COPPER TUBES

TALOS®

BUILDING PLUMBING INSTALLATIONS



HALCOR

ТАШЕВ-ГАЛВИНГ ООД
www.tashev-galving.com



HALCOR

HALCOR is a large-scale modern industrial company with over sixty years of experience in metal processing. It holds a significant position in European and global markets and has five modern plants; four in Greece and one in Bulgaria.

The company is dedicated to achieving high quality. It has ISO 9001:2000 certification, uses state-of-the-art technology and employs highly skilled personnel. Substantial, continual investment in research and know-how allows the company to create innovative new products, which support its aim of being a market leader.

At the same time, HALCOR is committed to sustained development and environmental protection. As such, its production processes are regulated by an ISO 14001:2004 certified Environmental Management System.

Aiming at the total satisfaction of all of its customers' needs, the company focuses on responding reliably and rapidly to demand. It provides exceptional support for its products, which are distributed to more than fifty countries worldwide. HALCOR combines size, strength and technology to achieve its overall vision of putting metals at man's disposal.

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Альтавит ООД
www.altavit.com

COPPER TUBES
TALOS®

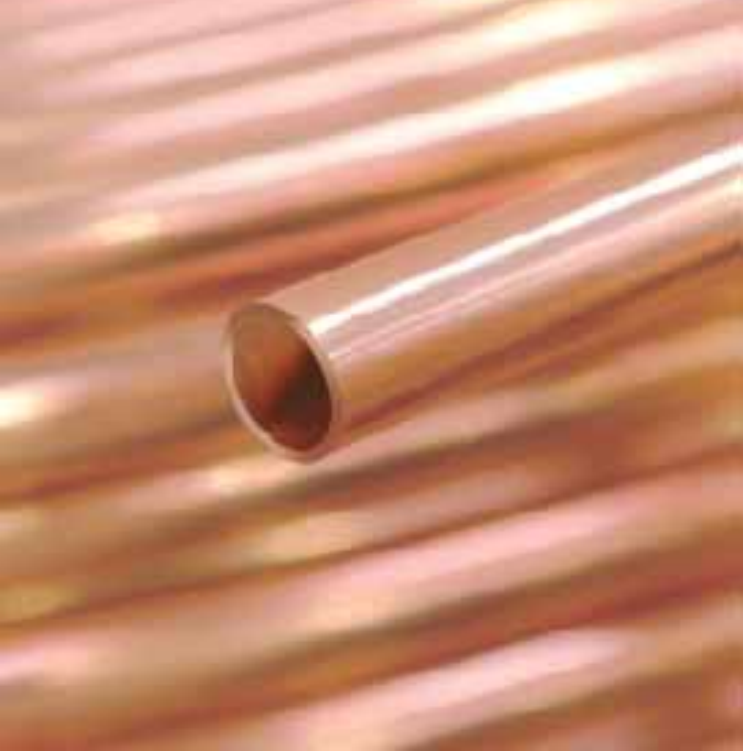
Versatility with the dependability of copper

TALOS® copper tubes, with their high quality of manufacture provide:

- **Unlimited lifetime.**
- **Resistance to pressure, temperature and fire.**
- **Low thermal expansion and enhanced shape stability.**
- **Complete impermeability.**
- **Potable water hygiene.**
- **Style and space saving.**
- **Cost-effectiveness.**



ТАЦЦЕ ГАТЕЗНГ ООД
www.tsh-gateving.com



TALOS® copper tubes are widely used in a variety type of construction plumbing installations, such as potable water and hot water supply, central heating, natural gas, air conditioning, fire extinguishing networks, medical gas networks, etc.
They are manufactured according to harmonised European standards such as EN 1057:2006 and EN 13349 for coated pipes for sanitary applications, EN 12735 for air conditioning systems, EN 13348 for medical applications, etc.



ТАШЕВ-ГАЛВИНГ ООД
www.tashev-galving.com



COPPER TUBES

TALOS®

WATER SUPPLY
HEATING
NATURAL GAS
COOLING

TALOS® PLAIN COPPER TUBES ADVANTAGES

- TALOS® copper tubes are easy and cost-effective to install, and provide safe and secure operation.
- TALOS® copper tubes are resistant to high working pressures and temperatures.
- TALOS® copper tubes are completely air- and water- tight and retain their natural and mechanical properties unchanged over time.
- They are stable and self-supporting.

