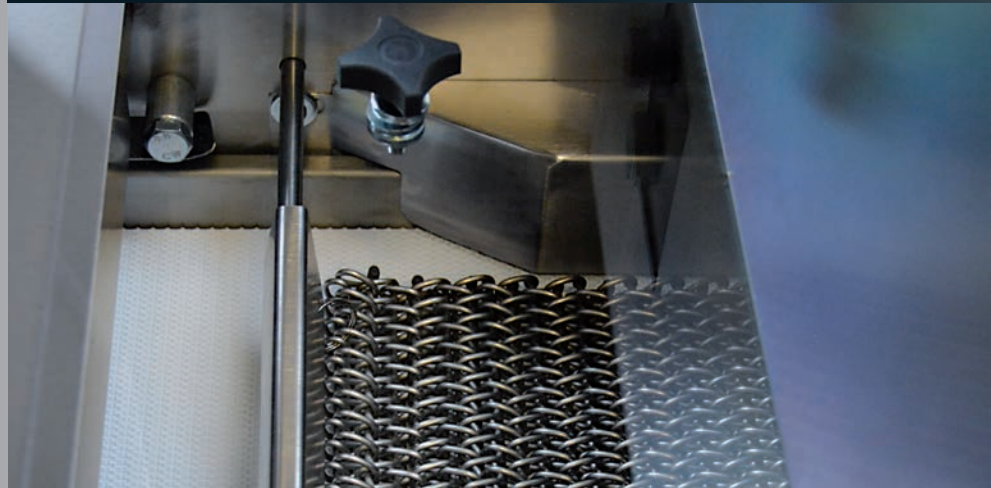


Innovative equipment
for traditional baking

Dough Moulders

Mini | Multi | Metro | Combination | Twin Sheeter | Conical Rounder



INTERESTING FACT:

The Origins of Bread

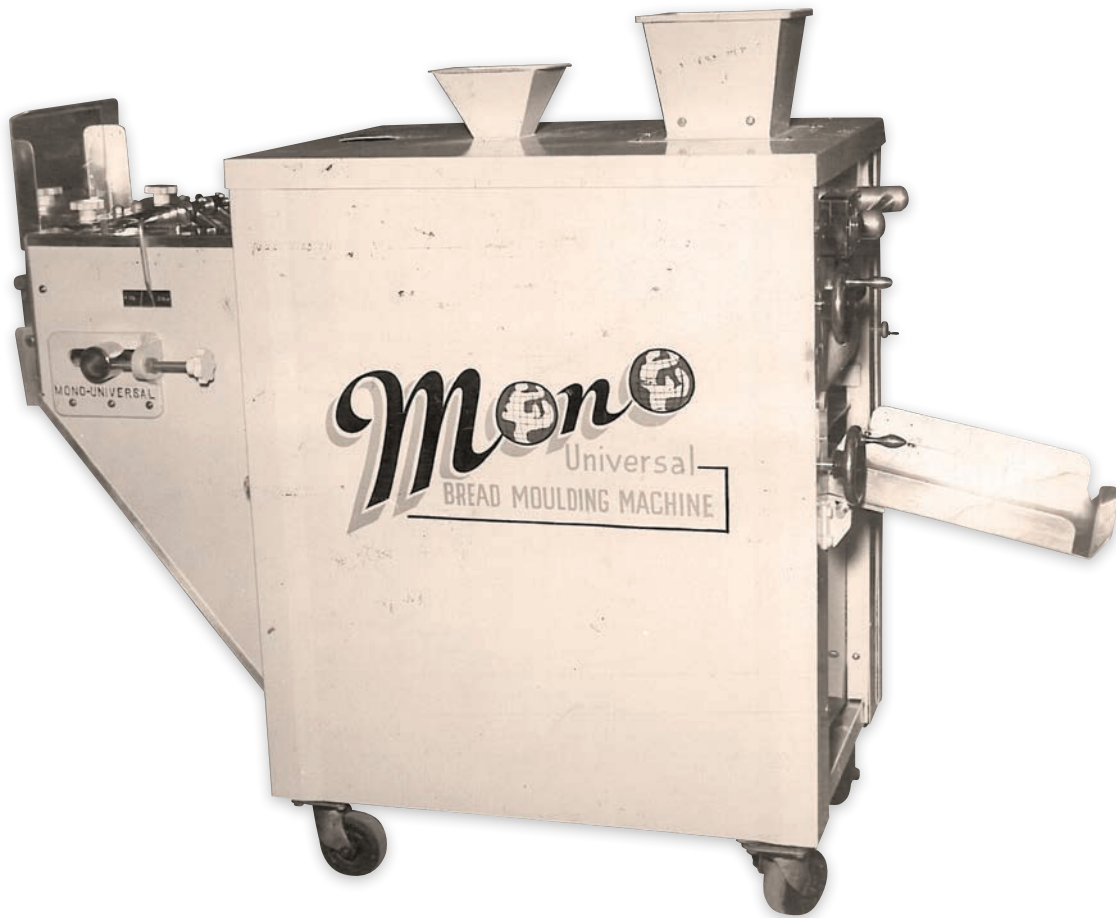
It is generally accepted that the baking of bread is older than any other craft in the world and probably originated on the stone hearths of primitive man long before the dawn of civilisation. Recent research suggests that humans may have started baking bread as far back as 30,000 years ago.

