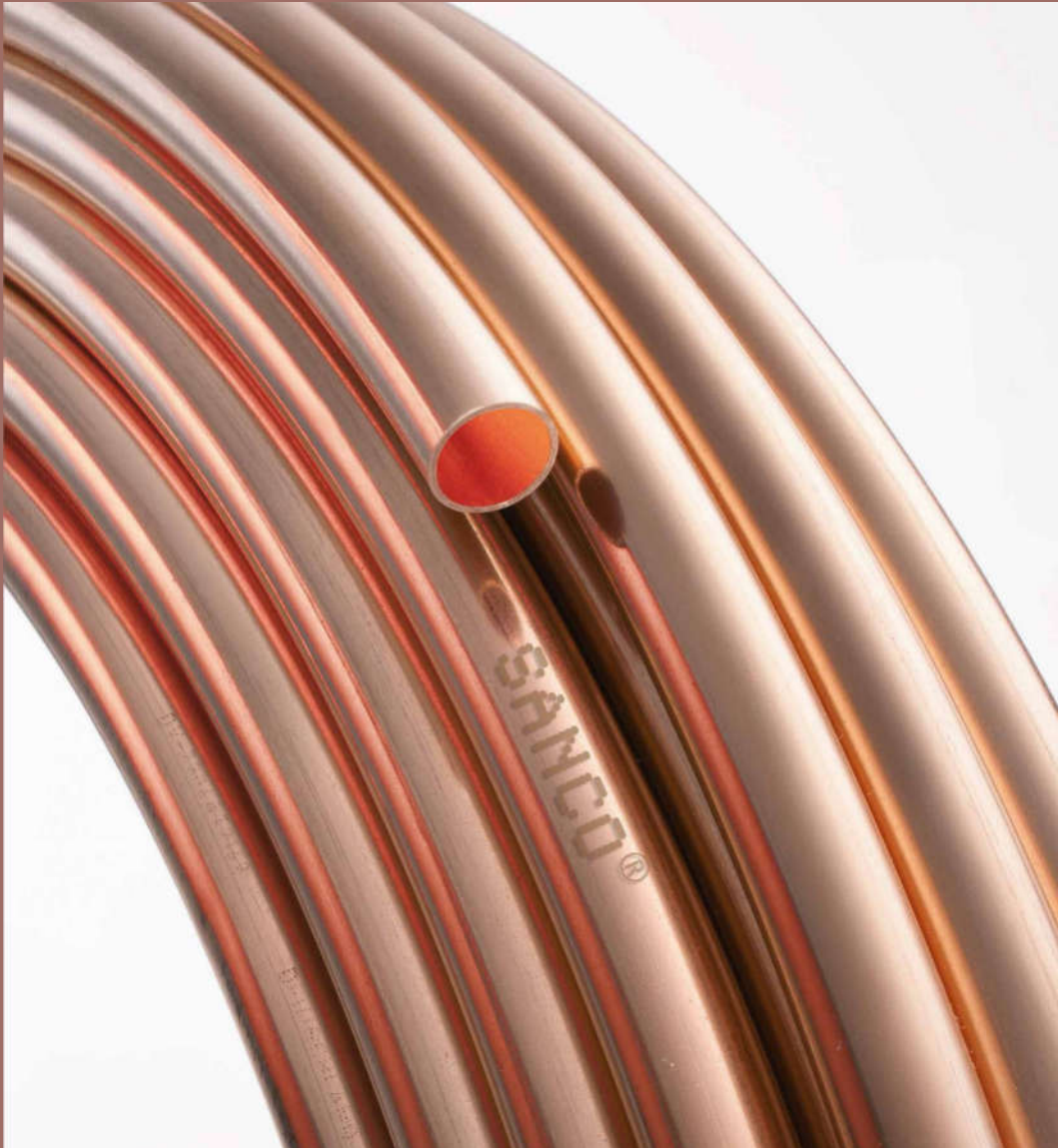


SANCO®

KME

Once you've used SANCO®
you'll never use anything else.