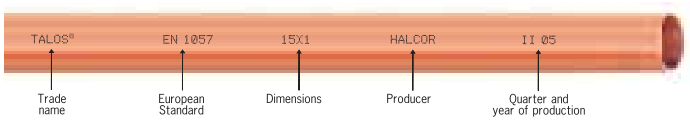
TALOS HALF HARD COPPER TUBES SPECIAL ADVANTAGES

- Easy cold bending.
- Reduction of necessary fittings.
- Easier shaping of networks.
- Faster installation and working performance.
- Overall lower installation costs.

MATERIAL

Copper phosphorus deoxidised (DHP-Cu) with min. copper content 99.9% and P=0.015% - 0.040%.

MARKINGS



MECHANICAL PROPERTIES

Temper	EN 1057 Classification	Tensile strength N/mm² (min. tensile strength)	Minimum elongation A5%
Soft	R-220	220	40
Half hard	R-250	250	30
Hard	R-290	290	3

SPECIFICATIONS

EN 1057: 2006

QUALITY MARKS

RAL/DVGW, BSI, AFNOR, AENOR, NSF, NSAI.

ТАЛЕВТ ЕООД
www.tashev-talev.com

I. STRAIGHT HALF HARD

Diameter x thickness d x s (mm)	Internal diameter d internal (mm)	Nominal copper weight (kg/m)	External surface area (m^2/m)	Full volume (l/m)	Packing		Maximum allowed working pressure (bar)
					Straight lengths	Pieces per bundle	
10x0,70	8,6	0,182	0,031	0,058	3m	900	90
10x1,00	8,0	0,252	0,031	0,050	4m	250	133
12x0,70	10,6	0,221	0,038	0,088	3m	800	74
12x1,00	10,0	0,308	0,038	0,079	4m	400	109
15x0,70	13,6	0,280	0,047	0,145	3m	600	59
15x0,80	13,4	0,318	0,047	0,141	3m	600	68
15x1,00	13,0	0,391	0,048	0,133	4m	600	86
15x1,20	12,6	0,463	0,047	0,127	4m	125	104
18x0,80	16,4	0,384	0,056	0,211	3m	450	56
18x1,00	16,0	0,475	0,056	0,201	4m	450	71
18x1,20	15,6	0,563	0,056	0,191	4m	100	86
22x0,80	20,4	0,474	0,069	0,327	3m	300	45
22x0,90	20,2	0,531	0,069	0,320	3m	300	51
22x1,00	22,0	0,587	0,069	0,314	4m	300	57
22x1,50	19,0	0,860	0,069	0,284	4m	80	88

II. STRAIGHT HARD

28x0,80	26,4	0,609	0,087	0,547	3m	200	43
28x0,90	26,2	0,682	0,087	0,539	3m	200	48
28x1,00	26,0	0,087	0,087	0,531	4m	200	54
28x1,50	25,0	0,087	0,087	0,491	4m	60	82
35x1,00	33,0	0,950	0,110	0,856	3m	100	43
35x1,50	32,0	1,410	0,110	0,804	4m	50	65
35x2,00	31,0	1,844	0,110	0,754	4m	50	88
42x1,00	40,0	1,148	0,131	1,256	3m	90	35
42x1,20	39,6	1,368	0,131	1,231	3m & 4m	90	43
42x1,50	39,0	1,700	0,131	1,193	4m	40	54
54x1,00	52,0	1,484	0,170	2,123	3m	60	27
54x1,20	51,6	1,771	0,170	2,090	3m & 4m	60	33
54x1,50	51,0	2,202	0,170	2,042	4m	60	41
54x2,00	50,0	2,906	0,170	1,962	4m	30	56
64x2,00	60,0	3,467	0,201	2,827	3m	25	47
76,1x2,00	72,1	4,144	0,239	4,083	3m	20	39
88,9x2,00	84,9	4,859	0,279	5,661	4m	15	33
108x2,50	103,0	7,375	0,339	8,332	4m	10	34

III. SOFT COILS

					Plain in coils (m) long	Plain coils per pallet	
11x0,75	9,5	0,287	0,034	0,071	50	96	67
15x1,00	13,0	0,391	0,047	0,133	50	30	66
18x1,00	16,0	0,475	0,056	0,201	25	40	54
22x1,00	20,0	0,587	0,069	0,314	25	40	44
18x1,50	17,0	0,692	0,057	0,177	25	40	84
22x1,50	19,0	0,860	0,069	0,284	25	30	67

Non-standard dimensions are manufactured upon request.