The first breads would probably have been unleavened flatbreads, closely related to the Middle Eastern pitta, the Indian naan and the Central American tortilla we all know and love today. Furthermore, archaeological evidence now confirms that yeast was used as a leavening agent in Egypt as early as 4,000 BCE and that bread was often left as a funerary offering in the tombs of the dead.

In ancient Rome, the baker was so highly respected that as early as 168 BCE, bakers were the only 'freemen' of the City and belonged to a collective called the 'Collegium Pistorum'; all other trades were carried out by slaves. Later, Pliny the Elder reported that the Gauls and Iberians used the foaming head skimmed from beer to produce '*a lighter kind of bread than other peoples*'.



It All Began with a Handful of Bicycle Parts



Designing and Manufacturing Dough Moulders Since 1947

During the Second World War, MONO Equipment's founder and President, Mr D Ayres Jones, was working at the family's bakery in Swansea, South Wales. When his brother was conscripted for war service, however, Ayres found it increasingly difficult to manage the increased workload on his own and began contemplating designing a machine which would mechanically take over the very labour intensive task of moulding the dough pieces before baking.

His dogged determination, combined with his love of engineering, meant that within a very short period of time Ayres had designed and built his first bread moulding machine almost entirely from scrap materials, including parts taken from an old motor cycle along with bits and pieces sourced from a local scrapyards. In the time-honoured convention of the day, there was absolutely no welding involved in the machine's build as each part was hand-riveted together piece by piece.

The bread moulding machine was so successful that other bakers in the principality approached Ayres to make a bread moulder for their bakeries as well and, in 1946, the MONO Universal Bread Moulding Machine actually went into commercial production. By 1976 over 12,000 units of these revolutionary bread moulders had been manufactured and sold to almost every corner of the globe.

Today, MONO Equipment continues to manufacture a comprehensive range of bread moulders perfectly suited to the small artisan bakery, the medium sized independent bakery and the larger in-store scratch bakery. This brochure introduces the current range of MONO Equipment dough moulders, the basic principles of which have hardly changed since the very first MONO Universal Bread Moulding Machine manufactured over 70 years ago by the great visionary and inventor, Mr D Ayres Jones.

The Mini Moulder

The Perfect Solution for the Smaller Bakery

MONO Equipment's superbly compact table-top Mini Moulder is the perfect choice for small bakeries, flour mills and laboratories that are looking for a high quality piece of equipment to automate their dough moulding process, but have limited space available.

The Mini Moulder provides the ideal solution for producing a wide range of bread loaves and morning goods; it helps reduce production costs by saving the baker time and effort whilst ensuring wastage is kept to a minimum by producing high quality moulds with uniformity and consistency, each and every time.

The Mini Moulder's compact size, however, should not be underestimated; the moulder effortlessly produces up to 1,000 dough pieces per hour with a maximum length of 152mm (6"). The fully-adjustable sheeting rollers and pressure board can be easily and quickly altered to operate with dough pieces of between 28g (1oz) and 900g (2lbs) in weight.

*With the addition of the optional dough path inserts, the Mini Moulder's capability and versatility can be extended to also include the production of other bread products like finger rolls.

An optional stainless steel base unit is also available should you wish to keep your counter space free.



