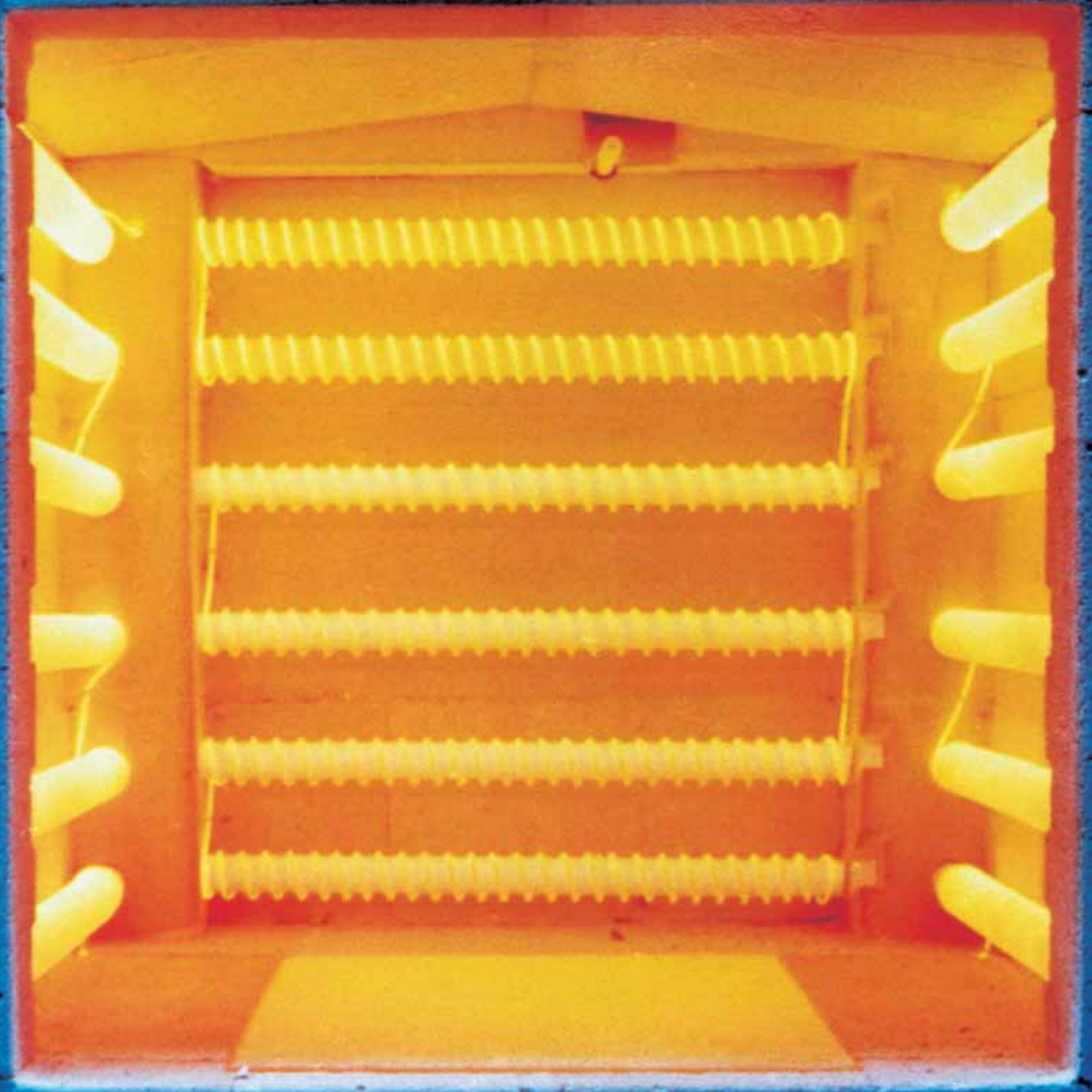


# CERAMIC TUBES

  
**W. HALDENWANGER**  
Technische Keramik GmbH & Co. KG  
A member of the Morgan Crucible Company Plc

Overview of materials and dimensions



# CERAMIC TUBES

Our extensive range of tubes enables us to offer a ceramic solution for every application. The tables below list a small selection of typical dimensions for the different materials. We are always happy to produce special designs upon request.