ТАЦЕВ-ЛАТВИЯ ООД
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COPPER TUBES

TALOS®

FIRE EXTINGUISHING NETWORKS

Maximum fire protection and safety

TALOS® copper tubes are the fastest and most cost-effective choice, for the construction of permanent fire extinguishing water supply networks and automatic sprinkler systems.

TALOS® copper tubes for fire extinguishing networks, provide substantial advantages:

- Smooth surface with minimal pressure loss due to friction, resulting in the need for smaller cross-sections, for specific water supply requirements.
- Various options in coupling methods.
- Easy to transport, install and support, even in limited spaces.
- High thermal conductivity that ensures prevention of extreme temperature peaks.
- Completely air- and water-tight and practically maintenance-free.
- Excellent corrosion resistance, compared to other metals.
- Extreme temperature resistance (copper melting point 1083 ^{0}C).
- Fully recyclable.
- Tested and reliable for all types of plumbing applications.

TALOS® copper tubes are the ideal material for the construction of fire extinguishing installations in different areas, such as: Hospitals, Factories, Warehouses, Schools, Museums, Restaurants, Hotels, Sports facilities, Offices, Shops, Car Parks, Houses.

TALOS® copper tubes are covered by a 30-year manufacturer's guarantee for good performance.

ТАШЕВ-ГАЛВИНГ ООД
www.tashev-galving.com



MATERIAL

Copper phosphorus deoxidised (minimum copper content 99.9%, phosphorus concentration P=0.015% - 0.04%, classified as CW024A, or Cu-DHP, according to the European alloy coding system.

MECHANICAL PROPERTIES

Temper	EN 1057 Classification	Tensile strength N/mm² (min. tensile strength)	Minimum elongation A5%
Soft	R-220	220	40
Half hard	R-250	250	30
Hard	R-290	290	3

SPECIFICATIONS

EN 1057:2006

TALOS® copper tubes comply fully with the EN 1057:2006 standard for water supply and permanent fire extinguishing networks.

QUALITY MARKS

RAL/DVGW, BSI, AFNOR, AENOR, NSAI.

STANDARD DIMENSIONS

Diameter x thickness d x s (mm)	Internal diameter d internal (mm)	Nominal copper weight (kg/m)	External surface area (m²/m)	Full volume (l/m)	Packing	
					Type	Pieces per bundle
15x1,00	13,0	0,391	0,047	0,133	Straight lengths of 4m	600
18x1,00	16,0	0,475	0,057	0,211		450
22x1,00	22,0	0,587	0,069	0,314		300
28x1,00	26,0	0,755	0,088	0,531		200
35x1,50	32,0	1,405	0,110	0,804		50
42x1,50	39,0	1,699	0,132	1,195		40
54x1,50	51,0	2,202	0,170	2,043		60
54x2,00	50,0	2,908	0,170	1,963		30
64x2,00	60,0	3,467	0,201	2,827		25
76,1x2,00	72,1	4,144	0,239	4,083		20
88,9x2,00	84,9	4,859	0,279	5,661		15
108x2,50	103,0	7,375	0,339	8,332		10

ТАШЕВ-ГАЛВИНГ ООД
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COPPER TUBES

TALOS MED™

MEDICAL GAS DISTRIBUTION NETWORKS

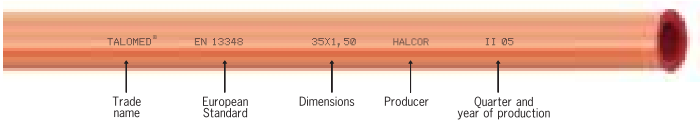
Cleanliness and resistance

In the sensitive healthcare areas and installations, it is imperative to use materials that safeguard cleanliness, neat appearance and durability. TALOS MED™ copper tubes, thanks to the natural strength of copper they can withstand high working pressures with unlimited durability, hence they are the ideal choice for the construction of the distribution networks of the medical gases. TALOS MED™ copper tubes are manufactured according to the requirements of standard EN 13348:2001. They are supplied with end caps to prevent contamination by foreign matter intrusion during storage or transportation.

