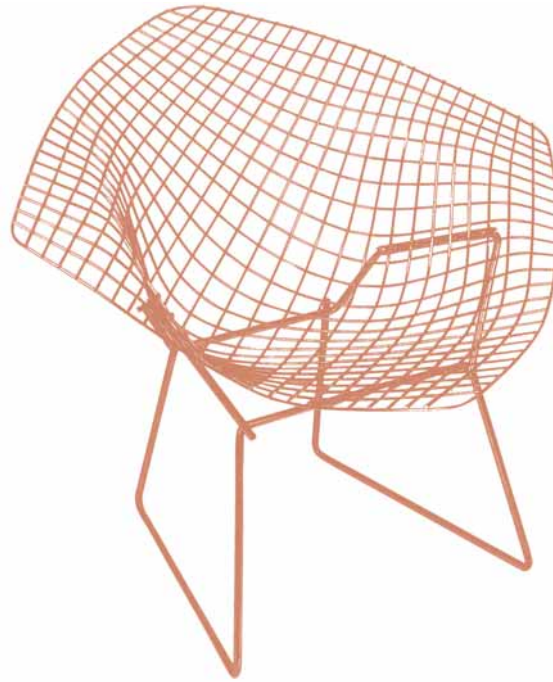
metre long pre-draw tube many kilometres of finished tube can result.

Further processing of the tubes is then carried out to fulfil each of our customer's requirements. This can be in finished coils, straightened random mill lengths or in cut lengths. The length can therefore be in very short cut lengths right up to 8 m mill lengths.

The Tube.



required to achieve the final dimension. Therefore, a number of anneals is necessary depending on the finished diameter and the wall thickness. So from a 12



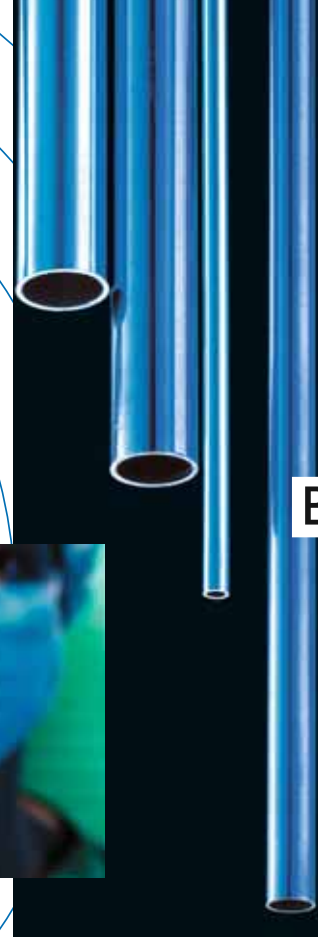
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**From small tube to canulars.
Small, smaller, the smallest.**



It does not matter which of the alloys is selected, but the objective in every case is absolute precision. This is how the company Barth Metallwerke has acquired an excellent reputation as a competent partner for precision and to satisfy stringent demands.

Brass, copper,

The high quality production of our seamless tubes has reached a wide range of industries.

These are only a few of them:

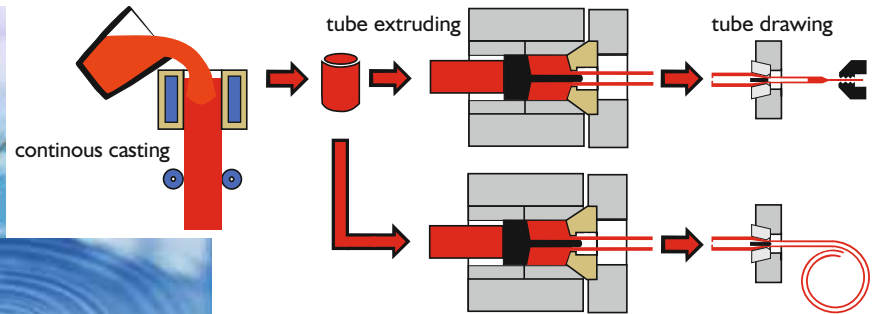
Tubes to produce rivets, spacer tubes and crimps, primarily for use in the electronics and automotive

industries, tubes for the bathroom and lighting industries, thin-walled tubes for pens and antennas, the smallest of tubes for medical and

