

High Performance Metal Solutions

High Performance Solutions for LT Superconducting Wire

H.C. Starck offers superior quality tantalum and niobium rod and sheet for high performance superconducting wire.

Advanced Products Niobium Niobium Niobium Niobium Niobium

Applications

Nb₃Sn superconducting wire for high magnetic field applications: NMR, mass spectroscopy (FTMS), particle accelerators, nuclear fusion research equipment.

Tantalum & Niobium Rod

> Sizes Available:

- > Diameters: 10 100 mm
- > Max. Length: 2.5 7.5 m
- > Microstructural control
- > In compliance with ASTM B392 (Nb) and B365 (Ta)
- > Consistent chemistry and mechanical properties

Tantalum & Niobium Sheet

- > Sizes Available:
 - > Sheet: 0.25 2.5 mm thick, up to 1m wide
 - > Other dimensions available upon request
- > Excellent surface quality
- > In compliance with ASTM B393 (Nb) and B708 (Ta)
- > Consistent chemistry
- > Mechanical properties tuned to customer needs



High Performance Metal Solutions

EBSD Map and Pole Figure of Nb rods in cross-section

Before optimization



H.C. Starck offers billet extrusion services for superconducting wire. The 5500 mt press is uniquely equipped with state of art controls for accurate dimensional control and optimum reductions. The high tonnage results in improved superconducting wire yields and superior wire properties.

H.C. Starck operates globally in accordance with stringent purchasing guidelines and processes only raw materials acquired from conflict-free sources. H.C. Starck's has been certified by the EICC as a "Conflict-Free Smelter" of tantalum for our sustainable procurement process.

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by H.C. Starck Solutions. All information is given without warranty or guarantee. It is expressly understood and agreed that the customer assumes and hereby expressly releases H.C. Starck Solutions from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind H.C. Starck Solutions. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent. Properties of the products grefered to herein shall a general rule not be classed as information on the properties of the item for sale. In case of order please refer to issue number of the respective product data sheet. All deliveries are based on the latest issue of the product data sheet and the latest version of our General Conditions of Sale and Delivery.

The values in this publication are typical values and do not constitute a specification.

For additional info please contact:

H.C. Starck Inc. 45 Industrial Place Newton, MA 02461 USA Phone: +1 216 392 5077 info@hcstarcksolutions.com www.hcstarcksolutions.com