

FRIEDRICH SMOKE HOUSES



THE MEAT PROCESSING EXPERTS





American crafted smokehouses for the meat processing industry .



Laser Cutting for more accurate cuts than ever.



Track welded seams are smoother, look better, and easier to clean.



Electrical systems are made and tested in-house.

You could say we've smoked like a chimney for years—or more precisely—an oven. That's because Friedrich smokehouses successfully blend legendary German engineering with solid American manufacturing.

WE'RE NOT JUST BLOWING SMOKE

As a meat processor, you no doubt have a strong appetite for performance, sanitation, and support. Friedrich's design, experience, and advanced manufacturing processes are a perfect blend to match your taste.

Performance Friedrich builds smokehouses to optimize the air flow. To achieve proper air flow and the resulting consistent temperatures, we provide the following:

- Properly sized wheel and motor for appropriate air changes
- Adjustable alternating dampers for precise breakpoint formation
- Cones for supply air, to produce proper air velocity and breakpoint
- Correctly designed and positioned suction return
- Inverter (VFD) for variable motor speed

To tailor cooking cycles for products with different air speed (change) requirements, our superior variable motor speeds set us apart, and also increase energy efficiency.

Sanitation Friedrich smokehouses aren't just durable. They're sanitary. Track welded seams (electro-chemically treated) are smoother, look better, and are easier to clean. To minimize harborage areas, supply air cones are fully welded in the ducts. Cleaning piping is standard throughout the ducts and cooking chamber. Combined with a CIP system, you have the tools to make the job easier.

Support When you purchase a Friedrich smokehouse, you're also buying the people behind it. Our teams in North Carolina and New Jersey have the know-how to help you plan your project, and the dedication to provide the kind of service you expect after the sale—including technical assistance and spare parts availability.



Friedrich specializes in large installations but often does small installations as well.



Single Smokehouse



Double Smokehouse

WE'LL BUILD YOUR DESIGNATED SMOKING AREA

Friedrich smokehouses are available in both standard designs as well as custom configurations. A variety of precise control systems are available to meet your needs and budget. Let us partner with you, and be part of the process.

Standard features include:

Product inspection door

Operators who like to have a hands on approach can check their product during cooking without opening the main door.

Insulated air handling section

For better energy efficiency.

Single point, double latch door lock

For better seal with easier operation.

Door lock release

To prevent accidental lock-ins.

WE CAN REALLY LIGHT IT UP

Not to brag, but the Friedrich Smoke Generator puts out enough smoke to fuel a 16- or 20-truck smokehouse. Just load the large capacity hoppers with small woodchips and you're in business. For the right amount of smoke density and flavor, it's fully automatic and fully adjustable. Enjoy instant on/off after startup, and easy maintenance with stainless steel construction.



NS80
Smoke
Generator



NS90
Smoke
Generator

FRIEDRICH, MANUFACTURED AND SUPPORTED IN THE USA

THE BREAKPOINT PRINCIPAL IS USED EXCLUSIVELY IN FRIEDRICH SMOKEHOUSES.

The idea is brilliantly simple, but sometimes hard to visualize. In a nutshell, the formation of the Breakpoint means the heated air is distributed throughout the cook chamber in a precise way, so that all of the product gets evenly heated no matter where it is located. Top, bottom, near the walls or at the center, everything gets the same treatment.



WHAT IS THE BREAKPOINT?



Even though the **Breakpoint Principle** is brilliantly simple, it is sometimes hard to visualize, so we created this ebook to **visually explain** how our smokehouses use the breakpoint.

First off we created this illustration so we could dissect the smokehouse.

THESE ARE THE COMPONENTS THAT ARE USED IN CREATING THE BREAKPOINT.



The blower is responsible for moving air through the enclosed ducts and eventually through the nozzles. The heated air is directed out of the plenum in a focused stream that flows down the smokehouse walls.