KME Germany GmbH & Co. KG
SANCO®
[GB]





KME SANCO® HALBHART

Contents

SANCO® - bright copper tubes **1** KME **2** Applications **4** Benefits **5** Availability **6** Hygiene **8**

Processing & Connection **9** Production/Quality Management **10** Training & Advice **11** Brand Quality **12**

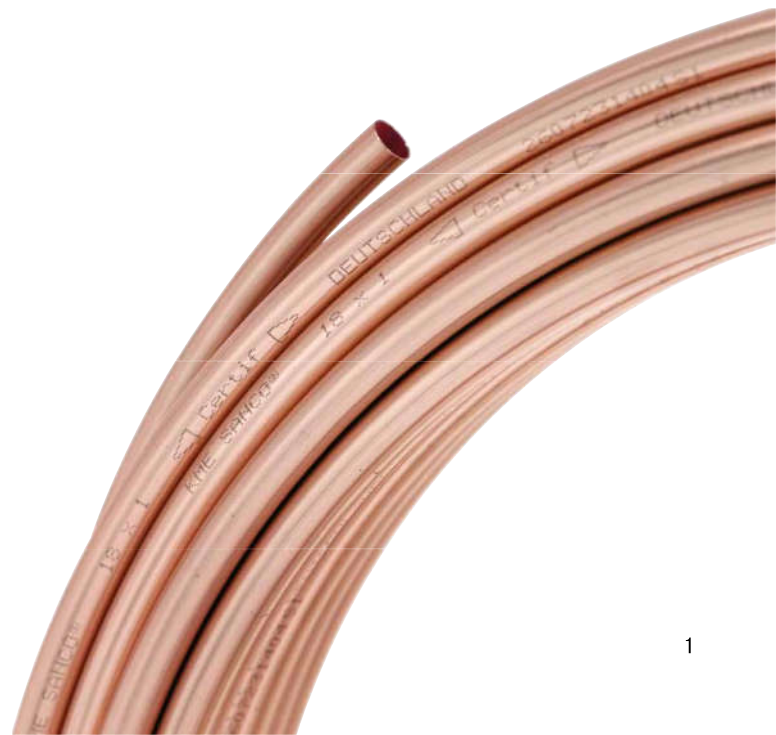
SANCO® – Bright Copper Tubes



SANCO® - tubes are made from high-quality copper with a purity grade of at least 99.9%. They are manufactured using a patented process to give the tubes extreme durability and longevity. Our soft, half-hard and hard copper tubes can be used in all areas of domestic plumbing. SANCO® is Europe's leading bright copper plumbing tube.



Once you've used SANCO® you'll never use anything else.





With production facilities in Germany, France, Italy, the UK, Spain and China, KME is one of the world's leading manufacturers of semi-finished goods and copper and copper alloy products. A large part of the copper products for the construction industry is designed for the domestic plumbing industry. KME has a wide range of specially designed and finished tubes for all domestic plumbing applications. KME's product and system solutions fulfill all quality standards, and are reliable and easy to assemble. This, combined with an extensive range of services, makes KME a competent partner for all its customers.

A close-up photograph of several copper tubes. The tubes are arranged in a way that creates a sense of depth and perspective. The foreground tube is in sharp focus, showing technical markings such as '1/2" x 1/8" L90' and '1/2" x 1/8" L90'. The background tubes are blurred, creating a bokeh effect. The lighting is soft and even, highlighting the metallic texture of the copper.

SANCO® - Copper Tubes for Domestic Plumbing



SANCO® – a Tube for Many Different Applications

Product benefits

- One range of tube products covers all areas of application.
- Standard and reliable installation in domestic heating and plumbing systems.
- Compatible with fittings from many different manufacturers.
- No material ageing.
- Gasproof, impervious to oxygen diffusion and UV-resistant.
- Higher quality standard than prescribed by standards and regulations.
- Every single metre can be processed. Tube cutoffs can be fully recycled, so that waste and disposal problems do not arise in the first place.

