



AC HORN MANUFACTURING
NUT PROCESSING SOLUTIONS


OUR **AC HORN** FOOD PROCESSING EQUIPMENT HOLDS UP WHERE OTHERS FALL SHORT BECAUSE OF OUR FAMILY'S UNWAVERING COMMITMENT TO HONEST CRAFTSMANSHIP AND GENUINE QUALITY.



AC Horn Manufacturing has earned its reputation as a world-class manufacturer of snack food processing equipment. Our goal is to provide you with durable machines, built with integrity and designed for efficient, yet precision throughput. Whether you require a single machine or entire processing system, we offer a complete range of nut processing equipment including roasters, nut butter mills, blanchers, granulators and full systems.

Compared to other suppliers, our innovative engineering gives our machines a longer lifespan and provides you with greater product consistency.

**BUILT WITH
INTEGRITY**



THE **AC HORN** PRODUCT LINE FEATURES BEST-IN-CLASS NUT ROASTERS, PLUS TOP-QUALITY EQUIPMENT FOR MILLING AND BLANCHING.



Today the global rise of better-for-you snacks is creating demand for nuts and seeds of all varieties. Whether packaged as trail mix, served in individual snack packs or used as ingredients in a nutrition bar, roasted nuts and seeds have numerous flavor and application possibilities.

Products that blend mixtures of nuts and seeds require custom equipment capable of processing multiple ingredients that can vary widely in size, shape and consistency.

AC Horn Manufacturing can design and build equipment that rises to the challenge of roasting multiple types of nuts and seeds, taking into consideration the unique characteristics of these raw ingredients. Whether the differences are subtle or significant, our equipment roasts to perfection. We draw upon years of expertise to build finely crafted equipment and adapt it to customer specifications.

Look to Horn for equipment that produces the most delicious, consistent and evenly roasted nuts and seeds of all types and sizes, every time.



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Continuous Nut Roasters

Putting quality into the entire process is exactly what we've done with our new Telford Turbo-Flo Roaster. Designed to meet virtually every roasting and drying need for nuts, seeds and other applications, AC Horn Manufacturing implemented state-of-the-art processing technology to ensure even, consistent roasting and drying. This results in ton after ton of consistent, quality product. The Telford Turbo-Flo also provides maximum fuel efficiency with the lowest possible operating cost. These ovens are chosen by food processors throughout the world when roasting or drying peanuts, almonds, hazelnuts, sunflower seeds or other similar materials.

Estimated Output by Product*

Model #		Peanuts: Dry Roast	Peanuts: Lt. Roast	Peanuts: In Shell	Peanuts: Dark	Almonds	Cashews	Pistachios Brined	Sunflower Seeds	Pumpkin Seeds	Hazelnuts
T20	lbs/hr kg/hr	573 260	529 240	375 170	684 310	639 290	562 255	560 275	375 170	396 180	606 275
T44	lbs/hr kg/hr	1,323 600	1,235 560	816 370	1,499 680	1,411 640	1,235 560	1,433 650	770 350	825 375	1,334 605
T66	lbs/hr kg/hr	1,985 900	1,830 830	1,213 550	2,249 1,020	2,117 960	1,874 850	2,139 970	1,155 525	1,236 562	1,985 900
T88	lbs/hr kg/hr	2,646 1,200	2,470 1,120	1,632 740	3,032 1,375	2,844 1,290	2,492 1,130	2,867 1,300	1,540 700	1,650 750	2,690 1,220
T130	lbs/hr kg/hr	3,969 1,800	3,704 1,680	2,459 1,115	4,520 2,050	4,278 1,940	3,749 1,700	4,300 1,950	2,310 1,050	2,475 1,125	4,035 1,830
T270	lbs/hr kg/hr	6,000 2,721	5,599 2,540	3,717 1,686	6,832 3,099	6,468 2,934	5,667 2,570	6,500 2,948	3,492 1,584	3,741 1,697	6,200 2,812

*Output estimates are estimates only. Actual final output depends on recipe and customer process. AC Horn and Company will work diligently with you to meet your companies precise processing needs.

