INDUSTRY GUIDE

Ovens & Furnaces for Utensil & Cookware Makers

Annealing, drying, non-stick curing and packing equipment for aluminium and steel utensil and cookware makers.

Utensil and cookware plants run a chain of heat processes. Aluminium circles are annealed before deep drawing or spinning, and pieces are washed or pickled and then dried. Non-stick, enamel or powder coatings are cured at high temperature, and finished sets are shrink-wrapped for dispatch. Each step needs its own kind of oven, and each affects the look and life of the product. Under-annealed circles crack, wet pieces stain, and an uneven cure leaves coatings that peel.

Heating processes in this industry

Circle annealing	about 340–410°C to soften circles for deep drawing and spinning
Drying after washing or pickling	low-temperature hot air to remove water before stains and oxidation form
Non-stick coating cure	multi-zone conveyor, AHS lines work at 200–500°C; topcoat sintering temperature per coating supplier's data sheet
Vitreous enamel firing	about 780–850°C on steel; AHS has built a 500°C electric conveyor furnace for enamel on utensils and a PNG enamelling furnace working at 500–850°C
Powder coating of utensil exteriors	about 160–200°C metal temperature
Shrink packing	electric shrink tunnel up to 300°C

Equipment AHS builds for this industry

- Aluminium Circle Annealing Oven
- Aluminium Utensils Dryer
- Non-Stick Curing Oven
- PTFE Coating Curing Oven
- Vitreous Enamel Oven
- Conveyor Powder Coating Oven
- Shrink Packaging Machine
- Non-Ferrous Melting Furnace
- Aluminium Dross Extraction System

Why AHS

- More than 90 documents on non-stick curing conveyor ovens since 2003, with lines rated to 550°C
- Non-stick lines exported to Bangladesh and an electric utensil dryer exported to Nepal
- Close to 60 aluminium circle and utensil annealing buyers, plus utensil conveyor and coating line buyers, in our records since 2017
- One supplier for annealing, drying, curing and packing, with heating matched across the plant
- Electric, LPG, PNG, CNG or dual-mode heating on every machine
- Building ovens in Delhi since 1991