Stainless Steel Curling Chain



Moulding Pressure Adjustment

The Mini Moulder is suitable for:

| Bread Types | Flour Types |
|------------------|------------------|
| — Bread Loaves | — White |
| — Tin Loaves | — Wholemeal |
| — Bloomers | — Multi-Grain |
| — Sub Rolls | — Granary |
| — Demi Baguettes | — Spelt |
| — Petits Pains | — Sprouted Grain |
| — Fruited Breads | — Brioche |
| — Finger Rolls* | — Low Carb |

The Mini Moulder at a Glance:

| | |
|---|---|
| Capacity: | Up to 1,000 pieces per hour |
| Dough piece weight range: | 28g - 900g (1oz - 2lbs) |
| Dough piece length: | 152mm (6") |
| Area of footprint (on base unit): | 0.61m ² (6.62ft ²) |
| Area of footprint (without base unit): | 0.36m ² (3.87ft ²) |



The Multi Moulder

The Preferred Choice for Artisan Bakers and In-Store Bakeries

MONO Equipment's Multi Moulder was first launched in the UK back in the 1950s and the fact that its essential blueprint and construction have hardly changed over this period of time pays testament to its superb design and innate functionality.

The Multi Moulder is perfect for both artisan and in-store retail bakeries due to its ability to produce a wide range of oven-bottom and tin loaves with accuracy and efficiency. Whilst treating the dough very gently, the Multi Moulder produces up to 1,200 pieces of dough per hour with beautifully tight moulds with no tails.

The key variables of sheeting pressure, moulding width and final moulding pressure can be easily adjusted to produce a variety of dough pieces with a weight range of between 170g (6oz) to 1,200g (2½ lbs) and a dough piece length of between 152mm (6") to 300mm (12").

Demonstrating true product versatility with a terrific mould quality and speedy production rates guarantees the Multi Moulder will please even the most fastidious of bakers. The Multi Moulder is also available with an optional stainless steel mobile stand fitted with runners to take five 30" x 18" trays.



Adjustable Side Guides



Stainless Steel Curling Chain

The Multi Moulder is suitable for:

| Bread Types | Flour Types |
|------------------|------------------|
| — Bread Loaves | — White |
| — Tin Loaves | — Wholemeal |
| — Bloomers | — Multi-Grain |
| — Sub Rolls | — Granary |
| — Demi Baguettes | — Spelt |
| — Fruited Breads | — Sprouted Grain |
| | — Brioche |
| | — Low Carb |

The Multi Moulder at a Glance:

| | |
|---------------------------|---|
| Capacity: | Up to 1,200 pieces per hour |
| Dough piece weight range: | 170g - 1,200g (6oz - 2½lbs) |
| Dough piece length: | 152mm (6") to 300mm (12") |
| Area of footprint: | 0.77m ² (8.29ft ²) |





INTERESTING FACT:

The Baker's Dozen

Britain has a long and distinguished history of trade regulation and the bakers were one of the first trades to be regulated by a guild called The Worshipful Company of Bakers; the earliest recorded mention of which can be found in the 'Pipe Rolls' of Henry II (1154-89).

One of the trade laws of the time that made bakers so wary was called the Assize of Bread and Ale of 1266 which regulated the price, weight and quality of bread sold. Anyone found to be selling their goods under the prescribed weight could be fined, pilloried and even publicly flogged.

Therefore, in order to avoid hefty fines or even physical punishment for under-selling their bread and other products, the practice of giving a free 13th loaf, often called the 'in-bread' or 'the vantage loaf' with every 12 purchased became quite common. This gave the bakers the confidence and peace of mind to know that they couldn't be punished for selling below the prescribed weight. This custom later became known by the phrase 'the baker's dozen'.

The Twin-Sheeter Moulder

The Perfect Solution for the Artisan Baker and In-Store Bakeries

Perfectly suited to the small artisan bakery and the larger in-store retail bakery, the Twin-Sheeter Multi moulder incorporates all the features of the Multi Moulder but with the addition of a secondary set of rollers to produce a nice tight mould with no tails.

With a generous output of up to 1,200 pieces of perfectly formed dough every hour, the Twin Sheeter Moulder has the versatility to mould a variety of oven bottom and tin breads with consistency, accuracy and efficiency.

The sheeting pressure, moulding width and final moulding pressure can be easily adjusted to produce a variety of dough pieces with a weight range of between 170g (6oz) to 1,200g (2½lbs) and a dough piece length of between 152mm (6") to 300mm (12").