MATERIAL

Copper phosphorus deoxidised (DHP-Cu) with min. copper content 99.9% and P= 0.015% - 0.040%.

MARKINGS



MECHANICAL PROPERTIES

Temper	EN 13348 Classification	Tensile strength N/mm² (min. tensile strength)	Minimum elongation A5%
Soft	R-220	220	40
Hard	R-290	290	3

SPECIFICATIONS

EN 13348: 2001

ТАШЕВ-ГАЗ ООД
www.tashev-gas.com



STANDARD DIMENSIONS

Diameter x thickness d x s (mm)	Internal diameter d internal (mm)	Nominal copper weight (kg/m)	External surface area (m^2/m)	Full volume (l/m)	Packing
6x1,00	4,0	0,140	0,019	0,013	Straight lengths of 5m
8x1,00	6,0	0,196	0,025	0,028	
10x1,00	8,0	0,252	0,031	0,050	
12x1,00	10,0	0,308	0,038	0,079	
15x1,00	13,0	0,391	0,048	0,133	
18x1,00	16,0	0,475	0,056	0,201	
22x1,00	22,0	0,587	0,069	0,314	
28x1,00	26,0	0,758	0,087	0,531	
35x1,50	32,0	1,410	0,110	0,804	
42x1,50	39,0	1,700	0,131	1,193	
54x2,00	50,0	2,906	0,170	1,962	
64x2,00	60,0	3,467	0,201	2,827	
76,1x2,00	72,1	4,144	0,239	4,083	
88,9x2,00	84,9	4,857	0,279	5,658	
108x2,50	103,0	7,370	0,339	8,328	

Different sizes and lengths are available upon request.

ТАЦЕТ АПВКИГ ООД
www.tasiev-plaving.com



ТАШЕВ-ГАЛВИНГ ООД
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PLASTIC COATED COPPER TUBES

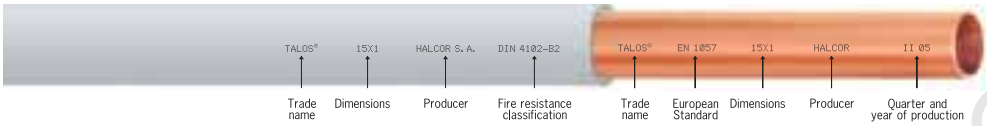
TALOS®

WATER SUPPLY
HEATING
COOLING

MATERIAL

Copper phosphorus deoxidised (DHP-Cu) with min. copper content 99.9% and P=0.015% - 0.040%.

MARKINGS



MECHANICAL PROPERTIES

Temper	EN 1057 Classification	Tensile strength N/mm² (min. tensile strength)	Minimum elongation A5%
Soft	R-220	220	40
Hard	R-290	290	3

SPECIFICATIONS

EN 13349:2002, EN 1057:2006.
They are classified as B2 according to DIN 4102 fire resistance classification system.

QUALITY MARKS FOR COPPER TUBES

AFNOR.
Copper tube: RAL, BSI, AENOR, AFNOR, NSF, NSAI.

STANDARD DIMENSIONS
I. SOFT COILS

Copper tube ext. diam. x thickness d x s (mm)	Overall ext. diameter D (mm)	Tube full volume (l/m)	Nominal copper weight (kg/m)	Thermal* capacity (Kcal/h)	Min. bending radius manually (mm)	Min. bending radius with bending tool (mm)	Packing in coils (m) long
12 x 1,00	16	0,079	0,308	6.700	100	–	25 or 50
15 x 1,00	19	0,133	0,391	11.000	120	–	
16 x 1,00	20	0,154	0,420	13.300	130	–	
18 x 1,00	22	0,200	0,475	17.200	145	–	25
22 x 1,00	26	0,315	0,537	27.200	175	–	
15 x 0,80	19	0,141	0,318	12.100	125	–	25 or 50
16 x 0,80	20	0,163	0,340	14.000	135	–	
18 x 0,80	22	0,211	0,385	18.200	150	–	25

II. STRAIGHT HARD

15 x 1,00	19	0,133	0,391	11.000	–	55	Straight lengths of 4m
16 x 1,00	20	0,154	0,420	13.300	–	60	
18 x 1,00	22	0,191	0,563	17.200	–	70	
22 x 1,00	26	0,314	0,587	27.200	–	80	

* For a temperature drop of 20 °C and a flow rate of 1.2 m/sec.

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