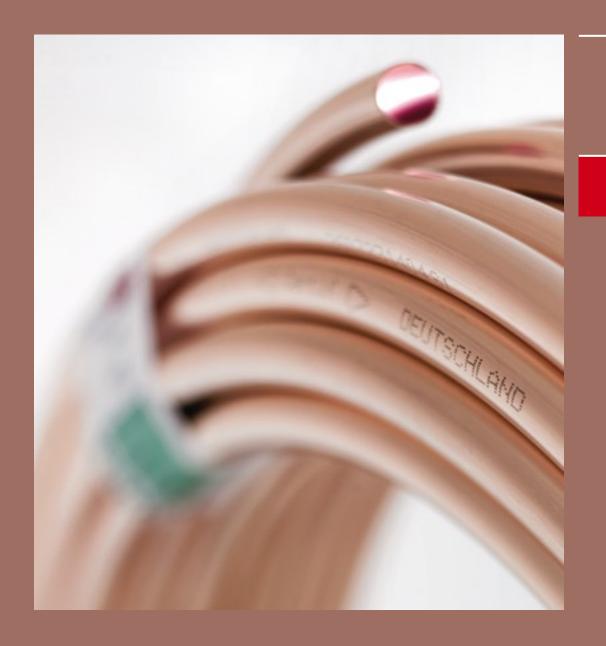
SANCO®

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





Member of the KME Group





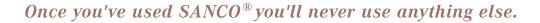
Contents

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[®] - 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.





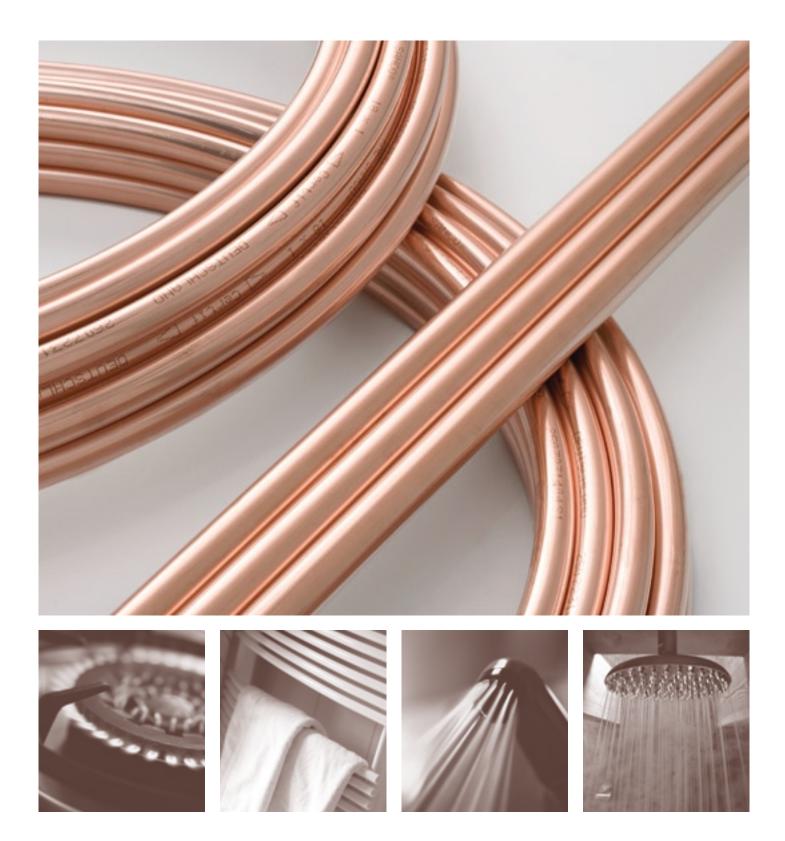


With production facilities in Germany, France, Italy, the UK, Spain and China, KME is one of the world's leading manufacturers of semi-finished goods and copper and copper alloy products. A large part of the copper products for the construction industry is designed for the domestic plumbing industry. 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.



SANCO[®] – Copper Tubes for Domestic Plumbing





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 [®]
Plumbing	
Heating	
Gas	
Liquefied gas	
Oil	
Rainwater	
Solar	
Sprinkler	
Extinguishing water	

SANCO[®] - a Tube for Many Different Applications

SANCO[®]

The bright, brand name copper tube

Identification

- KME The tube is manufactured by KME Germany AG
- 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)