Demonstrating true product versatility with a terrific mould quality and speedy production rates guarantees the Twin Sheeter Moulder will please even the most fastidious of bakers. The Twin Sheeter Moulder also features an assisted-lift top section, safely supported with gas struts, for quick and simple cleaning access.



Adjustable Side Guides



Easy Access for Cleaning

The Twin-Sheeter Moulder is suitable for:

| Bread Types | Flour Types |
|------------------|------------------|
| — Bread Loaves | — White |
| — Tin Loaves | — Wholemeal |
| — Bloomers | — Multi-Grain |
| — Sub Rolls | — Granary |
| — Demi Baguettes | — Spelt |
| — Fruited Breads | — Sprouted Grain |
| | — Brioche |
| | — Low Carb |

The Twin-Sheeter Moulder at a Glance:

| | |
|---------------------------|---|
| Capacity: | Up to 1,200 pieces per hour |
| Dough piece weight range: | 170g - 1,200g (6oz - 2½lbs) |
| Dough piece length: | 152mm (6") to 300mm (12") |
| Area of footprint: | 0.77m ² (8.29ft ²) |



A Dough Moulding Solution to Fit Your Every Need.

7 Key Benefits of Using MONO's Dough Moulders:

- Produces consistent mould shapes each and every time
- Dough quality is protected and maintained due to gentle handling
- Produces a seamless finish for an attractive appearance and excellent crumb structure
- Controlled tension during sheeting and moulding results in an even proving
- Helps de-gas the dough making the cell structure of the final baked product finer and more uniform
- Helps prevent the dough from being easily torn
- Lowers production costs due to improved operational efficiencies

Mini Moulder



Multi Moulder



Combination Moulder





Twin Sheeter Moulder

7 Key Features of MONO's Dough Moulders:

- Manufactured in hygienic stainless steel for ease of cleaning
- Tried and tested technology creates perfect mould results with accuracy and consistency
- All food contact materials comply with the UK's most stringent food-safety standards
- Space-conscious designs with options to suit even the smallest of bakery layouts
- 'Flip-Flap' Safety Hopper In-feeds for complete operator safety and peace of mind
- Simple and intuitive manual controls for quick product changeovers
- Thermoplastic polyurethane (TPU) belts for hygienic production and ease of cleaning



Plant Fed Metro Moulder
(Hand Fed Model Also Available
with Feeding Hopper)

Conical Rounder



INTERESTING FACT:

The Great Fire of London, 1666

In 1666, almost the entire milling and baking industries in London were destroyed as a result of the Great Fire of London which started at the King's baker's shop situated in the aptly named Pudding Lane, near London Bridge.

In the 17th century, fires in London were commonplace, even inevitable, as the majority of buildings were largely constructed from timber; the narrow streets with overhanging dwellings only added to the problem. After a long, hot and dry summer which had depleted water reserves in the city, only one spark was needed.

At 2 am on Sunday 2 September, 1666, the bakery owner, Thomas Farynor, was awoken by one of his workmen who had smelled smoke, and the whole family fled across the roof tops to safety. With the dry conditions, the densely packed wooden buildings and a prevailing wind, the fire rapidly took hold and by dawn London Bridge was burning.

At the height of the inferno, even the scaffolding around St Paul's Cathedral had caught fire, followed by the roof timbers, and within a few hours the Cathedral was a ruin. It wasn't until the Thursday that the fire was finally extinguished.

In total, 373 acres of the city had been destroyed; 13,200 houses, 84 churches and 44 company halls were burned to the ground.



The Metro Moulder

The Original London Bloomer Moulder - Designed by Bakers for Bakers

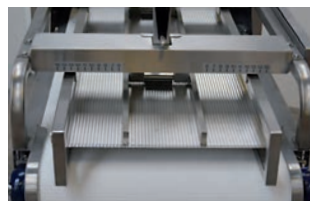
The Metro Moulder has been designed with reliability and ease of operation in mind and is capable of producing a wide range of breads including bloomers, tin breads and small batons.

The highly versatile Metro Moulder effortlessly produces high quality dough pieces at a rate of 1,200 pieces per hour, with a weight range of between 170g (6oz) and 1.8kg (4lbs) and lengths of between 152mm (6") and 380mm (15").

A great feature of the Metro Moulder is its Teflon-coated double sheeting rollers which perform a gentle two-stage reduction of the dough, whilst two stainless steel curling chains deliver greatly improved consistency of shape and size to the finally moulded dough piece.

