## Induction Hardening surgical blades

United Induction Heating Machine Limited

We are experienced in Induction Heating, induction heating machine, Induction Heating equipment. They are widely used in induction heating service, induction heat treatment, induction brazing, induction hardening, induction welding, induction forging, induction quenching, induction soldering induction melting and induction surface treatment applications http://www.uihm.com

Objective To quickly heat a steel surgical blade to 2000°F (1093°C) within 2 seconds so as to harden the blade edge.

Material Stainless steel surgical blades, temperature sensing paint Temperature 2000°F (1093°C)

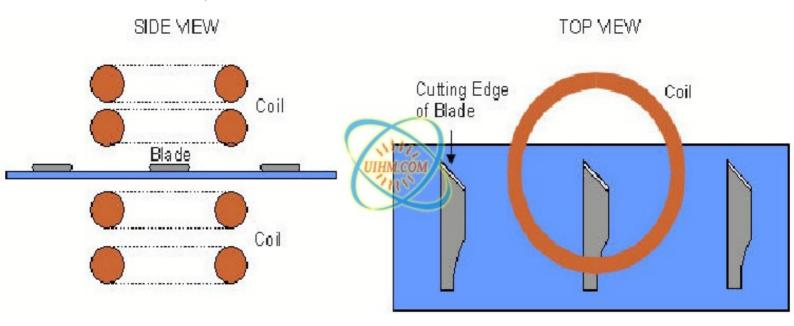
Frequency 339kHz

Equipment Power of 6kW induction heating system, remote heat station containing one 1.0 microfarad capacitor..

Process A four turn helical coil is used to harden the blades. The induction coil is designed to provide uniform heat to the entire length of the blade surface. RF power is applied to heat the entire assembly. The blade reaches the necessary temperature for hardening in 1.2 seconds.

Results/Benefits Induction heating provides:

- Does not affect core structure
- Targeted and rapid heat treating
- Fast, accurate repeatable heat



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