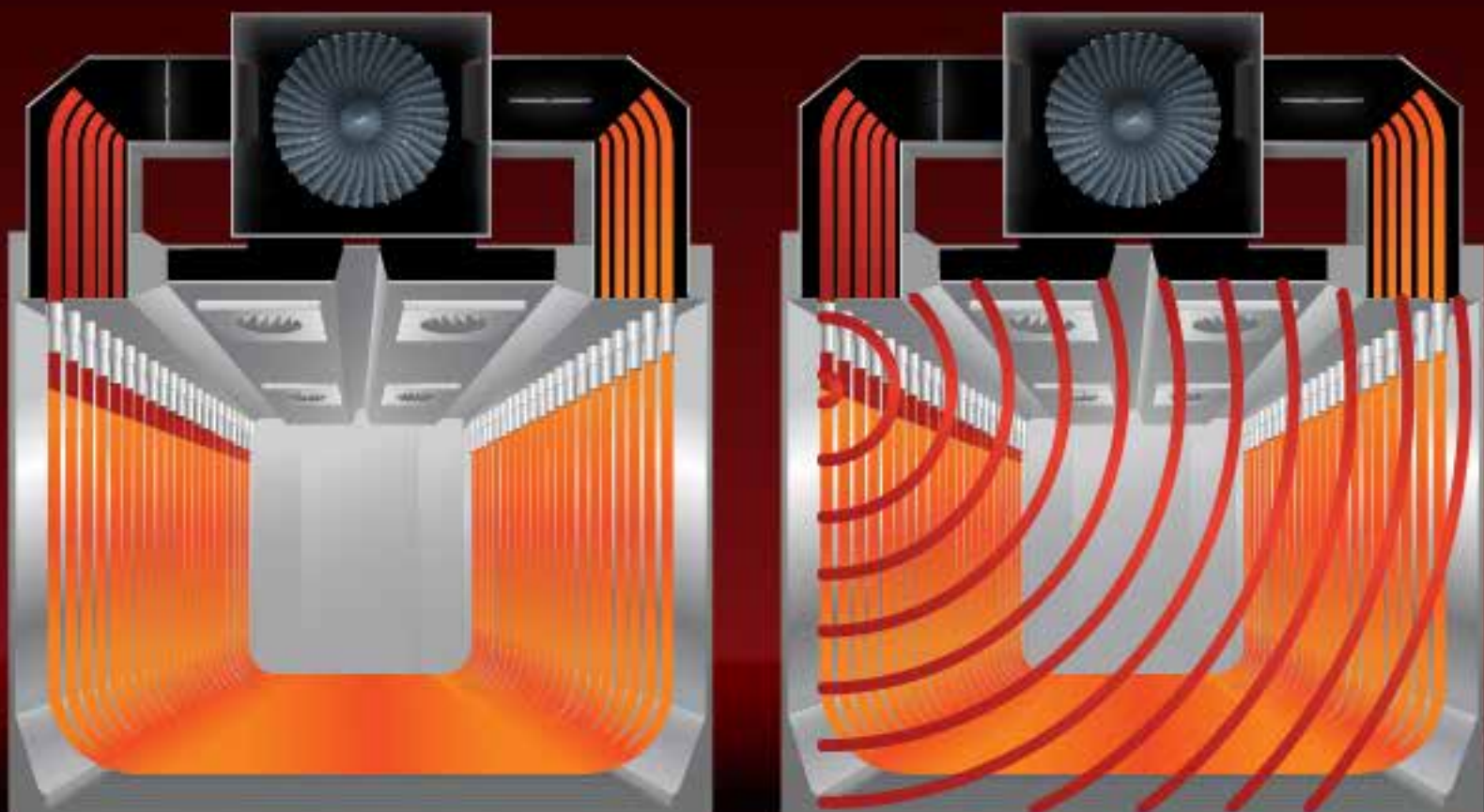
THE DAMPERS



There are a couple of very significant parts you haven't seen. **Two Constantly rotating dampers** in each duct control the volume of air headed to the nozzles.

The dampers operate constantly so that one is always moving to a closed position while the other is moving to an open position.