## I M P E R V I O U S

### Alsint 99.7

Type C 799 to DIN EN 60672  
Al<sub>2</sub>O<sub>3</sub> content 99.7%

Outer / Inner Ø mm	
0.8 x 0.3	30 x 23
1.3 x 0.7	35 x 27
1.6 x 1.0	42 x 34
1.8 x 1.2	46 x 38
2.0 x 1.0	50 x 40
2.7 x 1.7	60 x 50
3.0 x 2.0	65 x 56
4.0 x 2.0	70 x 60
5.0 x 3.0	75 x 65
6.0 x 4.0	80 x 70
8.0 x 5.0	85 x 75
9.0 x 6.0	90 x 80
9.6 x 6.4	100 x 85
10.0 x 6.0	115 x 100
12.0 x 8.0	120 x 100
12.7 x 8.9	130 x 110
14.0 x 10.0	140 x 120
15.0 x 10.0	150 x 130
17.0 x 12.0	170 x 150
17.5 x 11.1	190 x 170
20.0 x 15.0	220 x 200
24.0 x 18.0	260 x 240
26.0 x 20.0	320 x 300
28.0 x 20.0	410 x 390

max. length 4000 mm depending on outer Ø

### Pythagoras

Type C 610 to DIN EN 60672  
Al<sub>2</sub>O<sub>3</sub> content approx. 60%,  
Alkali content 3%

Outer / Inner Ø mm	
1.3 x 0.7	28 x 22
1.6 x 0.7	30 x 23
1.8 x 1.2	35 x 27
2.0 x 1.0	40 x 32
2.7 x 1.7	50 x 40
3.0 x 2.0	55 x 46
4.0 x 2.0	60 x 50
5.0 x 3.0	65 x 55
6.0 x 4.0	70 x 60
8.0 x 5.0	75 x 65
9.0 x 6.0	80 x 70
9.6 x 6.4	85 x 75
10.0 x 6.0	90 x 80
12.0 x 8.0	95 x 85
12.7 x 8.9	100 x 85
14.0 x 10.0	110 x 95
15.0 x 10.0	120 x 100
15.0 x 11.0	130 x 110
17.0 x 12.0	140 x 120
17.5 x 11.1	150 x 130
20.0 x 15.0	160 x 140
22.0 x 17.0	180 x 160
24.0 x 19.0	200 x 180
26.0 x 20.0	300 x 280

max. length 4000 mm depending on outer Ø

### Pythagoras 1800 Z

Al<sub>2</sub>O<sub>3</sub> content approx. 76%,  
Alkali content 0.5%

Outer / Inner Ø mm	
40 x 32	
48 x 40	
53 x 43	
60 x 52	
63 x 53	
70 x 60	
73 x 63	
75 x 65	
80 x 70	
82 x 72	
85 x 74	
86 x 76	
88 x 78	
93 x 83	
95 x 85	
100 x 90	
105 x 90	
115 x 105	
120 x 110	

max. length 2200 mm  
depending on outer Ø

### Halsic-I

reaction-bound Si-infiltrated  
SiC, SiC content 85-88%,  
free Si content 12-15%

Outer / Inner Ø mm	
20 x 13	
22 x 15	
25 x 18	
28 x 20	
30 x 20	
40 x 30	
42 x 32	
45 x 35	
50 x 38	
55 x 41	
60 x 46	
70 x 56	
80 x 66	
90 x 76	

max. length 3400 mm  
depending on outer Ø

### Zircon oxide

MgO, CaO, Y<sub>2</sub>O<sub>3</sub>  
stabilised

Outer / Inner Ø mm	
1 x 0.5	
2 x 1	
4 x 2	
6 x 4	
7 x 5	
10 x 6	
12 x 9	
16 x 12	
20 x 15	
25 x 20	
30 x 23	
35 x 28	

max. length 1200 mm  
depending on outer Ø

## P O R O U S

### Sillimantin 60

Type C 530 to DIN EN 60672,  
medium-fine structure,  
Al<sub>2</sub>O<sub>3</sub> content 72-74%

