

[IV~21]

XU-TEC PROCESS AND XU-TEC SAW BLADES

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The Xu-Tec process is also called the double glow surface alloying technology and is a new method of surface metallurgy which can produce an alloy layers with special physical and chemical properties on the surface of common and inexpensive materials. Many super alloys and alloy steels, such as nickel base alloys, high speed steels and stainless steels, have been produced by Xu-Tec Process on the surfaces of carbon steels. The depth of the alloy layers may vary from several microns up to 300 microns with alloying elements in a concentration of few percentage to 100%. World wide patents for Xu-Tec process have been granted in the United states, Canada, United Kingdom, Australia and Japan.

High performance saw blades have been successfully produced by the Xu-Tec process with much simpler processing steps and less cost than bimetal high speed saw blades. A comparison of the cutting times and wear rates of the Xu-Tec blades with the conventional bimetal blades has been made. The Xu-Tec blades demonstrates similar or better performance than bimetal blades. A Xu-Tec Unit for the commercial production of Xu-Tec saw blades has been designed and manufactured. This Unit can treat 10,000 hack saw blades at one time. Three Xu-Tec hack saw blades production lines have been set up in China.