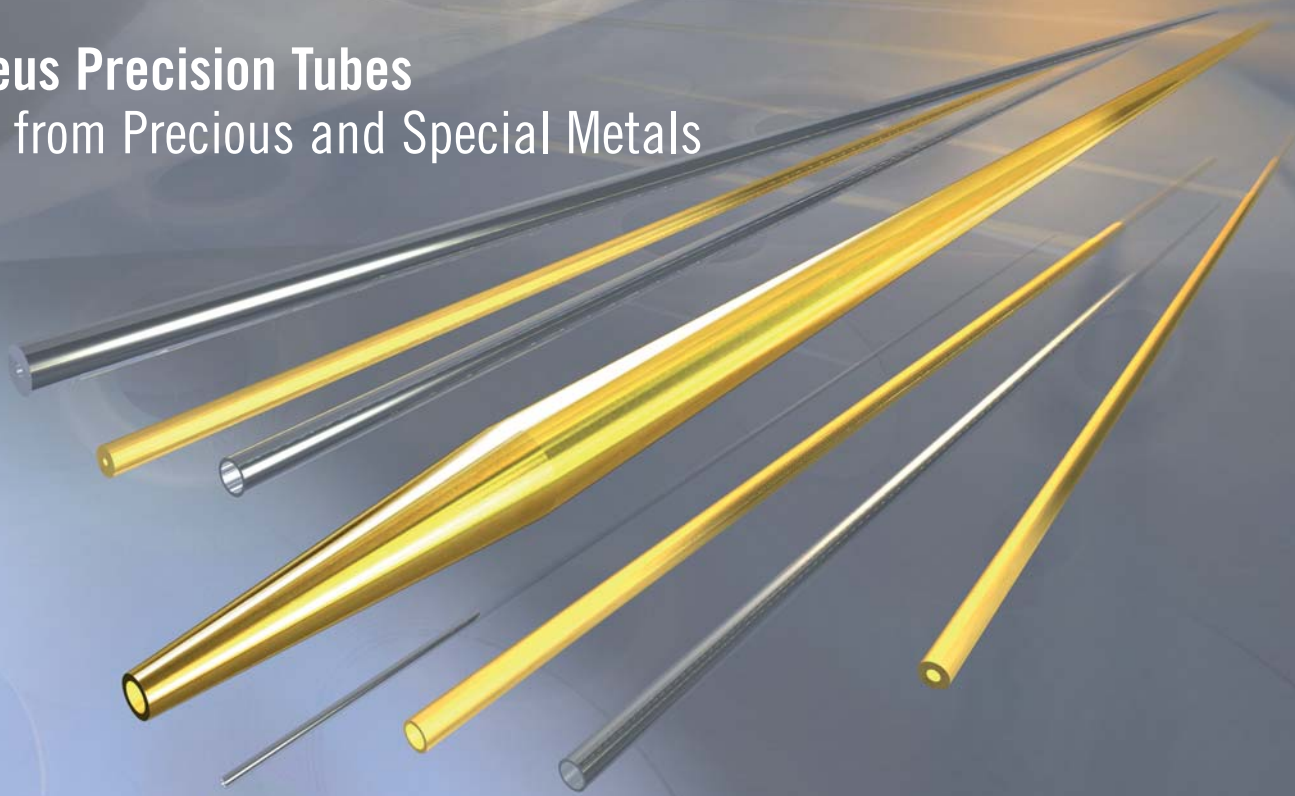


Heraeus Precision Tubes made from Precious and Special Metals



W.C. Heraeus manufactures precision tubes made from precious and special metals for highly sensitive applications, such as analytic technology.

To effectively make use of the specific properties of precious and special metals in the manufacture of precision tubes, a very high purity graded material plus a technically advanced production process are absolute prerequisites.

For many years W.C. Heraeus has been using a specially developed method of manufacturing precision tubes, which gives our customers access to a top-quality product with maximum purity and narrow manufacturing tolerances.

Precision tubes as developed and manufactured by W.C. Heraeus demonstrate excellent durability against different hydrous solutions and acids, as well as molten baths and vapour. Their solid high temperature reliability together with their inherent properties against corrosion, make our products suitable for a variety of technical applications.

The latest studies on the usage of tantalum in the medical field (cannulae and implants) and analytic technology, e. g. HPLC (High Performance Liquid Chromatography), document the extraordinary biocompatibility and corrosion durability.

Research and development are integral parts of the W.C. Heraeus business philosophy. Unique concepts, the development of customer tailored precision parts for an optimal performance and top level functionality are what we strive for and promise.

All this entails a wide field of activities, ranging from specification and definition of the required properties, to the choice of suitable materials, right through to the flawless geometry. This is rounded off with high quality finishing. The know-how behind the entire process, from smelting to end production and comprehensive analysis comes from just one source.

Our specialists are readily available for a detailed consultation and welcome the opportunity to discuss specific customer requirements.



Special properties:

- Narrow dimension tolerances
- Optimized surfaces
- Well-defined properties of stability
- High durability against corrosion and thermal oxidation
- High chemical durability
- Extraordinary biocompatibility
- High pressure stability

Types of product:

- Seamless drawn tubes
- Trimmed tubes
- Needles with rotated or honed tips
- Tube-in-tube products / bonded tubes
- Precision lathe parts based on precision tubes
- Compressed tubes
- Special forms according to customer requirements

Dimensions:

- External diameter \geq approx. 0.5 mm
- Internal diameter \geq approx. 0.2 mm
- Length up to approx. 4 m

Materials:

- Tantalum
- Niobium
- Niobium-1%-zirconium
- Precious metals (e. g. platinum and platinum alloys)

Applications:

- Analytic technology
- Pharmacy
- Lighting technology
- Measuring technology
- Electronics
- Electro-technology
- Laboratory technology
- Medical technology
- Chemical apparatus engineering



HPLC analysis device from Agilent

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