Outer / Inner Ø mm	
10 x 6	
15 x 10	
24 x 19	
26 x 18	
28 x 22	
30 x 23	
35 x 27	
40 x 32	
50 x 40	
60 x 50	
70 x 60	
80 x 70	
90 x 75	
100 x 85	
110 x 95	
120 x 100	
130 x 110	
140 x 120	
160 x 140	
200 x 175	
250 x 230	
330 x 310	

max. length 4000 mm  
depending on outer Ø

### Sillimantin KS

medium-fine structure,  
Al<sub>2</sub>O<sub>3</sub> content 70%

Outer / Inner Ø mm	
15 x 7	
20 x 12	
20 x 15	
25 x 18	
30 x 20	
35 x 25	
40 x 30	
45 x 35	
50 x 40	
55 x 45	

max. length 1600 mm  
depending on outer Ø

### Sillimantin 60 NG

medium-fine structure,  
Al<sub>2</sub>O<sub>3</sub> content 72-74%

Outer / Inner Ø mm	
10 x 6	
15 x 10	
24 x 19	
26 x 18	
28 x 22	
30 x 23	
35 x 27	
40 x 32	
50 x 40	
60 x 50	
70 x 60	
80 x 70	
90 x 75	
100 x 85	
110 x 95	
120 x 100	
130 x 110	
140 x 120	
160 x 140	
200 x 175	
250 x 230	
330 x 310	

max. length 3600 mm  
depending on outer Ø

### Silicium carbide

fine and coarse structure,  
SiC content 65-70%,  
silicate bound

Outer / Inner Ø mm	
17 x 12	
20 x 15	
22 x 17	
24 x 19	
26 x 18	
26 x 20	
28 x 22	
30 x 23	
28 x 22	
31 x 25	
33 x 28	
35 x 27	
40 x 32	
45 x 35	
50 x 40	
55 x 45	
60 x 50	
65 x 55	
70 x 60	
75 x 65	
80 x 70	
85 x 75	
90 x 75	

max. length 2000 mm  
depending on outer Ø

### Halsic-R

recrystallized SiC,  
SiC content ≥ 99%

Outer / Inner Ø mm	
15 x 5	
20 x 10	
22 x 12	
25 x 15	
30 x 20	
32 x 22	
34 x 24	
35 x 25	
40 x 30	
45 x 35	
50 x 38	
60 x 46	
70 x 56	
75 x 61	
80 x 66	

max. length 3000 mm  
depending on outer Ø

All dimensions available with:

- ▶ both ends open
- ▶ one end closed
- ▶ both ends open with flange
- ▶ one end closed with flange

Maximum outer diameter 410 mm.  
Tolerances are in compliance with DIN 40680.  
Customized tolerances upon request.

We supply single-hole and multi-bore insulators for thermocouples in the materials Alsint 99.7 Type C 799 and Pythagoras Type C 610.



Variety  
TUBES

Excellent Surface Finish  
FUSED SILICA ROLLERS

Tradition  
LABORATORY PORCELAIN



Long Service Life  
ROLLERS

High Performance  
HALSIC

Flexibility  
SPECIALITIES



**W. HALDENWANGER**  
Technische Keramik GmbH & Co. KG

Teplitzer Str. 27 · D- 84478 Waldkraiburg  
Tel. +49 - (0)8638 60 04-0  
Fax +49 - (0)8638 60 04 317  
info@haldenwanger.de  
www.haldenwanger.de



Haldenwanger forms part of the Morgan Advanced Ceramics group, which is a global business unit of the Morgan Crucible Company Plc.

**Morgan**  
MorganAdvancedCeramics  
www.morganadvancedceramics.com

beat the heat  
beat the heat

www.haldenwanger.de