

Features	Benefits
Granco Clark Age & Anneal Ovens	
Excellent temperature uniformity—a nominal $\pm 7^\circ$ F	<ul style="list-style-type: none"> • Uniform hardness for high product quality, minimal scrap
Quick heat-up of load (nominal one to two hours)	<ul style="list-style-type: none"> • Increased throughput
Chamber sizes designed to meet your needs	<ul style="list-style-type: none"> • Adaptable to virtually any space requirements • A range of prices to fit your budget
Charge and discharge transport systems, including rack stackers and destackers	<ul style="list-style-type: none"> • Reduced manpower, manual intervention • Increased operator safety • Reduced damage to oven
Available with multiple, pre-programmed age oven cycles	<ul style="list-style-type: none"> • Process can be varied to suit requirements of individual products • Reduced chance of operator error resulting in a scrapped load
Single-End-Flow Model	
Simplicity of design, high-grade materials	<ul style="list-style-type: none"> • Durable • Low maintenance • Easy to operate
High air volumes	<ul style="list-style-type: none"> • More uniform heating than competitive ovens
Double-End-Flow Model	
Separate fans supply air to each end of chamber	<ul style="list-style-type: none"> • Achieves greater temperature uniformity, faster heat-up rate than single-end-flow ovens
Dual burners and fans	<ul style="list-style-type: none"> • Faster heat-up rates • Improved temperature uniformity
Doors under positive air-flow pressure at all times	<ul style="list-style-type: none"> • Eliminates cold air infiltration, which can compromise profile quality
Side-Flow Model	
Engineered duct system	<ul style="list-style-type: none"> • Highest temperature uniformity • Fastest heating rate
Cross-flow circulation through the load	<ul style="list-style-type: none"> • Greater thermal uniformity

Extrusion Expertise That's Always Within Reach

Granco Clark's commitment to assuring maximum equipment performance has earned us a record of more successful extrusion installations than any other company in North America.

First, we work with you to recommend the right equipment for your particular needs. Our highly experienced employees, together with our ISO-9001-certified quality assurance system, ensure a smooth acquisition from purchase order to

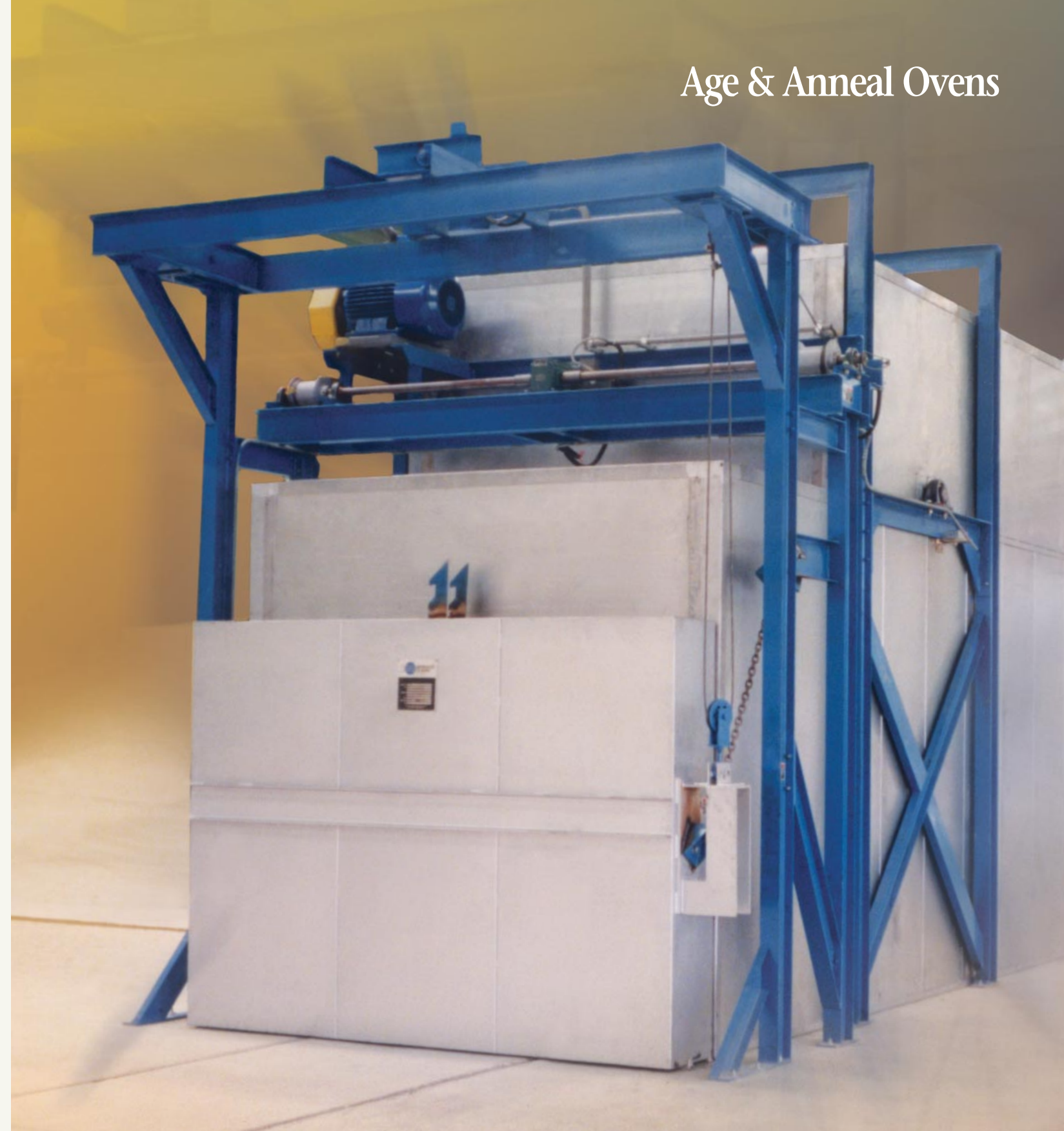
up-and-running. Once equipment is installed, we adjust it, train your personnel to operate it, and get it into service quickly.