SANCO® has proven its value in all areas of domestic plumbing and heating

SANCO® – a Tube for Many Different Applications

| | SANCO® |
|---------------------|--------|
| Plumbing | ● |
| Heating | ● |
| Gas | ● |
| Liquefied gas | ● |
| Oil | ● |
| Rainwater | ● |
| Solar | ● |
| Sprinkler | ● |
| Extinguishing water | ● |

The bright, brand name copper tube

Identification

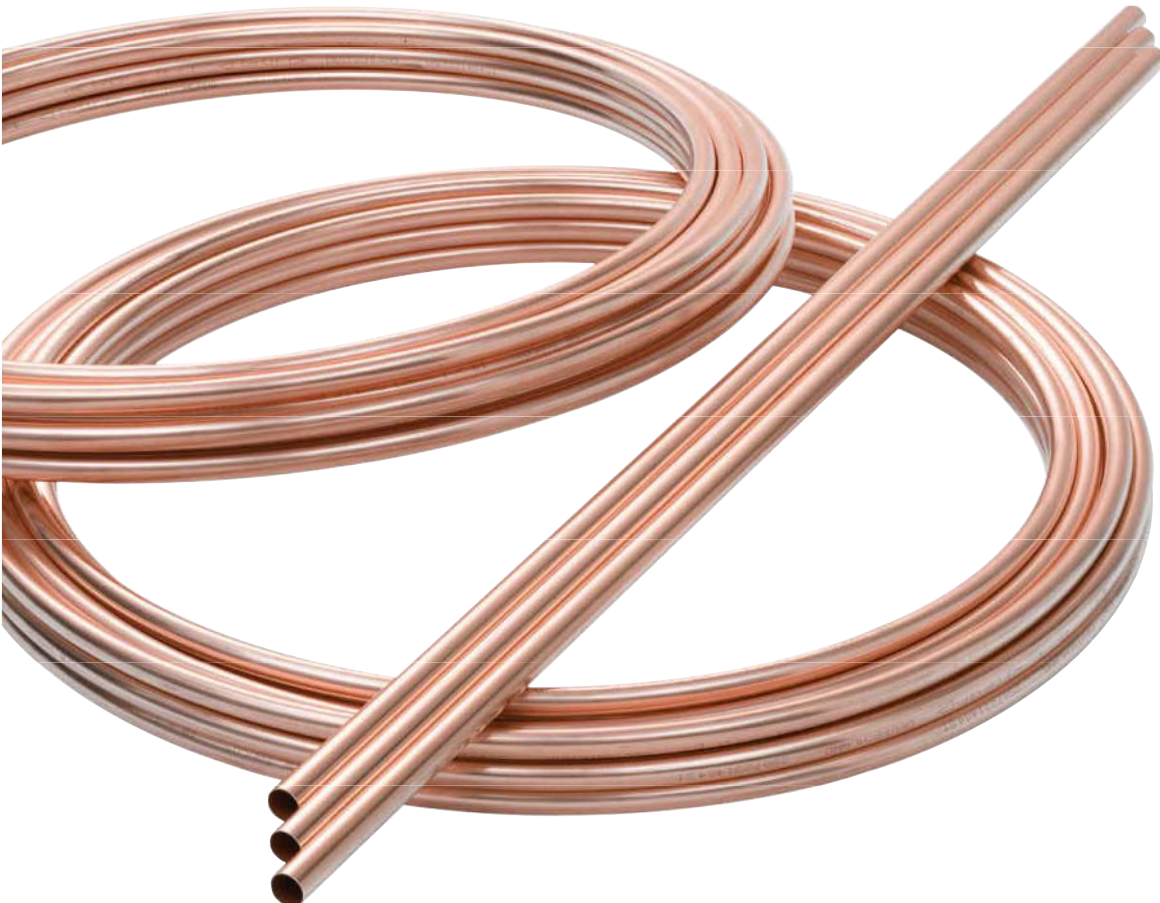
| | |
|---------------|---|
| KME | The tube is manufactured by KME Germany GmbH & Co. KG |
| 15 x 1 | Tube dimensions in mm |
| EN 1057 | The tube complies with EN 1057 |
| ⊙ | Simplified quality mark RAL |
| DV-7204AT2142 | Mark of the German Technical and Scientific Association for Gas and Water (DVGW) - for copper tubes according to EN 1057 or GW 392 |
| Germany | Country of manufacture |

Lengths of copper tube according to EN 1057

- With quality marks RAL and DVGW DV-7204AT2142 or DV-7204AT2143 up to 108mm outer diameter
DV-7202AT2141 from 133mm outer diameter
- Cu-DHP, R250 (half-hard) and Cu-DHP, R290 (hard)
- Bundled

