INDUSTRY GUIDE

Ovens & Furnaces for Aluminium Circle & Sheet Makers

Annealing ovens, melting furnaces and dross recovery for aluminium circle, sheet and coil producers.

Aluminium circle and sheet makers turn ingot and scrap into cold-rolled sheet, punch it into circles, and then anneal the circles soft enough for utensil makers to deep draw. Most of the cost is heat. Metal is melted for casting, rolled stock is annealed, and dross is skimmed off at every melt. An oven that leaves the centre of the stack under-annealed causes cracked circles at the customer, and a melting furnace that runs too hot burns metal into dross.

Heating processes in this industry

Circle and sheet annealing	about 340–410°C, soaked until the whole stack recrystallises to soft O temper for deep drawing
Recovery (partial softening)	from about 90–120°C up to 230°C, used for partial tempers
Melting ingot and scrap	up to about 800°C for casting slabs and strip
Dross recovery	hot dross worked in a heated vessel so trapped aluminium drains out
Ageing of heat-treatable alloys	about 150–200°C after solution treatment at about 500–540°C
Billet preheating before extrusion	temperature set by alloy and press practice

Equipment AHS builds for this industry

- Aluminium Circle Annealing Oven
- Annealing Furnace
- Aluminium Ageing Oven
- Aluminium Billet Preheating Oven
- Non-Ferrous Melting Furnace
- Tilting Furnace
- Rotary Melting Furnace
- Aluminium Dross Extraction System
- Industrial Gas Burner

Why AHS

- Aluminium annealing is our largest family: more than 550 documents on circle annealing ovens between 2004 and 2026
- Close to 60 aluminium circle and utensil annealing buyers in our sales records since 2017
- Charges from 500 kg to about 4,000 kg, with 500 kg and 600 kg our most-built sizes
- More than 100 documents on dross extraction and aluminium recovery systems since 2012
- Electric, LPG, PNG, CNG and dual-mode heating, and conversion of existing furnaces to gas
- Designing and building industrial ovens in Delhi since 1991