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Chapter 7. Tension Members and Welds in Thin Cold-Formed Tubes7.1 Tension Members; 7.2 Characteristics of Welds in Thin Cold-Formed Tubes; 7.3 Butt Welds; 7.4 Longitudinal Fillet Welds; 7.5 Transverse Fillet Welds; 7.6 References; Chapter 8. Welded Connections Subjected to Fatigue Loading; 8.1 General; 8.2 Classification Method; 8.3 Hollow Sections and Simple Connections; 8.4 Lattice Girder Joints; 8.5 Examples; 8.6 References; Chapter 9. Recent Developments; 9.1 Effect of Concrete-Filling and Large Deformation Cyclic Loading; 9.2 Fatigue Design using the Hot Spot Stress Method
9.3 Bolted Moment End Plate Connections9.4 Plastic Design of Portal Frames; 9.5 Other Recent Developments; 9.6 References; Subject Index

Sommario/riassunto

Cold formed structural members are being used more widely in routine structural design as the world steel industry moves from the production of hot-rolled section and plate to coil and strip, often with galvanised and/or painted coatings. Steel in this form is more easily delivered from the steel mill to the manufacturing plant where it is usually cold-rolled into open and closed section members.This book not only summarises the research performed to date on cold form tubluar members and connections but also compares design rules in various standards and provides practical design exam