

# **Design of steel structures with worked examples**



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## Introduction

The text in this book summarises the design of steel structures according to European standards. The first chapter focuses to structure of Eurocodes and the sustainability. Further are discussed basic principles of element design according to EN 1993-1-1 and connection design according to EN 1993-1-8. The fourth chapter demonstrates to application of texts in works examples.

The optional values of partial safety factors are selected for Czech Republic. The application in other countries needs to check/implant their values, which are included in National Annexes. After the chapter number is kept the numbering in text of standards EN 1993-1-1 and EN 1993-1-8. For further study of the design principles may be recommended the text books, see [6], or texts of educational projects of AccessSteel [7] and eQUESTA [8] available at internet.

The authors sheared the work as follows: Chap. 1 (except 1.2), 3.8, 4.16 and 4.17 František Wald; Chap 1.2 Petr Hájek; Chap 2 (except 2.6.3) and 4.1, 4.2 a 4.8 Josef Macháček; Chap. 2.6.3 a 4.3 - 4.8 Michal Jandera; kap. 3.1 – 3.7 and 4.12 - 4.15 Zdeněk Sokol; and Chap 4.10 and 4.11 Jakub Dolejš.

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František Wald

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