ROASTER FEATURES

- Easy Cleaning Access
- Simple to Operate
- Effective Air Distribution
- Adjustable Exhaust Volume
- Fully Insulated
- High Thermal Efficiency
- Accurate Control
- Minimal Product Breakage & Loss
- Consistent Roast Quality
- Compact Footprint
- Roasting & Cooling in One Process
- Meets Sanitation Standards

OTHER EQUIPMENT

- Infeed Conveyor
- Exit Conveyor

OPTIONS

- Data Recorder - Fully program-mable and integrated with main control panel through PLC.
- Wash Brush
- Stainless Steel Chain
- Water Quench System
- Infeed Hopper Distribution Chute
- Infeed Hopper Distribution Auger
- Exit Chute
- Exit Declumper Chute
- Heat zone declumper
- Discharge declumper chute
- Stainless Steel exhaust and cooling fan



Batch Roasters

AC Horn low-cost, high-quality roasters ensure uniform roasting for maximum flavor development. Two different models provide capacities of 1,000 lbs/hr or 2,000 lbs/hr and offer manual or fully automatic options. Uniform color penetration, fast heat transfer, minimal fuel usage and precision roasting in a continuous, automatic operating cycle make our roasters an excellent choice for nut processors.

Our machines are the top choice in the industry for fully roasting or drying peanuts, almonds, pistachios, Japanese peanuts, sesame, pumpkin & sunflower seeds, and other similar types of nuts, seeds and grains either shelled or unshelled.

Our batch roasters come factory prewired and program tested for immediate, trouble-free operation. And since coolers are necessary in most applications, we offer a belted cooler that is easily integrated with the batch roaster.

ROASTER FEATURES

- Fully Automatic or Manual Models
- Infeed and Discharge on Opposite Sides
- Easy to Operate Touchscreen Controls
- All Stainless Steel Design
- Easy Cleaning Access

ADDITIONAL COMPONENTS

- Infeed conveyor system
- Exit conveyor system
- Belted cooler
- Aspiration system

Estimated Capacity by Product

Model #	lbs/hr	kg/hr	Batch roasters are capable of processing up to 3 batches per hour at a rate of 20-25 minutes per batch. Exact batch time may vary from product to product.
M322	1,000	455	
M333	2,000	910	

Nut Butter Mill

AC Horn Manufacturing constructs nut butter mills unique within the industry, mills that allow you to take advantage of market opportunities for premium and gourmet spreads, ordinary nut butters with extraordinarily smooth consistency. Our mills will last for generations, to grind a wide range of nuts and seeds. Here are just a few of the unique that differentiate a Horn nut butter mill to set us apart—and put us ahead—of the competition:

- “Mortar and pestle” approach creates a more consistent, smooth end product
- High heat load allows customers to blend other ingredients into the finished product without agglomeration
- Parallel plate structure grinds product at the same, exact distance the surface of the plates, for greater product consistency
- Screw feeder controls the product feed into the attrition chamber, allowing a consistent, even feed of added ingredient (salt, sugar or stabilizers)
- Ability to process high oil content (35% or higher) nuts or seeds

Capacity

Bauer Mill Specifications

Model #	Plate Size	lbs/hr	kg/hr
148	8"	1,000-2,000	455-910
248	18"	2,000-6,500	905-2955
LNB	18"	7,500-12,000	3400-5444
247	24"	4,000-7,500	1818-3409
245	36"	7,500-25,000	3400-9090



"WE ARE THE EXPERTS IN NUT BUTTER."

Nut Butter Line

You can rely on AC Horn Manufacturing as your single-source supplier for a complete processing line for nut butter. We can supply all equipment and design an integrated control system. We will provide complete drawing sets and manage the project. You have our guarantee that the project will be finished on time and meet your specifications.

Roast

Raw nuts are roasted on the best-in-class Telford Roaster

Piping & Pumps

The configuration of the pipes and pumps is critical for seamless operation

Mill

Roasted nuts are ground into paste or butter using the one and only Bauer Mill

Dearate

Air is removed from the product

Chill

Product passes through heat exchanger to reduce temperature

Packaging

Product is dispensed into containers, either bulk filled or consumer-sized

AC Horn supplies all equipment needed for a Nut Butter Line including:

- Processing equipment
- Packaging equipment
- Piping
- Engineering and Design of plant set-up
- Installation of the equipment, piping and supporting items
- System integration: For a fully automated line, this is one of the most critical components.

An AC Horn programmer will design a program custom to your nut butter line, controlled from one main panel. Our system integration ensures continuous, seamless operation, shift after shift.

A complete nut butter line requires synchronization of several elements, our Project Managers will coordinate all aspects of the new line.



