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Zhong Xu · Frank F. Xiong

## Plasma Surface Metallurgy with Double Glow Discharge Technology

Xu-Tec Process

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#### Z. Xu, F.F. Xiong Plasma Surface Metallurgy

With Double Glow Discharge Technology—Xu-Tec Process

- ► The first book available on plasma surface metallurgy
- Written by the originator of Xu-Tec process
- Offers an in-depth understanding and hands-on experiences of the techniques in an industry environment

This book provides a comprehensive introduction to and technical description of a unique patented surface-modification technology: plasma surface metallurgy with double-glow discharge plasma process, known as the Xu-Tec process. As such it promotes further attention and interest in scientific research and engineering development in this area, as well as industrial utilization and product commercialization.

The Xu-Tec process has opened up a new material engineering field of "Plasma Surface Metallurgy". This surface-modification process can transform many low-grade and low-cost industrial engineering materials into "gold" materials with a high value and high grade or special functions. This improved material can be widely used in industrial production to improve the surface performance and quality of mechanical parts and manufacturing products, and to conserve expensive alloying elements for the benefit of all mankind.

"This book will be valuable to those in the general area of surface metallurgy. The substantial description of the Xu-Tec process is very important and should assist in expanding the use of this superior technique. The in-depth explanation of glow discharges and their use in general will also serve as a valuable reference in the field."

James E. Thompson, Prof.

Fellow of the IEEE

Dean of Engineering Emeritus

University of Missouri, Columbia, Missouri, USA

November, 2016

"A BREAKTHROUGH IN MAKING METAL TOUGHER".

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