Copper tube coils according to EN 1057

- With quality marks RAL and DVGW DV-7204AT2142
- Cu-DHP, R220 (soft), in coils
- 6 x 1.0mm to 15 x 1.0mm in 50m coils
18 x 1.0mm to 22 x 1.0mm in 25 m coils



Complete Product Range

SANCO®-copper tubes are suitable for all applications with the same high quality. They are approved with the RAL quality mark and the DVGW seal of quality and can be supplied in coils and straight lengths. Wherever a reliable copper tube is needed, SANCO® is the answer.

Straight lengths (5 m)

| Article No. | Dimensions Outer diameter x wall thickness (mm) | Strength | Weight (kg/m) | Permitted working pressure** (bar) | Water volume (l/m) |
|-------------|--|----------|------------------|---|-----------------------|
| 7011277 | 6,0 x 1,0* | R 290 | 0,140 | 229 | 0,013 |
| 7011278 | 8,0 x 1,0* | R 290 | 0,196 | 163 | 0,028 |
| 7011279 | 10,0 x 1,0* | R 290 | 0,252 | 127 | 0,050 |
| 7011411 | 12,0 x 1,0 | R 250 | 0,308 | 104 | 0,079 |
| 7011412 | 15,0 x 1,0 | R 250 | 0,391 | 82 | 0,133 |
| 7011413 | 18,0 x 1,0 | R 250 | 0,475 | 67 | 0,201 |
| 7011414 | 22,0 x 1,0 | R 250 | 0,587 | 54 | 0,314 |
| 7011421 | 28,0 x 1,0 | R 250 | 0,755 | 42 | 0,531 |
| 7103779 | 35,0 x 1,2 | R 290 | 1,134 | 35 | 0,835 |
| 7103783 | 42,0 x 1,2 | R 290 | 1,369 | 29 | 1,232 |
| 7011371 | 54,0 x 1,5 | R 290 | 2,202 | 28 | 1,963 |
| 7011437 | 64,0 x 2,0 | R 290 | 3,467 | 37 | 2,043 |
| 7011439 | 76,1 x 2,0 | R 290 | 4,144 | 31 | 4,083 |
| 7011441 | 88,9 x 2,0 | R 290 | 4,859 | 26 | 5,661 |
| 7011442 | 108,0 x 2,5 | R 290 | 7,374 | 27 | 8,332 |
| 7011443 | 133,0 x 3,0 | R 290 | 10,904 | 26 | 12,668 |
| 7011444 | 159,0 x 3,0 | R 290 | 13,085 | 22 | 18,385 |
| 7011445 | 219,0 x 3,0 | R 290 | 18,118 | 16 | 35,633 |
| 7011446 | 267,0 x 3,0 | R 290 | 22,144 | 13 | 53,502 |

Coils (50 m)

| Article No. | Dimensions Outer diameter x wall thickness (mm) | Strength | Weight (kg/m) | Permitted working pressure** (bar) | Water volume (l/m) |
|-------------|--|----------|------------------|---|-----------------------|
| 7011218 | 6,0 x 1,0* | R 220 | 0,140 | 229 | 0,013 |
| 7011219 | 8,0 x 1,0* | R 220 | 0,196 | 163 | 0,028 |
| 7011220 | 10,0 x 1,0* | R 220 | 0,252 | 127 | 0,050 |
| 7011222 | 12,0 x 1,0 | R 220 | 0,308 | 104 | 0,079 |
| 7011227 | 15,0 x 1,0 | R 220 | 0,391 | 82 | 0,133 |
| 7011232 | 18,0 x 1,0 | R 220 | 0,475 | 67 | 0,201 |

Coils (25 m)

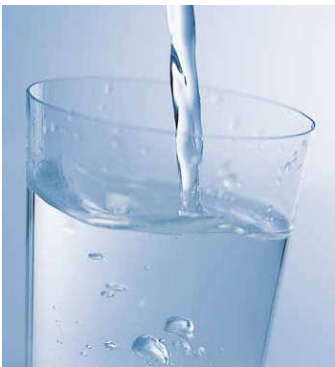
| Article No. | Dimensions Outer diameter x wall thickness (mm) | Strength | Weight (kg/m) | Permitted working pressure** (bar) | Water volume (l/m) |
|-------------|--|----------|------------------|---|-----------------------|
| 7011231 | 18,0 x 1,0 | R 220 | 0,475 | 67 | 0,201 |
| 7011234 | 22,0 x 1,0 | R 220 | 0,587 | 54 | 0,314 |

R220 = soft, R250 =semi- hard, R290 = hard

* These dimensions are not included in GW 392. This is why they do not have the DVGW mark.