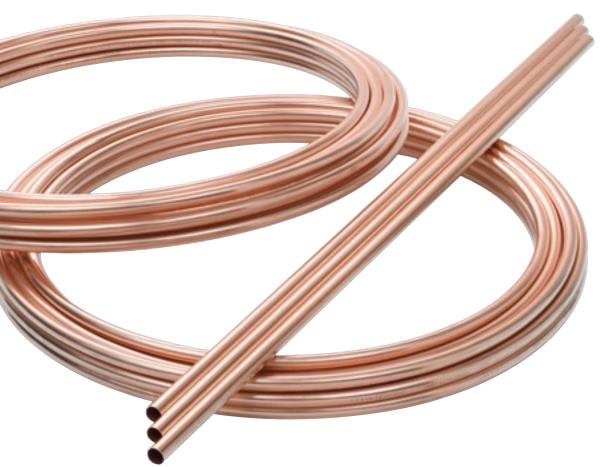
for copper tubes according to EN 1057 or GW 392 Germany Country of manufacture

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)					
	Dimensions Outer diameter x			Permitted working	
	wall thickness		Weight	pressure**	Water volume
Article No.	(mm)	Strength	(kg/m)	(bar)	(I/m)
7011277	6,0 × 1,0*	R 290	0,140	229	0,013
7011278	8,0 × 1,0*	R 290	0,196	163	0,028
7011279	10,0 × 1,0*	R 290	0,252	127	0,050
7011411	12,0 x 1,0	R 250	0,308	104	0,079
7030663	12,0 x 1,5*	R 250	0,440	163	0,064
7011412	15,0 x 1,0	R 250	0,391	82	0,133
7011284	15,0 x 1,5*	R 250	0,566	127	0,113
7011413	18,0 x 1,0	R 250	0,475	67	0,201
7011290	18,0 x 1,5*	R 250	0,692	104	0,177
7011414	22,0 x 1,0	R 250	0,587	54	0,314
7011299	22,0 x 1,5*	R 250	0,860	83	0,284
7011421	28,0 ×1,0*	R 250	0,755	42	0,531
7011426	28,0 x 1,5	R 250	1,110	65	0,491
7011324	35,0 x 1,5	R 290	1,410	51	0,804
7011360	42,0 × 1,5	R 290	1,700	42	1,195
7011372	54,0 × 2,0	R 290	2,910	44	1,963
7011437	64,0 ×2,0	R 290	3,467	37	2,827
7011439	76,1 x 2,0	R 290	4,144	31	4,083
7011441	88,9 ×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 x3,0	R 290	10,904	26	12,668
7011444	159,0 x3,0	R 290	13,085	22	18,385
7011445	219,0 ×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)

Artikelnummer	Dimensions Outer diameter x wall thickness (mm)	Strength	Weight (kg/m)	Permitted working pressure** (bar)	Water volume
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)

Artikelnummer	Dimensions Outer diameter x wall thickness (mm)	Strength	Weight (kg/m)	Permitted working pressure** (bar)	Water volume
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 Rm = 200 N/mm2 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		\bigcirc	\bigcirc	
Brazing		\bigcirc	\bigcirc	
Pressing	\bigcirc	\bigcirc	\bigcirc	
Welding	\bigcirc	\bigcirc	\bigcirc	only from a wall thickness of \geq 1.5mm)
Clamping	\bigcirc	\bigcirc	\bigcirc	
Insertion	0	\bigcirc	\bigcirc	

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

Modern tube manufacturing is an extensive, high-tech process. At KME, all stages from the first processing steps with the raw material through to delivery of the final product run smoothly as part of a single quality chain.

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 colddrawing processes.

Quality and Reliability

KME defines quality as a responsibility that is to be met by its employees. Effective improvement is an on-going process that is practiced day in, day out at every work-place. The commitment of each and every employee to quality is vital in order to ensure that we only put the best copper tubes on to the market. And it is thanks to their continued dedication that KME quality management systems fulfill the ISO 9000 standard, among many other trade standards and regulations. At KME, we know that you can only have fully satisfied customers in the long term if you achieve 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.



KME SANCO® HALBHART 22 x 1 R250

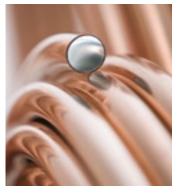




WICU[®] Eco



tec[®]



COPATIN[®]



HYPOPLAN[®]

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, the internally tin-plated **COPATIN®** tube system for drinking water installations, the **HYPOLAN®** 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 AG & Co. KG

Plumbing Tubes Klosterstraße 29 49074 OSNABRÜCK GERMANY

Fon +49 541 321-4329 Fax +49 541 321-4320 www.sanco-tubes.com sanco-tubes@kme.com

Sales & Service



KME Germany AG & Co. KG Plumbing Tubes Postfach 3320 49023 OSNABRÜCK Klosterstrasse 29 49074 OSNABRÜCK GERMANY Tel. +49 541 321-2021/-2022/-2024 Fax +49 541 321-2020 www.kme.com info-rohre@kme.com

Plumbing Tubes



All changes reserved. Owing to limitations in printing technology, the colours reproduced in this brochure should be regarded as approximate equivalents to the colours described.