# CODETI Division 3

Revision 2018

Code for Construction of Penstocks





Find all our codes online!

www.snctpublications.com snctpublications@snct.org



# **CODETI Division 3:2014**

## Code for Construction of Penstocks



### General

This part defines the scope and application of the code, the general principles on which the rules and conditions precedent to their application are based and the notion of construction category. The construction category is a function of the fall height, the inside diameter of the penstock and the consequences of a possible failure.

### **Materials**

The requirements of this Part permit the selection of materials, the definition of delivery conditions so that base materials and welded joints have sufficient ductility and toughness. Annex MA2 of this part proposes rules for preventing the risk of brittle fracture for non-alloyed steels with a guaranteed minimum yield strength of 500 MPa or less.

### **Design and Calculations**

The requirements of this part allow, after detailed inventory of mechanical loadings to which the equipment will be subjected, to select the geometries, to design joints and to determine the thicknesses and dimensions to prevent ruin following the different modes of failure of the equipment covered by the code.

### **Fabrication**

The requirements of this part relate to the provisions for the operations of cutting, forming, joining, welding, rolling expansion, thermal treatments, etc. whose observation makes it possible to obtain the characteristics provided for the base material and the joints in the conditions of use of the equipment, as well as respect for the dimensions provided.

### **Testing - Proof Tests - Inspection**

This part concerns the operations to be carried out to check that all the requirements of the code have been well observed and therefore the quality of the equipment ensures the expected operational safety.

### **Revision 2018**

- Changes to the «General» Part to take into account the specificities of penstocks.
- Addition of an appendix relating to the technical construction data necessary for the progress of a project (Annex GA4)
- Modifications of design rules of exposed penstocks and steel tunnel liners (Section C4)
- Modifications of simplified fatigue analysis rules and addition of a synoptic illustrating the application of the rules.

A list of changes subject to revision 2018 is available at the beginning of the code when you have subscribed.

### Your sales contact:

Muriel VAN-MARLE
Tél: +33 (0)1 47 17 62 66
E-mail: snctpublications@snct.org
www.snctpublications.com