THE POINT WHERE THE AIR STREAMS COLLIDE IS THE BREAKPOINT



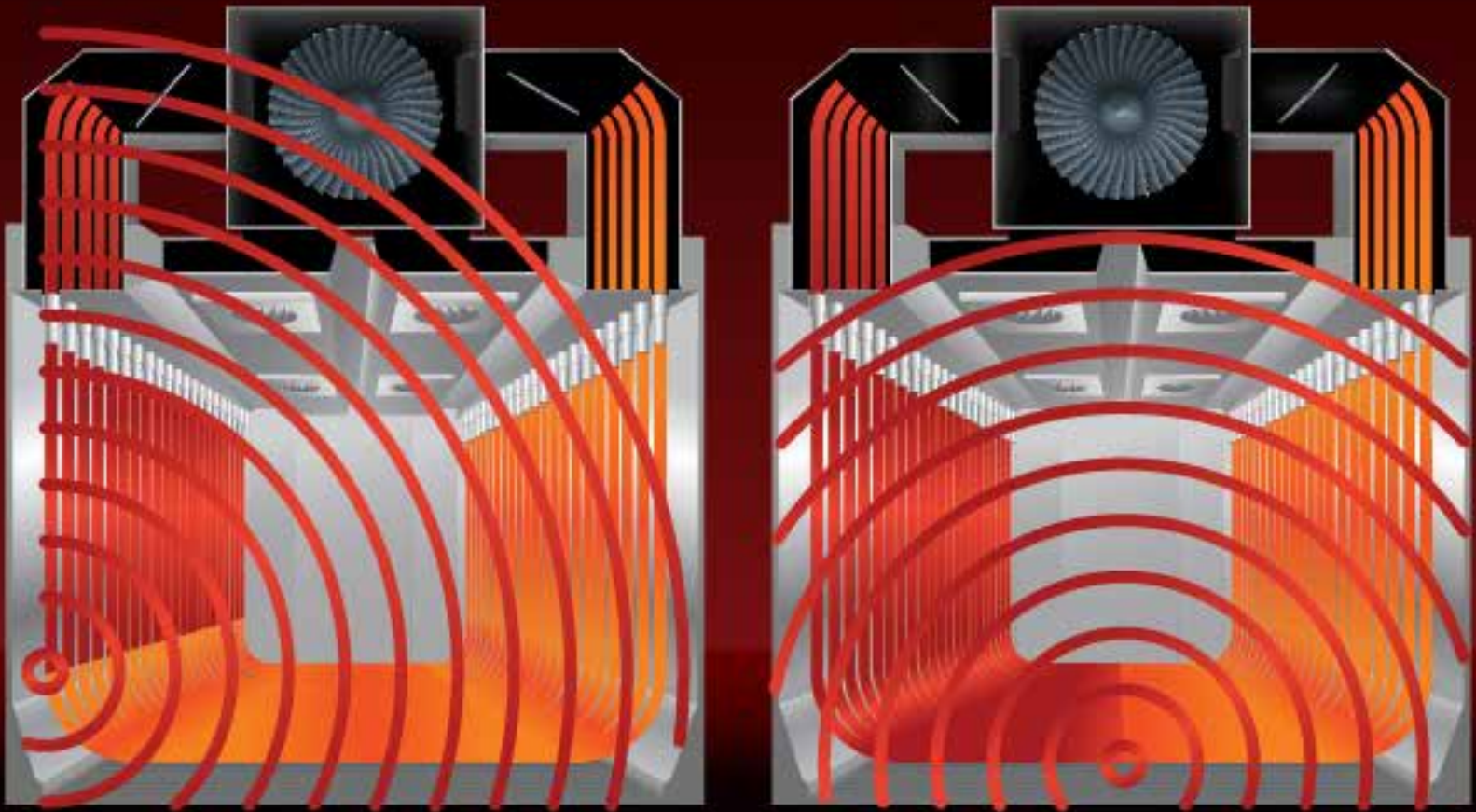
The dampers are set to a 90 degree angle from each other. Here the damper on the left is vertical which restricts most of the air, the damper on the right is horizontal letting the air move almost unimpeded.

Constantly rotating the dampers **varies the amount of heated air** traveling on each side of the smokehouse.

Because there is more air on the right side it **makes it further around the smokehouse** than the air stream on the left.

The point where the air streams “collide” is the “BREAKPOINT.” At the breakpoint the heated air disperses throughout the smokehouse in a unique and predictable manner.

A CONSISTENT TEMPERATURE WITH NO HOT OR COLD-SPOTS IN THE COOKING CHAMBER



Just **rotating the dampers slightly** alters the BREAKPOINT from the top to the bottom of the left wall. If we move the dampers to 1/2 open, 1/2 closed the **BREAKPOINT will occur in the middle.**

By moving the breakpoint to every position we achieve a **consistent temperature with no hot-spots or cold-spots** in the cooking chamber

You can expect the same **high-quality results in each and every batch** you process with a Friedrich smokehouse

And because there are **few moving parts** involved in creating the breakpoint Friedrich equipment is among the **most dependable and low-maintenance** in the marketplace.

Friedrichs





FRIEDRICH, MANUFACTURED AND SUPPORTED IN THE USA

CONTACT US

NU-MEAT GENERAL INQUIRIES:

601 Hadley Road
P.O. Box 897
South Plainfield, NJ 07080

Email: jni@nu-meat.com

Phone: (908) 754-3400

Fax: (908) 754-3401

Parts: (908) 754-3400 ext. 17

Service: (908) 754-3400 ext. 14

FRIEDRICH GENERAL INQUIRIES:

6204 Technology Drive
Browns Summit, NC 27214

Phone: (336) 375-3067

Fax: (336) 621-7901



THE MEAT PROCESSING EXPERTS



NU-MEAT TECHNOLOGY • NU-MEAT.COM • 908-754-3400