Modular Rotary Oven

AC Horn introduced the Modular Rotary Oven to meet the varying needs of our customers. This equipment was designed in modular format to enable processors to develop a system that fits their exact specifications.

The Modular Rotary Oven is used to connect two or more heating zones together – allowing a processor to link different temperature zones and airflows or processes together to run consecutively, expanding the system's heating or drying capabilities beyond that of a single Rotary Oven.

For example: Products such as sunflowers might be brined or wetted to infuse the seed kernel with flavor inside the shell. This type of product will use a drying step to shed the excess moisture followed by a higher-heat roasting step to finish the process. This two step process is one that lends itself to a modular rotary drying system.

Other Examples Include:

- Puffing of extruded pellets and products
- Roasting and drying of certain peanuts and tree nuts
- Reducing moisture content of crackers
- Drying of dough-coated nuts
- Drying of certain in-shell seeds and grains

In many cases, the moisture removal process creates the need for a sanitary wash down construction. The Modular Rotary Oven is constructed with continuously welded stainless steel heat zones, full-length access doors and built-in floor drains. And while the standard design has built up a proven track record, these units are often customized to provide the specific features which most benefit a customer's process.

At AC Horn, our goal is to provide you with durable machines designed for efficient, consistent throughput of product and the Modular Rotary Oven is an excellent example of our innovative engineering. The AC Horn Modular Rotary Oven provides precise control of your product flavor, quality and moisture content.

Rotary drying processes vary significantly from one product to another. AC Horn can help determine the system that best meets your needs.



M320 Magnum for Coated Nuts

The AC Horn 320 Magnum is used worldwide for the slurry based, small batch coating of peanuts, hazelnuts, almonds, pistachios and other nut products. High-performance batch coating from the 320 Magnum allows for the production of quality coated nuts in a single machine that is easy to operate and clean. In day-to-day operations the AC Horn 320 Magnum is reliable, low-maintenance and low-cost workhorse.

All 320 Magnums come with a heavy duty motor, gearbox and agitator built to gently handle the nut products being coated. Equipped with a NEMA 4 Stainless Steel Control Panel with touch screen control, making recipe programming and product monitoring simple and easy. The 320 Magnum audibly and visually notifies the operator to add ingredients and when the cooking cycle is complete. Other features include; 24" kettle with casted heating element that ensures even heating and long life, base thermo-couples to ensure precision heat, variable speed agitator to handle different type nut products, wash-down motor mounted safely below product with all wiring run through flexible conduit, and heavy duty castors for ease of movement.

Capacity

Model #	Capacity By Product
M320 MAGNUM	lbs/hr 125

Japanese Peanut Roasters

AC Horn Manufacturing offers the only rotary oven specifically designed to roast dough-coated Japanese-style peanuts. Also capable of roasting other nuts and seeds, the Japanese Peanut Rotary Oven is available in three sizes.

The proprietary lifting paddles are key to proper dough-coated peanut processing. Dough-coated products tend to stick together, which can cause them to break after roasting, or result in lack of uniformity. Our lifting paddles slowly separate the product as it passes through the heat zone. As the drum rotates, the peanuts are lifted and rolled within the product bed for a perfectly coated nut every time.

In addition, a high-efficiency forced air premix combustion system precisely mixes the air and gas in order to maximize fuel efficiency and minimize gas consumption. Programmable digital temperature control minimizes the potential for burnt product and maximizes energy efficiency. A variety of hopper feeder/combinations are available for use with a variety of product types.