** The maximum permitted working pressure was calculated on the basis of soft copper tubes with $R_m = 200 \text{ N/mm}^2$ and a safety factor of 3.5 at a working temperature of 100°C .

The permitted working pressure relates to the copper tube, not the joint.



Hygiene

Compared to other materials, copper also has hygienic advantages that, which are especially important in drinking water installations. As experience and recent studies have shown, the formation of legionella and other harmful bacteria caused by unfavourable operating conditions is considerably reduced when copper is a part of the system. Additionally, there are no temperature-related limitations for thermal disinfecting as in other materials. With copper, the normal use of disinfecting agents in water such as chlorine is also possible in the concentrations typical for drinking water, even short-term high-chlorination processes of up to 12 hours cause no problems whatsoever.

The Connection Techniques

| | SANCO® soft | SANCO® half-hard | SANCO® hard | |
|-----------|----------------|---------------------|----------------|--|
| Soldering | ○ | ○ | ○ | |
| Brazing | ○ | ○ | ○ | |
| Pressing | ○ | ○ | ○ | |
| Welding | ○ | ○ | ○ | <i>(only from a wall thickness of ≥ 1.5mm)</i> |
| Clamping | ○ | ○ | ○ | |
| Insertion | ○ | ○ | ○ | |

Many people in the plumbing, heating and air-conditioning trades grew up with SANCO® – from their apprenticeship to their master tradesman's certificate. However, these days if you base your prices only on the length of tubing used, and compare this with different tube systems, you may not consider the expensive connection techniques with other materials – and get an unpleasant surprise when the bill arrives. The fact is that SANCO® can be used for every domestic plumbing application and is compatible with the fittings from all major manufacturers. This is the only way that tradesmen can implement complete domestic plumbing installations with just one tube system – at the best value for money. No other tube can make this claim.

All the conventional connection techniques used in domestic plumbing can be used on SANCO® tubes. They can be soldered, brazed, pressed, welded, clamped or inserted; soft, semi-hard and hard tubes can be bent cold.

Even when different systems are compared, SANCO®, with all the benefits of copper, comes out on top.



Manufacture

These days tube manufacturing is a high-tech process. At KME it runs smoothly from the raw material stage through to delivery.

The starting products are refined copper billets delivered from continuous casting plants. These are heated to 950 °C and processed into hollows for further processing by hot pressing or hot skew rolling. Reciprocating rolls then perform the subsequent cold forming. Hard, half-hard and soft copper tubes are produced for domestic plumbing in multi-stage cold-drawing processes.

