

1. Record Nr.	UNINA9910254058903321
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Titolo	Plasticity of Boronized Layers // by M. G. Krukovich, B. A Prusakov, I. G Sizov
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-40012-6
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (369 p.)
Collana	Springer Series in Materials Science, , 0933-033X ; ; 237
Disciplina	620.11
Soggetti	Tribology Corrosion and anti-corrosives Coatings Metals Surfaces (Physics) Interfaces (Physical sciences) Thin films Mechanics Mechanics, Applied Materials—Surfaces Tribology, Corrosion and Coatings Metallic Materials Surface and Interface Science, Thin Films Theoretical and Applied Mechanics Surfaces and Interfaces, Thin Films
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Preface -- The general classification scheme of boronizing -- Components and phases in systems a boron-iron and a boron-carbon-iron -- The phase equilibrium diagram of binary system iron-pine boron -- The multicomponent phase equilibrium diagrams used at boronizing steels and alloys -- Plasticity – a durability basis boronized layers -- Formation conditions boride and boronized the layers, defining their plasticity -- Ways of decrease in fragility boronized

layers and the parameters of technological process defining their plasticity -- Composite structure – a plasticity basis of boronized layer -- Interrelation of plasticity boronized layers with the mechanical and working properties boronized steels -- Modeling of process of formation diffusive boronized layers and their wear resistance -- Perspective technologies of boronizing, providing the raised plasticity of layers -- Application of processes boronizing in the industry for treatment of details and tools.

Sommario/riassunto

This book presents the physico-technical basis and current state of the technology of boronized layers. Special attention is given to the layer structure and morphology of allocated phases and distributions in a superficial zone of chemical compounds. Two- and multi-component phases of alloys and diffusion processes in a self-organizing mode are discussed. Surface hardening by boronizing increases the life time of mechanical tools. This is important for the mining industry, agriculture, textile and chemical industry. The book is important for thermochemical treatment and surface hardening of metals and alloys.