Capacity

Model #	Capacity
421	lbs/hr 150
450	lbs/hr 550
540	lbs/hr 1,100

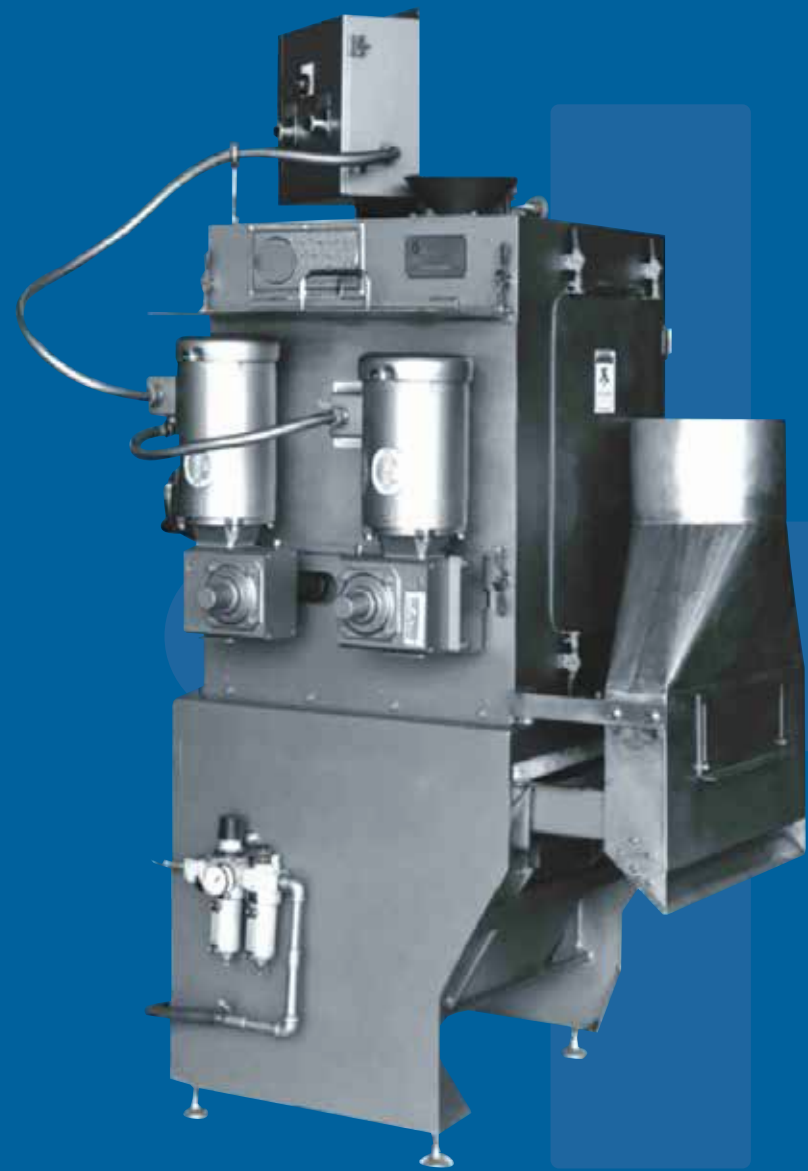


ROASTER FEATURES

- Precise Temperature and Speed Control
- Continuous Process
- Proven Design
- Digital Temperature Control
- High-Efficiency

OTHER EQUIPMENT

- Horizontal belted cooler



Split Peanut Blanchers

For the highest quality in blanched peanuts, choose AC Horn's VB-5000 Split Nut Blancher. The blancher removes the skins and hearts from dried or fully-roasted peanuts for the smoothest, cleanest nuts possible.

The operating range is between 2,000 to 5,000 lbs/hr with less shrinkage than any other blancher on the market. Operation is simple and reliable. The process begins when the blanchers splits the nuts and removes the skins. Then the hearts are removed from the halves. Screening separates the halves from the hearts, and aspiration completely removes the skins.

Dependable features like a trouble-free adjustable feed hopper and a dual-aspiration system allow you to blanch peanuts for peanut butter, candy and other products with maximum efficiency.

Capacity

Model #	lbs/hr	kg/hr
VB-5000	2,000-5,000	2,300+

Granulators

Our rotary blade granulator is the snack food industry's only nut processing machine that is exclusively designed to granulate any and all nut varieties. Instead of crushing the product as other multipurpose machines do, ours pulverizes nuts into defined, sharp-edged granules with minimum production of fines.

A key feature of our granulator is its flexibility. The operator can choose from eight knife spacings ranging between 1/16" to 1/4". The granulator is both efficient and clean, with most contact parts made of stainless steel. It is available in three models with capacities ranging from 600 to 2,400 lbs/hr.

Estimated Output by Product*

Model #	lbs/hr	kg/hr
M365-C1	600-800	273-364
M365-C2	1,200	545-727
M365-C3	1,800	818-1,091

*Output estimates are estimates only. Actual final output depends upon recipe and customer process. AC Horn Manufacturing will work diligently with you to meet your company's precise processing needs.



AC Horn equipment produces granulated nuts in sizes perfect for a variety of products from prepared meals, to baked goods to ice-cream toppings





AC HORN MANUFACTURING

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