


## Specifications for the procurement of NbTi superconducting wires


Date: 26/05/2025  
Reference: DSBT-CDC-25-30  
Issue - Revision: 1 - 3

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	CEA - GRENOBLE	Département des Systèmes Basses Températures
	Specification for the procurement of NbTi Superconducting Wire	Date : 26/05/2025 Ref : DSBT-CDC-25-30 Issue – Revision : 1 - 3 Page : 2 / 3

### **Document status**

Issue	Révision	Date	N° de page	Modifications
1	0	04/03/2025		1st Issue
1	1	22/04/2025		Minor update
1	2	16/05/2025		Minor update to clarify requirements
1	3	26/05/2025		Update approbation

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## 1.1. OBJECT AND CONTEXT

This is a specification for the procurement of NbTi superconducting wire.

## 1.2. DESCRIPTION

NbTi superconducting wire with the following specifications:

- Diameter of the bare superconducting wire: 0.79 mm (+/- 10%)
- Diameter of the insulated superconducting wire including insulation: 0.100 mm (+/-10%)
- Filament numbers: 54
- Filament diameter: 10 to 15  $\mu$ m
- Ratio Copper / NbTi: 1.3 (+/- 20%)

Functional property:

- Critical current > 5 Amps at a magnetic field of 3 Tesla.

Length: 125 km

Packaging: coils of 20 to 30 km

## 1.3. OTHER REQUIREMENTS

The seller will provide a formal datasheet and a certificate of conformity.

## 1.1. EXPECTED DELAY

The expected delay is a maximum of 3 months after the date of order.

## 1.2. CONTACTS

For any technical inquiry, you can contact:

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