FOUNDRY & WELDING OVENS

Continuous Electrode Baking Oven

Multi-zone tunnel oven that dries, bakes and cools welding electrodes in one continuous flow.



TEMPERATURE
80–450°C

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

INDUSTRIES
Welding electrode manufacturing, welding consumables

Specifications

Number of zones	3 to 5 heating zones plus cooling zone
Typical zone lengths	3,000 to 6,000 mm each
Zone temperatures	about 80°C drying up to 450°C final bake
Heating	sealed tubular heaters, 30 to 60 kW per zone, or LPG/PNG burners
Air circulation	hot air generators with 5 HP SS-304 blowers
Material movement	trolleys on tracks, chain or PLC-driven pusher
Insulation	100 to 150 mm ceramic fibre and mineral wool
Control	PLC + HMI with recipes, PID zones, thyristor power control
Recording	multi-channel recorder with data logging
Moisture exhaust	timed exhaust blowers per zone

Features

- Gradual drying before baking to avoid coating cracks
- Independent temperature control in every zone
- Recipe selection for different electrode grades and sizes
- Flue-gas heat recovery to the first zone on gas models
- Water-cooled fan bearing housings
- Cooling zone so electrodes leave ready for packing
- Electric, gas or dual fuel heating

Applications

- Baking of low-hydrogen basic coated electrodes
- Drying and baking of rutile and cellulosic electrodes
- Stainless steel and special alloy electrodes
- Hardfacing and cast iron electrodes
- High-volume electrode plants replacing batch ovens
- Expansion lines for existing electrode plants