

COMPUTER AIDED DESIGN OF STEEL BEAM

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ABSTRACT

Engineering structures are of such variety that they defy any attempt to enumerate them except in a general way. The countless problems that arise in their design have prompted engineers to specialize in the design of particular structures or groups of related structures, and it is profitable to study design somewhat according to customary areas of specialization. Although the complete design of many structures is the result of the design of a structure having in mind only that part of the design, which comes within the province of one of the branches.

Among the structures that are designed by civil engineers are bridges, buildings, transmission towers, storage vessels, dams, retaining walls, docks, wharves, highway pavements, and aircraft landing strips. Even this group of structures is too large for convenient study as a unit. In this book we shall limit ourselves to a study of structural members in metal and the methods by which they are usually connected, together with applications to the design of bridges and buildings.