

**NATIONAL ANNEX TO  
STANDARD**

**SFS-EN 1993-4-3 EUROCODE 3: DESIGN OF STEEL STRUCTURES**

**Part 4-3: Pipelines**

**Foreword**

This National Annex is used together with Standard SFS-EN 1993-4-3 + AC.

This National Annex sets out:

a) National parameters for the following paragraphs in Standard SFS-EN 1993-4-3 + AC where national choice is permitted:

2.3 (2)

3.2(1)P

3.2 (2)P, (3), (4)

3.3 (2), (3), (4)

3.4 (3)

4.2 (1)P

5.1.1 (2), (3), (4), (5), (6), (9), (10), (11), (12), (13)

5.2.3 (2)

5.2.4 (1).

b) Guidance on the use of Informative Annexes A, B and C.

### **2.3 Reliability differentiation**

#### 2.3(2)

The minimum reliability should be chosen according to National Annex for standard SFS-EN 1990 or standard SFS-EN 1997-1 depending on the case. National Annex to standard SFS-EN 1990 should be applied, when pipelines are above the ground level. National Annex to standard SFS-EN 1997-1 should be applied, when pipelines are not above the ground level.

### **3.2 Mechanical properties of pipeline steels**

#### 3.2(1)P

The recommended value should be used.

#### 3.2(2)P

The recommended value should be used.

#### 3.2(3)

The recommended value should be used.

#### 3.2(4)

The recommended value should be used.

### **3.3 Mechanical properties of welds**

#### 3.3(2)

The recommended value should be used.

#### 3.3(3)

The recommended value should be used.

#### 3.3(4)

The recommended value should be used.

### **3.4 Toughness requirements of plate materials and welds**

#### 3.4(3)

The recommended value should be used.

### **4.2 Partial factors for actions**

#### 4.2(1)P

The values and load combinations given in the National Annex for standard SFS-EN 1990 or SFS-EN 1997-1 should be used depending on the case. National Annex to standard SFS-EN 1990 should be applied, when pipelines are above the ground level. National Annex to standard SFS-EN 1997-1 should be applied, when pipelines are not above the ground level.

### **5.1.1 Simplified calculation model for ultimate limit state design**

#### 5.1.1(2)

The values given in the National Annex for standard SFS-EN 1990 or standard SFS-EN 1997-1 should be used depending on the case. National Annex to standard SFS-EN 1990 should be applied, when pipelines are above the ground level. National Annex to standard SFS-EN 1997-1 should be applied, when pipelines are not above the ground level.

## 5.1.1(3)

The recommended values should be used.

## 5.1.1(4)

The recommended values should be used, if local conditions do not require values, which are more determining.

## 5.1.1(5)

The recommended value should be used, if local conditions do not require greater value.

## 5.1.1(6)

The recommended values should be used, if local conditions do not require values, which are more determining.

## 5.1.1(9)

The recommended value should be used.

## 5.1.1(10)

The recommended value should be used, if local conditions do not require other value to be used.

## 5.1.1(11)

The recommended values should be used, if local conditions do not require other values to be used.

## 5.1.1(12)

The recommended values should be used, if local conditions do not require other values to be used.

## 5.1.1(13)

The values given in the National Annex for standard SFS- EN 1990 or SFS- EN 1997-1 should be used for partial factor  $\gamma_F$ , depending on the case. National Annex to standard SFS-EN 1990 should be applied, when pipelines are above the ground level. National Annex to standard SFS-EN 1997-1 should be applied, when pipelines are not above the ground level. For other values above the recommended values should be used.

### 5.2.3 LS3: Deformation

## 5.2.3(2)

The recommended value should be used.

### 5.2.4 LS4: Fatigue

## 5.2.4(1)

Other standards for fatigue load are not given in the National Annex.

## Annex A

### Analysis of resistances, deformations, stresses and strains of buried pipelines

Annex A may be used.

## Annex B

### Bibliography to National Standards and to design guides

Annex B may be used in individual projects, but Annex B is not a part of National Annex.

## Annex C

### Bibliography

Annex C may be used in individual projects, but Annex C is not a part of National Annex.