HEAT TREATMENT OVENS

Aluminium Circle Annealing Oven

Trolley-type oven for annealing stacks of aluminium circles soft for deep drawing, 500 kg to 4,000 kg loads.



TEMPERATURE
Up to 550°C

HEATING
Electric, gas (LPG/PNG/CNG) or dual fuel (electric + gas)

INDUSTRIES
Aluminium circles and sheet, utensils and cookware

Specifications

Charge	500 kg and 600 kg standard; up to about 4,000 kg built
Maximum temperature	500–550°C
Working range	100–500°C
Electric heating	54–90 kW (60 kW most common)
Gas heating	top-mounted LPG/PNG/CNG burner in an SS firing chamber
Insulation	125–150 mm ceramic fibre + mineral wool
Loading	trolley on rails; motorised trolley optional
Door	counterweighted vertical-lift door
Controls	PID with soaking timer and blower starters

Typical reference builds

Build	Load	Working size (W x D x H)	Temperature	Heating
Compact	2,000 kg charge	1,250 × 2,400 × 1,100 mm	100–500°C	60 kW electric; gas or dual-fuel to order
Standard	3,000 kg charge	1,200 × 2,400 × 1,200 mm	100–500°C	72 kW electric; gas or dual-fuel to order
Heavy-Duty	4,000 kg charge	1,450 × 2,400 × 1,100 mm	100–500°C	72–78 kW electric; gas or dual-fuel to order

Sizes and loads taken from ovens AHS has quoted and built. Indicative only: final chamber size and heating load are engineered to your load, cycle and site supply.

Features

- Side-wall circulation fans for even heating through the stack
- Separate firing chamber keeps flame off the circles
- Flame-failure gas cut-off with audio-visual alarm
- SS-304 inner chamber option
- Soak timer with end-of-cycle hooter
- Optional switch-over between gas and electric heating
- Two-trolley layouts so one charge loads while another anneals

Applications

- Annealing aluminium circles for pressure cookers and utensils
- Softening circles before deep drawing and spinning
- Annealing aluminium sheet blanks and discs
- Intermediate annealing between drawing stages
- Annealing circles for lids, containers and lamp shades