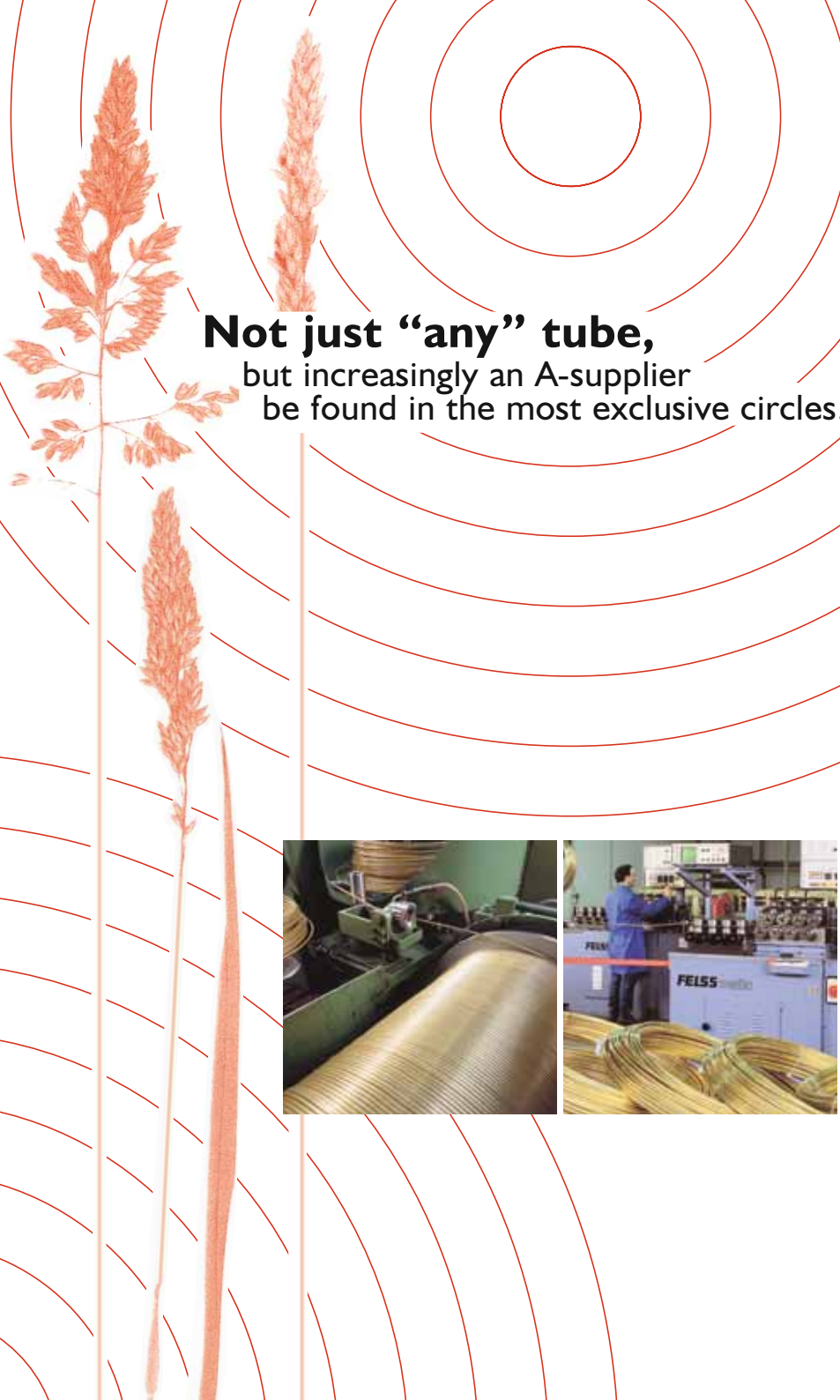
technical applications, instrumentation, watches and jewellery, models for the toy industry, furniture and finished goods (e.g. tubes for oil-coolers and tubes for general engineering use).



