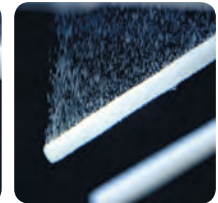


Our ceramic tubes are all 'Made in Germany'. Every one of our protecting tubes undergoes standardised leak-tightness checks. These can reliably detect leakage rates of up to 10^{-2} cm³/min (corresponding to a bubble of \varnothing 3 mm after 100 seconds of testing). The images below show a gas-tight Haldenwanger tube compared with a gas-permeable tube following long-term use in a leak-tightness test.

Haldenwanger tube

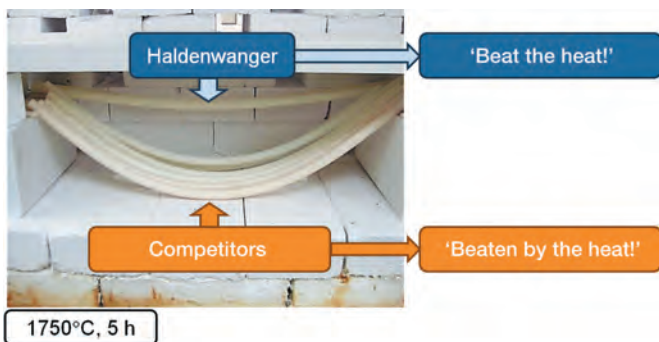
Competitor product



Our quality standards are ensured at all times as our Type C 530 to C 799 materials correspond to DIN norms. The tube labelling indicates the high quality features to customers and helps trace each individual tube.



This results in a long service life in high-temperature applications. The practical test at a temperature of 1,750 °C and with an exposure time of five hours emphasises the quality on offer from Haldenwanger (see below).



Fast lead times and custom manufacturing

Our warehouse stocks more than 7,600 tube products, which can be delivered to our customers in Germany within 24 hours and elsewhere in Europe within 48 hours. Thanks to our high production capacity, a lead time of max. eight weeks is needed for new products. This means we can guarantee you fast and reliable availability worldwide. Our Sales team would be pleased to assist you in many European languages and involve our In-House Technical Support team when needed. Of course, our processing centre can also prepare individual, custom dimensions for you.

The right raw materials and processes facilitate reliable temperature measurement and a long service life

Due to its high aluminium oxide content, Alsint 99.7 demonstrates very good chemical resistance in corrosive atmospheres. Even after the thermocouple has been used for years at high temperatures, the noble metal wires are still well protected from contamination and embrittlement. The long-term availability of the temperature sensor is unparalleled. The positive material properties also ensure the long-term and accurate stability of the voltage reading between the thermocouple wires, essential to precise, reproducible temperature measurement.