



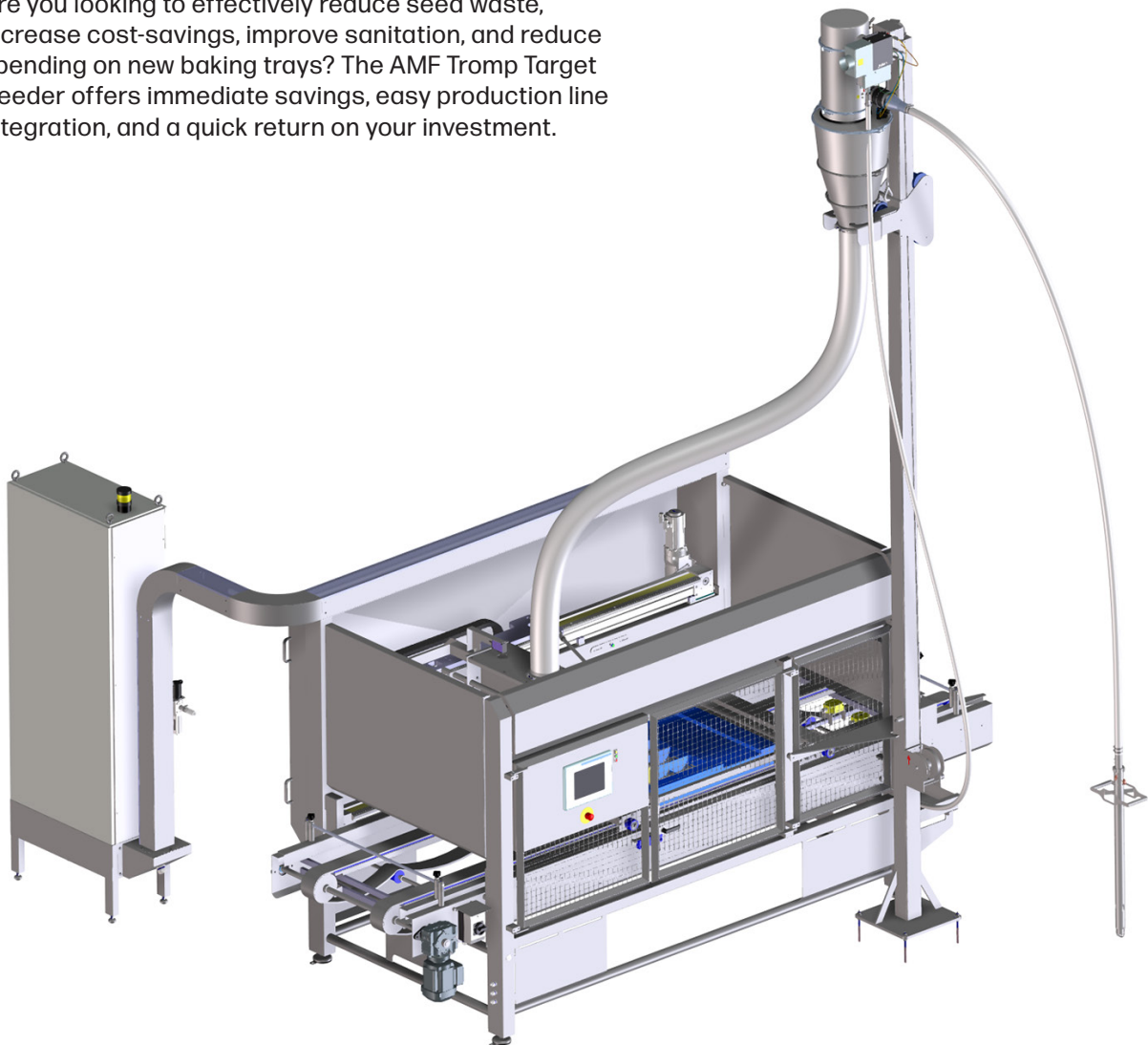
Rise Together.

BAKERY SYSTEMS

AMF TROMP TARGET SEEDER

Provides accurate, targeted application of seeds and toppings for producing a wide variety of premium bread and bun products.

Are you looking to effectively reduce seed waste, increase cost-savings, improve sanitation, and reduce spending on new baking trays? The AMF Tromp Target Seeder offers immediate savings, easy production line integration, and a quick return on your investment.