Simple manual controls enable quick and efficient product changes whilst a viewing window, positioned at the rear of the moulder, allows the operator to monitor the progress of the dough on its journey through the machine.

The Metro Moulder is traditionally available as an option on our range of Fusion Bread Plants, but is also available as a standalone unit incorporating a small hopper for manual feeding.



Easily Adjustable Pressure Board



Teflon-Coated Rollers

The Metro Moulder is suitable for:

| Bread Types | Flour Types |
|------------------|------------------|
| — Bread Loaves | — White |
| — Tin Loaves | — Wholemeal |
| — Bloomers | — Multi-Grain |
| — Sub Rolls | — Granary |
| — Demi Baguettes | — Spelt |
| — Fruited Breads | — Sprouted Grain |
| | — Brioche |
| | — Low Carb |

The Metro Moulder at a Glance:

| | |
|---------------------------|--|
| Capacity: | Up to 1,200 pieces per hour |
| Dough piece weight range: | 170g - 1,800g (6oz - 4lbs) |
| Dough piece length: | 152mm (6") to 380mm (15") |
| Area of footprint: | 1.3m ² (14ft ²) |



The Combination Moulder

True Dough Moulding Versatility - Including Baguettes

The highly versatile Combination Moulder shapes all oven bottom, tin breads along with full size baguettes with absolute accuracy and consistency. With an output of up to 960 pieces per hour the moulder produces gently moulded dough pieces with a length of between 152mm (6") to 300mm (12") and baguettes with an impressive length of up to 710mm (28").

The dual sheeting rollers and pressure boards are adjusted via simple manual controls to ensure a gentle reduction of the dough whilst Teflon coatings and the use of high performance polymers along the dough path provide a clean, unimpeded journey through to the final off-take conveyor belt.

Ergonomically positioned seeding trays provide the ability to quickly seed the dough pieces with speciality toppings as they are removed from the moulder, helping to speed up the production process.

Cleaning the rollers, scraper and curling chains couldn't be quicker or easier due to the many easily-accessible doors and panels on the Combination Moulder. The moulder is also available in two formats; a manual hand-fed version and an automated version which forms part of MONO's Fusion and Fusion Pro Bread Plants.



Large Nylon Moulding Rollers



Manually Adjustable Controls

The Combi Moulder is suitable for:

| Bread Types | Flour Types |
|------------------|------------------|
| — Bread Loaves | — White |
| — Tin Loaves | — Wholemeal |
| — Bloomers | — Multi-Grain |
| — Sub Rolls | — Granary |
| — Demi Baguettes | — Spelt |
| — Fruited Breads | — Sprouted Grain |
| — Baguettes | — Brioche |
| | — Low Carb |

The Combi Moulder at a Glance:

| | |
|---------------------------|--|
| Capacity: | Up to 960 pieces per hour |
| Dough piece weight range: | 250g - 1,000g (9oz - 2lbs) |
| Dough piece length: | 152mm (6") - 710mm (28") |
| Area of footprint: | 1.23m ² (13.23ft ²) |



The Conical Rounder

For the Perfectly Rounded Dough Piece

MONO's Conical Rounder provides the ultimate finishing for your bread by effortlessly producing perfectly rounded dough pieces which not only helps to preserve the internal structure of the dough but also provides a much better visual presentation to the first prover and final moulder.

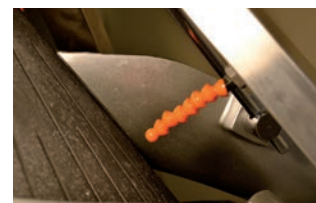
The Conical Rounder accepts divided dough pieces with a weight range of between 100g (3½oz) to 1,200g (2.6lbs) and gently takes it on an upward journey around a specially designed, precision-shaped 3 metre track that progressively rolls the dough in a controlled manner, at a constant speed, to produce perfectly rounded results.

The use of an integrated flour duster ensures the dough has a smooth path around the inner cone whilst an optional 6-nozzle hot air blowing system can be included to gently condition the surface of the dough for easier handling downstream and a better finished product.

The Conical Rounder can be used as a standalone piece of equipment and fed manually and is also available as part of MONO's Fusion Pro Bread Plant and our Fusion Compact Pro Bread Plants. A variable speed version is also available.



