



Annealing stainless steel bread cutting saw blades

Objective Anneal saw blades used for cutting bread, prior to hole punching.

Material .38" (9.6mm) wide and .51" (12.9mm) wide continuous strips of 400 series stainless steel.

Temperature 600°C (315.6°F) for one second

Frequency 289kHz

Equipment

- Ambrell 4.2 kW induction heating system equipped with a remote workhead containing one 1.00 μ F capacitor.
- An induction heating coil designed and developed specifically for this application.

Process A three turn helical coil at a 45° angle is used to anneal a 1.2" (30.5mm) strip of saw blade prior to hole punching.

Results/Benefits Induction heating provides:

- Improved quality of blades at hole punching location
- Decreased scrap product
- Easily incorporated into existing production lines