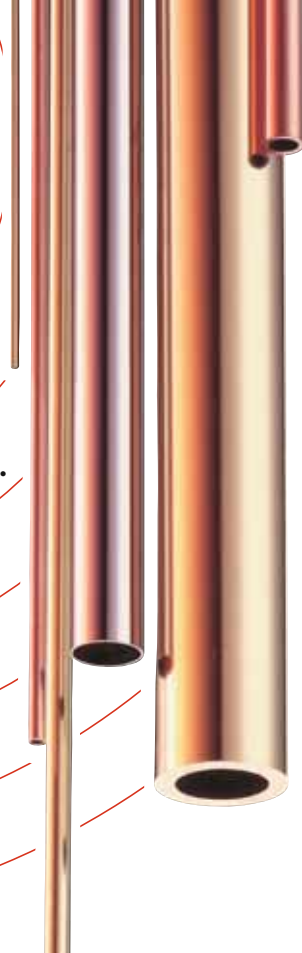
steel, aluminium and ever more alloys...



Quality that has radiated throughout our production for over 30 years.



**Not just “any” tube,
but increasingly an A-supplier
be found in the most exclusive circles.**



Quality work, which
radiates throughout:

Barth Metallwerke now

supplies its precision pro-
ducts to numerous and
differing customers through-
out Europe and all around
the world.

Our product range:

Copper tubes:

Cu-ETP (CW 004 A) E-Cu 57

Cu-DHP (CW 024 A) SF-Cu

Brass tubes:

CuZn15 (CW 502 L)

CuZn20 (CW 503 L)

CuZn30 (CW 505 L)

CuZn30As (CW 707 R)

CuZn33 (CW 506 L)

CuZn36 (CW 507 L)

CuZn37 (CW 508 L)

Leaded brass tubes:

CuZn37Pb0,5 (CW 604 N)

CuZn38PbI (CW 607 N)

Admiralty brass tubes:

CuZn28SnI (CW 706 R)

Copper-Nickel tubes:

CuNi10Fe1Mn (CW 352 H)

Range of dimensions:

Outside Ø: 0,80 - ca. 20 mm

Wall thickness:

0,20 - ca. 2,5 mm

Aluminium tubes:

Al99,5 (AW 1050A),

AlMgSi0,5 (AW 6060)

Range of dimensions:

Outside Ø: 2,0 - ca. 15 mm

Wall thickness: 0,20 - ca. 1

mm



For good quality
and efficiency of
production, which
radiates throughout
more than 30 years
we are proud to
associate our name
- now and in future:

Josef Berth
Katharina Berth

Bronze tubes:
CuSN8 (CW 453 K)

Mild steel tubes:
St30Al (E 215)
St35 (E 235)

Range of dimensions:
Outside Ø: 1,5 - 12 mm
Wall thickness: 0,20 - ca. 1 mm

Further alloys and dimensions
on request.
End finish:

Mechanical properties:
According to EN-Standard
and/or customer require-
ments. Full certification to
EN10204/3.1.B from our
extensive, in-house, test labo-
ratory. Lengths starting from
1 mm up to 8 m Coil weight
(depending on the alloy)
12-150 kg

Surfaces:
Bright as drawn or polished,
degreased, annealed, pickled.

Tolerances:
According to EN-Standards
or each customer's require-
ments.

Full details about our produc-
tion programm can be found
in our technical guidelines
book "Facts all about tubes"
which is obtainable on
request.



Delivery of small quantities
< 50 kg



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The latest technology, long term experience and qualified employees are our corner stones to offer optimal solutions according to customers requirements. Based on the confidence of our customers, our



Step by step to success ...

quality of work and flexibility after 30 years Barth Metallwerke now employs 65 employees in two mills.



By closely monitoring the markets and current technological trends Barth Metallwerke strives to utilise this



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