FOUNDRY & WELDING OVENS

Electrode Baking Oven

Batch oven for drying and baking coated welding electrodes, 80–450°C. Electric, gas or dual fuel.



TEMPERATURE
80–450°C

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

INDUSTRIES
Welding electrodes, welding consumables, fabrication

Specifications

Working range	80–450°C (drying and baking)
Electric heating	15–180 kW, sealed tubular or Inconel-sheathed heaters
Gas heating	LPG/PNG burners in an SS-304 firing chamber
Construction	three-wall, 150 mm ceramic fibre + mineral wool on all six sides
Loading	trays on trolleys running on rails
Moisture control	exhaust blower on a cyclic timer
Controls	PID with thyristor and multi-point recorder; PLC/HMI optional
Warranty	one year on manufacturing defects (elements and consumables excluded)

Typical reference builds

Build	Load	Working size (W x D x H)	Temperature	Heating
Compact	Single trolley	1,250 × 1,250 × 1,250 mm	up to 450°C	30 kW electric
Standard	Trolleys on rails	1,600 × 3,600 × 1,600 mm	up to 450°C	90 kW electric; gas or dual-fuel to order
Heavy-Duty	Trolleys on rails	1,600 × 5,600 × 1,600 mm	up to 450°C	120 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

- Forced hot-air circulation through every tray level
- Gas-to-electric selector switch on dual-mode ovens
- Timed moisture exhaust to carry steam out of the chamber
- SS-304 firing chamber keeps combustion gases away from the flux
- Multi-point temperature recorder for batch records
- Burner-fail and end-of-cycle alarms
- Trolleys and trays sized to your electrode lengths

Applications

- Baking low-hydrogen basic electrodes after extrusion
- Drying rutile and general-purpose electrodes
- Re-drying electrodes that have picked up moisture
- Baking special and alloy electrodes in small batches
- Drying flux-coated rods before packing