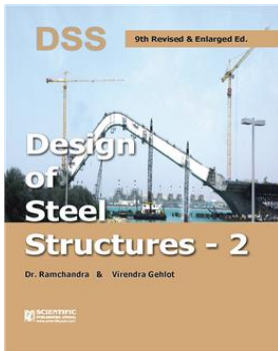


## Design of Steel Structures Vol.2



**Ramchandra & V. Gehlot**

ISBN	: 9788172336448	Book Format	: Book
Language	: English	Binding	: Paper Back
Imprint	: Scientific Publishers	Edition	: 1
Pages	: 972	© Year	: 2015
Weight	: 1355 Gms	Trim Size	: 7.5 x 9.75

**Print Book** : ₹625.00 ₹562.50 10%Off

### Blurb

Eight edition of this book is based on Bridge Rules (Adopted in 1941, Revised in 1964 and Reprinted in 1989), and IS: 800-2007. Authors have distributed present text in the edition in thirty two chapters [that is, in Four parts (1) Steel Bridges and Influence Lines Diagrams for axial forces for the members of different types of truss-girders, (2) Special Steel Structures (3) Analysis of Structures specially, the method of tension co-efficients for determinate and indeterminate structures, (4) Aluminium structures. In order to emphasize that similar to various other subjects, this subject is also very vast. Therefore, space steel structures and stressed-skin steel structures have been described special features of this new-edition of this book may be mentioned as under (1) Historical development of different types of steel bridges details of some spans of longest spans of various types of steel bridges, (2) Design of Guyed Steel Chimneys (3) Instantaneous Centre of Rotator (ICR) and Plastic Analysis of Pitched slope (i.e., gable structure) and influences of axial forces and shear forces on the plastic moment of resistance of the member cross-sections.

### Table of Contents

#### PART I (STEEL BRIDGES)

1. Steel Bridges
2. Loads, Methods of Design and Stresses
3. Plate Girder (Solid Web Girder) Bridges
4. Truss Girder (Open Web/Lattice Girder) Bridges
5. End Bearings for Steel Bridges
6. Influence Line Diagrams for stresses in Frames
7. Influence Line Diagrams for Stresses in Members of A Pratt Truss with Parallel Chords
8. Influence Line Diagrams for stresses in Members with Curved chords
9. Influence line diagrams for stresses in members of a Baltimore and A Pettit Trusses with subdivided panels.
10. Influence line diagrams for stresses in members of a Balanced canti-lever and suspended span Girder.

#### PART II. SPECIAL STEEL STRUCTURES

11. Self-supporting steel chimneys
12. Guyed Steel Chimneys
13. Rectangular steel Tanks (RST)
14. Elevated Circular Steel Tanks (CST)
15. Pressed Steel Tanks (PST)
16. Design of steel Bunkers and Silos
17. Design of Industrial Buildings
18. Low and High-Rise (Multi-storey Buildings)
19. Design of Light Gauge Steel Members
20. Plastic (ultimate load) analysis and design of steel structures.
21. Plastic Bending of Beams
22. Plastic (ultimate load) analysis of rectangular portal frames.
23. Plastic (ultimate load) analysis of Pitched (Gable) Frames
24. Influence of Axial Force on Plastic Moment.
25. Influence of Shear Force on Plastic Moment.

26. Design of Steel Towers, Trestles Masts and Poles.

**PART III. DESIGN OF ALUMINIUM STRUCTURES**

27. Design of Aluminium structures

**PART IV. ANALYSIS OF STRUCTURES**

28. Analysis of Determinate and Indeterminate space frames (Method of Tension coefficient)

29. Analysis of secondary stresses.

**PART V. OTHER SPECIAL STEEL STRUCTURES**

30. Special Structures

31. Space structures

32. Stressed-skin structures

**INDEX**

This is computer generated document and does not require signature

Scientific Publishers

Date :- Wed Sep 29 2021