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Chapter 10: Heat-Treating FurnacesClassification; Types of Furnaces; Controlled Atmosphere; Controlled-Atmosphere Furnaces; Temperature Control of Heat-Treating Furnaces; Summary; Review Questions; Chapter 11: Annealing, Hardening, andTempering; Annealing; Hardening; Tempering; Summary; Review Questions; Chapter 12: Principles of Induction Heating; Adjustable Induction Heating Coil; Summary; Review Questions; Chapter 13: High-Frequency Induction Heating; Producing Heat by Resistance; Heating Units; High-Frequency Applications; Summary; Review Questions; Chapter 14: Furnace Brazing Basic ProcessHolding Assemblies Together; Laying and Pressing Parts Together; Summary; Review Questions; Chapter 15: Cold-Treating Process; Fundamental Principle of Cold Treating; Cold-Treating Procedures; Subzero Chilling; Summary; Review Questions; Chapter 16: Automatic Lathes; Automatic Turret Lathes; Automatic Threading Lathes; Summary; Review Questions; Chapter 17: The Automatic Screw Machine; Classification; Operating Principles; Selection and Use of Tools; Setting Up an Automatic Screw Machine; Dial-Controlled Machines; Summary; Review Questions; Chapter 18: Automated Machine Tools
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Nominal Dimensions of Heavy Hex Bolts and Heavy Hex Cap Screws

Sommario/riassunto

Master today's toolmaking equipmentHere, fully updated to include new machines and electronic and digital controls, is the ultimate guide to automated machines and toolmaking. Whether you're a professional machinist, an apprentice, or a trade student, this fully illustrated volume helps you work with metal-safely, precisely, efficiently-using today's tools and techniques. It's packed with review questions for students, and loaded with answers you need on the job.* Understand automated machine fundamentals and work with jigs and fixtures * Learn the basics of spiral and helix mi