

1. Record Nr.	UNINA9910458192503321
Titolo	Handbook of residual stress and deformation of steel [[electronic resource] /] / edited by G. Totten, M. Howes, T. Inoue
Pubbl/distr/stampa	Materials Park, OH, : ASM International, c2002
ISBN	1-62198-372-2 1-61503-227-4
Descrizione fisica	1 online resource (495 p.)
Altri autori (Persone)	TottenGeorge E HowesMaurice A. H InoueTatsuo <1939->
Disciplina	620.1/76
Soggetti	Steel - Fatigue Residual stresses Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	<p>""Contributors""; ""Contents""; ""Preface""; ""Material Factors""; ""Prestress Engineering of Structural Material: A Global Design Approach to the Residual Stress Problem""; ""Residual Stresses and Fatigue Behavior""; ""Stability of Residual Stresses""; ""Effect of Residual Stress on Hydrogen Embrittlement and Stress Corrosion Cracking""; ""Deflection Methods to Estimate Residual Stress""; ""Measurement of Residual Stresses""; ""Stress Determination in Coatings""; ""Methods for Determination of Inhomogeneous Residual Stress Fields""; ""Residual Stress in the Forming of Materials""</p> <p>""The Effect of Final Shaping Prior to Heat Treatment""""Factors Affecting Final Part Shaping""; ""Effects of Process Equipment Design""; ""Residual Stresses in Carburized, Carbonitrided, and Case-Hardened Components""; ""Residual Stresses in Nitriding""; ""Induction Hardening""; ""Hardening by Reheating and Quenching""; ""Metallo-Thermo-Mechanicsa€?Application to Quenching""; ""Control of Residual Stress Formation and Steel Deformation during Rapid Heating and Cooling""; ""Effect of Cryogenic Cooling of Residual Stresses, Structure, and Substructure""</p>

""Inducing Compressive Stresses through Controlled Shot Peening""
Residual Stress Formation during Casting""; ""Residual Stress Formation
during Casting: Continuous and Centrifugal Casting Processes"";
""Residual Stress Formation Processes during Welding and Joining"";
""Residual Stresses in Powder-Metal Processing""; ""Residual Stress
Formation and Distortion of Rail Steel""; ""Residual Stresses during Gear
Manufacture""; ""Metric Conversion Guide""; ""Index""