DIRECT COST REDUCTION AND RETURN-ON-INVESTMENT

Application of Seeds in the Bakery

Commercial bread and bun bakers incorporate a variety of toppings including seeds, nuts, sugars, or flours as the mark of a premium product. The baking industry continues to see a rise in demand for these premium products as consumers seek greater sensory experiences, healthier baked foods, and products with a more artisan appearance.

In products such as a sesame seed hamburger bun, seeds are typically strewed using waterfall technology. This drops a large quantity of seeds onto the buns, but also allows wasted seeds to fall onto the baking tray. These seeds become baked and burned onto the tray making sanitation of the trays difficult while also wearing down the protective coating on each tray.

The AMF Tromp Target Seeder has been engineered to address many of the pain points industrial bakeries encounter with waterfall topping applicators with the following improvements:

- Reduced waste and improved cost savings on raw ingredients (see savings calculation table)
- Reduced spillage and simpler sanitation
- Improved resource conservation and utility savings
- Extended life of baking trays

In response to customer demand for a more accurate, precise topping solution, the AMF Tromp Target Seeder has been installed at multiple bread and bun bakeries around the world. With proven performance strewing a variety of toppings onto bread and bun products, the Target Seeder aims to be the industry standard for accurate topping and strewing.

SEEDER APPLICATIONS

SEEDS



SWEETS & NUTS



FLOUR DECORATION (NOT TARGET)



MIXED SEEDS

- Mix of
- linseed, sesame, corn chunks
 - pumpkin seeds, oat flakes, sunflower seeds
 - fine crushed wheat and corn semolina
 - sunflower seeds, linseed, sesame seeds
 - crushed oats, sunflower seeds, sesame seeds, linseed
 - oat flakes, sunflower seeds, linseed
 - sunflower seeds and oats
 - crushed wheat and sesame seeds
 - crushed oats, sunflower seeds, sesame seeds, linseed
 - broken oats and sunflower kernel
 - corn flakes, sunflower seed, sesame seeds
 - crushed wheat, sunflower seed, poppy seeds, sesame seeds

DIRECT COST REDUCTION AND RETURN-ON-INVESTMENT


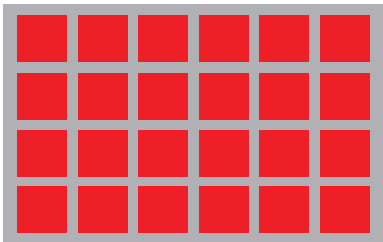
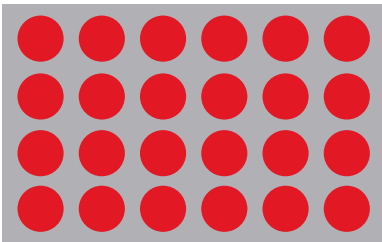
The Target Seeder ensures highly accurate strewing of toppings including a wide range of seed mixes, sesame, corn or flour onto buns, rolls, and loaves.

The method used for strewing toppings reduces the required quantity of ingredients by almost 50% in comparison to a waterfall system or up to 27% in comparison to other market seeders resulting in less waste and minimal pan pollution.

Recent customer installations have provided successful data and savings, that we can also calculate for your bakery, as seen in the model below.

The AMF Tromp Target Seeder distributes much less waste onto the tray surface, by targeting the topping onto the product; this results up to 50% increased savings on topping ingredients.

Customer savings example:

| WATERFALL SYSTEM | COMPARABLE MARKET SEEDERS | AMF TROMP TARGET SEEDER |
|---|---|--|
| 100% strewing surface | 62.7% strewing surface | 42.9% strewing surface |
| Price of toppings per year ~ \$ 1,800,000 | Price of toppings per year ~\$ 1,100,000 | Price of toppings per year ~ \$ 750,000 |
| | Save up to \$ 650,000 per year | Save up to \$ 1,000,000 per year* |
|  |  |  |
| Covers the entire pan with seeds. | Covers all of the buns and parts of the pan. | Covers only the strewing area of the bun. Prevents seeds from getting on the sides of the bun. |

* Based on standard Hamburger pan 29" x 20" with 24 buns of 4" running at 1500 pans/h; 16h production/ day

* Based on average cost of \$ 3.00 per kilogram Seeds

PROVEN RESULTS WITH AMF TROMP TARGET SEEDER

Bakers and consumers, quick-service restaurants, and food service chains all over the world can attest to the perceived value of a premium bun or roll product.

Combined with an in-depth knowledge of the baking process, AMF Bakery Systems integrates the proven performance of AMF Flex dividing and makeup technology with the latest AMF Tromp decorating technology to ensure the most optimal, premium bun production solutions from mixer to marketplace.

