INDUSTRY GUIDE

Furnaces & Ovens for Wire, Mesh & Spring Makers

Pit-type wire annealing furnaces, spring stress relieving ovens and coating cure ovens for wire products.

Wire drawing hardens the metal at every pass. Wire makers anneal coils between draws and before final use, spring makers stress relieve springs after coiling so they hold their shape, and mesh and wire-product makers cure PVC or powder coatings on finished goods. Each job needs the whole coil or basket to reach temperature evenly. Uneven heating leaves hard and soft patches along the wire.

Heating processes in this industry

Low-carbon steel wire annealing	about 650–720°C
Copper and brass wire annealing	about 400–650°C
Aluminium wire annealing	about 300–400°C
Music wire spring stress relief	about 230–290°C for 20–30 minutes
Oil-tempered and Cr-Si spring stress relief	about 260–425°C
Stainless spring stress relief	about 350–430°C
PVC coating cure on wire products	about 200°C working in AHS PVC ovens

Equipment AHS builds for this industry

- Wire Annealing Oven
- Pit Type Annealing Furnace
- Annealing Furnace
- Copper and Brass Annealing Oven
- Spring Stress Relieving Oven
- Tempering Furnace
- Hardening Furnace
- PVC Curing Oven

Why AHS

- About 70 documents on pit furnaces, pots and charge carriers between 2005 and 2026
- Pit furnaces of 90 kW (3 × 30 kW) and 120 kW (3 × 40 kW) with sealed heaters and about a 4-hour cycle
- SS-304 lid fans with water-cooled bearing housings and 250 mm ceramic wool insulation
- Pit annealing furnaces exported to Ivory Coast, with spares supplied abroad
- PVC curing ovens for coated wire products
- Building furnaces in Delhi since 1991