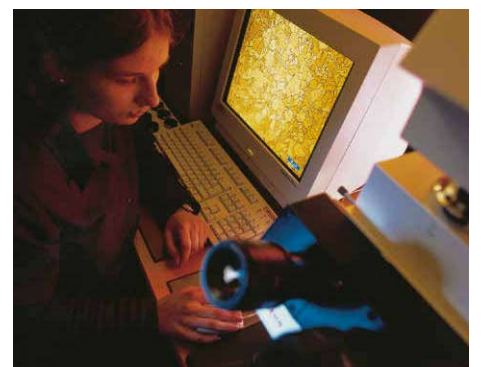


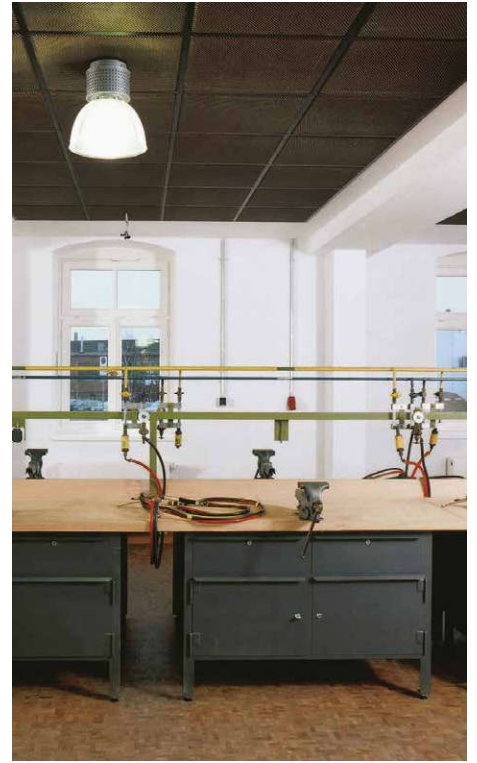
Quality and Reliability

KME defines quality as a task for every single employee and thus practices effective improvement at every workplace. The commitment of every employee is a vital requirement to ensure that we only put the best copper tubes on to the market. Because of this, KME quality management systems fulfil the ISO-9000 standard, among others. You can only have fully satisfied customers in the long term with complete reliability in the production processes and the quality of the finished products.

On the basis of this responsibility, KME offers all contractors reliable warranty agreements. The manufacturers' system alliance with the ZVSHK (German Central Association Plumbing, Heating, Air Conditioning) and the BHKS (Federal Industrial Association for Heating, Air Conditioning and Sanitary Engineering/Technical Buildings Systems) guarantees maximum reliability.

Reliability is top priority – from the raw material to the finished KME copper tube.





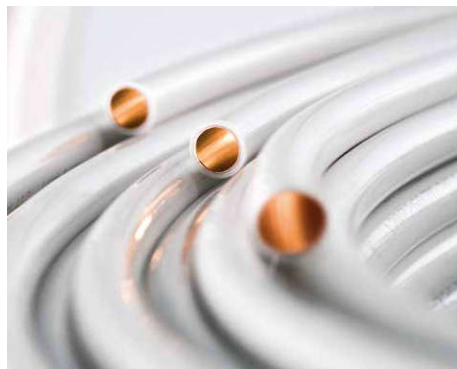
KME Plumbing Tubes – Training and Advice

High-quality brand name products have to be processed properly so that quality standards and reliability can be guaranteed. As a leading manufacturer of brand name copper tubes in Europe, KME not only offers the widest product range, but also the best support.

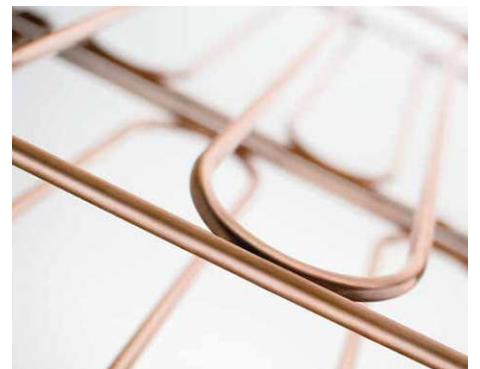
We pass on our many years of experience with copper plumbing tubes to contractors in the plumbing, heating, and air-conditioning industries in numerous seminars. The content of the seminars is always up to date and can be used in practical application. In addition to theoretical fundamentals, the seminars also deal with practical planning and installation of plumbing and heating systems with brand name copper tubes. Our specialist seminars are held by experienced trainers. They also offer extensive advice for all issues relating to KME brand name copper tubes.



WICU® Eco



Qtec®
SANCO® INSIDE



cuprotherm® PLAN

Brand Name Quality from KME

Brand name tubes from KME prove their reliability in many different applications: The heat insulated **WICU® Eco** tube in heating and hot water systems, the innovative, flexible and lightweight **Q-tec®** tube for all domestic plumbing applications and under-floor heating systems and the **cuprotherm® PLAN** tube system for wall heating.

All SANCO® products are sold through traditional channels
– from the manufacturer to plumbing, heating and air
conditioning wholesalers and from there to the trades.

If you have any questions, staff in the Plumbing Tubes
division will be pleased to help you.

KME Germany GmbH & Co. KG

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