AMF's engineering teams collected feedback and industry research from thousands of bread and bun production lines around the world to drive innovation for the AMF Tromp Target Seeder.

The most significant benefits of the AMF Tromp Target Seeder are reduced costs and more accurate distribution of seeds, along with several others:

- A return-on-investment of less than a year
- Less waste of expensive raw materials
- Direct savings on ingredients in kilos and cash
- Easier sanitation of pans
- Reduced labor costs

Are you looking to reduce waste or improve product quality? Contact AMF Bakery Systems to learn more about our AMF Tromp decorating solutions!

Actual Customer Results from AMF Tromp Target Seeder:

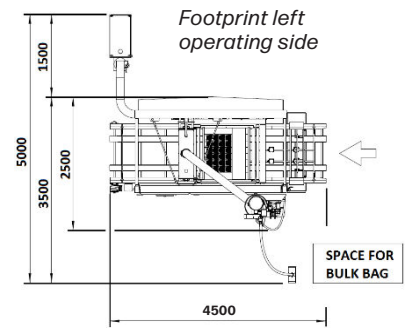


“We achieved perfect buns with the precise amount of seeds, hardly any waste on the sides, and much easier cleaning; we are happy with this solution”

SPECIFICATIONS

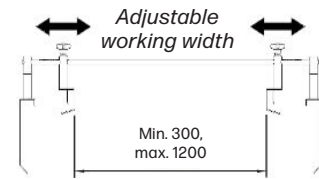
SPECIFICATIONS

| | |
|--|---|
| Dimensions L x W x H [mm] | 4500 x 5000 x 6000 |
| Weight [kg] | 2115 |
| Water consumption [L/min] | 2 |
| Max. air consumption at 4.5 bar (65 psi) | 350 NL/min |
| Hopper volume [L] | 23 |
| Materials | Stainless Steel, FDA/CE approved and mostly blue plastics |



MECHANICAL EXECUTION

| | |
|-------------------------------|---------------------|
| Operating side | Left or right |
| Adjustable working width [mm] | Min. 300, max. 1200 |



ELECTRICAL EXECUTION

| | |
|-----------------------------------|-----------------------|
| Voltage | 400V/50Hz 460V/60Hz |
| Servo Motors for linear movements | ALLEN-BRADLEY KINETIX |

OPTIONS

| | |
|-------------------------|---|
| Trolley & storage frame | For removal & storage of max. 4 hoppers + 3 manifolds |
| Decojet 1 | For straight in-line water cuts in the dough |

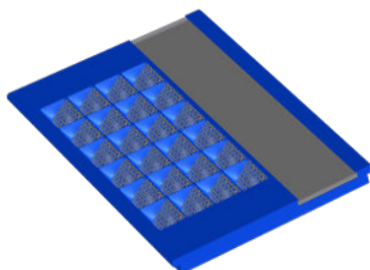
PRODUCT PARTS

| | |
|---|---|
| Throughput capacity (based on baking pan length in direction of travel) | Up to 500mm / 19,7" (39 pans per minute max.) Up to 600mm / 23,6" (36 pans per minute max.) Up to 810mm / 32" (31 pans per minute max.) Up to 1000mm / 39" (27 pans per minute max.) |
| Manifold for target application | Per pan size a manifold including one strewing hopper Extra strewing hopper for each used strewing material or seed type |

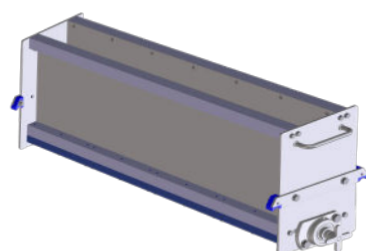
PAN & BUNS



MANIFOLD



STREWING HOPPER





WHY AMF BAKERY SYSTEMS?

We engineer customer driven solutions
for bakers all around the world

We listen to our customers and design products that are:

- sanitary, wash-down designs
- low maintenance (direct drives and minimal parts)
- easy to operate by bakers and operators

We engineer products that are reliable and robust,
with over 100 years of industry experience

We offer many standard and easy to implement solutions
We can also engineer by project and make custom
designed solutions

We deliver turnkey solutions that are ready to improve
production capacity and profit

We offer the best value for low risk investments

We offer localized support, globally

We love to know what we can do for you!



AMF IS A MARKEL FOOD GROUP COMPANY

AMF's focus on continuous improvement may result in changes to
machinery specifications without notice.