After installation, we follow up to make sure equipment is performing at peak efficiency and that you're completely satisfied. And we back all of our equipment with the industry's best warranty.

We never stop being your key resource. Need a part? Order replacement parts any day of the week, any time with our 24-hour parts hotline—more than 80% are available for delivery the next day or sooner.

If equipment goes down, help is available immediately with Granco Clark's modem support. Service is free during standard business hours, with additional assistance available 24/7. We'll run diagnostics on your system via modem and walk you through any repairs.

With Granco Clark, you have peace of mind that your extrusion line is delivering the highest possible performance and productivity. And you can count on us for continued service and support over the full life of your equipment.





High-volume air systems bring oven loads up to temperature quickly (nominal one to two hours).

Granco Clark age ovens are designed to deliver rapid, complete aging of every profile in every batch—which translates into maximum profile quality and throughput and a dramatic reduction in scrap. And we produce several different oven designs, allowing you to balance performance needs against budget parameters.

Quick, Uniform Heating

Granco Clark age ovens bring loads to temperature quickly, a nominal one to two hours. Due to high-volume airflow, they come to heat faster than competitive ovens, a major efficiency.

In Granco Clark ovens, the heating process also occurs with exceptional uniformity throughout the load—a nominal $\pm 7^\circ$ F. The result is profiles of uniform hardness and minimal scrap. In short, more usable—more profitable—product.

Programmed for Profitability

Granco Clark age ovens are available with multiple, pre-programmed cycles, allowing you to adjust the aging process to the requirements of individual products. Preset programs also reduce the chance of operator error resulting in a scrapped load.

Designed for Flexibility

Granco Clark offers single-end-flow, double-end-flow, and side-flow ovens. Our various recirculation designs give you the flexibility of a wide price range and the diversity to fit any plant layout and performance requirement.

Single-End-Flow

Some of the oldest working ovens in the industry are single-end-flow designs by Granco Clark. Simply designed and easy to operate, our single-end-flow ovens require very little maintenance. Their high-volume air systems result in quicker heat-up and excellent temperature uniformity for chamber lengths of up to 50 feet. Vertically operated powered doors are standard.

Reversing-End-Flow

In Granco Clark's reversing-end-flow oven, the air source is positioned in the center of the oven and the direction of the air can be reversed during the age oven cycle. This distributes the heat more evenly throughout the oven, producing a more uniform temperature load.

Double-End-Flow

With separate fans supplying air to each end of the chamber, Granco Clark double-end-flow ovens yield greater temperature uniformity than single-end-flow ovens. Dual burners and fans achieve faster heat-up for higher productivity and improved energy efficiency. The doors of the double-end-flow oven are under positive airflow pressure at all times, which eliminates cold air infiltration and helps maintain the uniformity of the load.

Side-Flow

The Granco Clark side-flow oven has a duct system engineered to achieve the best airflow, allowing for quick heat-up and creating cross-flow circulation throughout the load. This oven offers the fastest heating rate and the highest degree of temperature uniformity for extrusions of any length.

Continuous Aging

In addition, Granco Clark has the capability to build continuous aging ovens that automatically index age oven racks to provide continuous production flow.

Rack Handling Solutions

Granco Clark also offers complete aging systems that include conveyors, rack stackers and destackers, and profile destackers. Product can move through the entire aging cycle with no manual intervention required—greatly enhancing productivity. These automated systems also reduce labor needs, increase operator safety, and reduce the possibility of damage to the oven.



Top: The Granco Clark single-end-flow age oven provides excellent temperature uniformity for chamber lengths of up to 50 feet.

Bottom: The dual burners and fans of the double-end-flow age oven deliver faster heat-up and improved temperature uniformity.