Integrated Flour Duster



Positionable Hot Air Blowers

The Conical Rounder is suitable for:

| Bread Types | Flour Types |
|------------------|------------------|
| — Bread Loaves | — White |
| — Tin Loaves | — Wholemeal |
| — Bloomers | — Multi-Grain |
| — Sub Rolls | — Granary |
| — Demi Baguettes | — Spelt |
| — Fruited Breads | — Sprouted Grain |
| | — Brioche |
| | — Low Carb |

The Conical Rounder at a Glance:

| | |
|---------------------------|--|
| Capacity: | Up to 2,400 pieces per hour |
| Dough piece weight range: | 100g - 1,200g (3½oz - 2.6lbs) |
| Area of footprint: | 1 m ² (10.75ft ²) |



Technical Specifications

| Specifications | Mini Moulder | Multi Moulder | Metro Moulder | Combination Moulder | Hand Fed Combination Moulder | Twin Sheeter Moulder | Conical Rounder |
|-----------------------------|----------------------------------|--|----------------------------------|----------------------------------|----------------------------------|--------------------------------------|---|
| Stem Code | FG007 | FG129 | FG021 | FG105 | FG105 | FG169 | FG398 |
| Capacity | upto 1,000 pcs/hour | upto 1,200 pcs/hour | upto 1,200 pcs/hour | upto 960 pcs/hour | upto 900 pcs/hour | upto 1,200 pcs/hour | upto 960 pcs/hour |
| Dough Piece Weight Range | 28 - 900g | 1oz - 2lbs | 56 - 1,800g | 2oz - 4lbs | 250 - 1,000g | 9oz - 2lbs | 56 - 1,200g |
| Dough Piece Length | 152mm | 6" - 12" | 152 - 380mm | 6 - 15" | 152 - 710mm | 6 - 28" | 152 - 300mm |
| Width | 343mm | 13.5" | 533mm | 21" | 750mm | 29.5" | 1,020mm |
| Width on Stand | 584mm | 23" | 610mm | 24" | N/A | N/A | 610mm |
| Height | 889mm | 35" | 902mm | 35.5" | 1,310mm | 51.5" | 1,825mm |
| Height on Stand | 1,651mm | 65" | 1613mm | 63.5" | N/A | N/A | 1,770mm |
| Height with Hopper | N/A | N/A | 1,610mm | 63.5" | N/A | N/A | 1,770mm |
| Depth | 1,054mm | 41.5" | 1,257mm | 49.5" | 1,740mm | 68.5" | 1,205mm |
| Weight | 110kg | 243lbs | N/A | N/A | 230kg | 507lbs | 470kg |
| Weight with Stand | 129kg | 284lbs | 170kg | 375lbs | N/A | N/A | 1,036lbs |
| Conveyor Belt Width | 152mm | 6" | 302mm | 12" | 458mm | 18" | 470kg |
| Number of Rollers | 2 | 2 | 2 | 4 | Front 700mm Rear 750mm | Front 27.5" Rear 29.5" | N/A |
| Primary Roller Diameter | 89mm | 3.5" | 89mm | 3.5" | 102mm | 4" | 1,205mm |
| Secondary Roller Diameter | N/A | N/A | N/A | N/A | 87mm | 3.5" | 430kg |
| Tertiary Roller Diameter | N/A | N/A | N/A | N/A | 127mm | 5" | 948lbs |
| Roller Material | Steel | Steel | Teflon Coated | Nylon | Nylon | Nylon | Steel |
| Pressure Plate Material | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel |
| Curling Chain Material | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel |
| Scraper Material | Stainless Steel | Stainless Steel | Nylon | Nylon | Nylon | Stainless Steel | Stainless Steel |
| Conveyor Belt Material | Thermoplastic Polyurethane (TPU) | Thermoplastic Polyurethane (TPU) | Thermoplastic Polyurethane (TPU) | Thermoplastic Polyurethane (TPU) | Thermoplastic Polyurethane (TPU) | Thermoplastic Polyurethane (TPU) | Thermoplastic Polyurethane (TPU) |
| Spring Loaded Scraper? Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Dough Centering Flaps? Y/N | Yes | Yes | Yes | Yes | No | N/A | Yes |
| Adjustable Side Guides? Y/N | Yes | Yes | Yes | Yes | No | N/A | Yes |
| Sealed Bearings? Y/N | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Flour Duster Included ? Y/N | No | No | No | No | No | No | No |
| Noise Level | <85dB | <85dB | <85dB | <85dB | <85dB | <85dB | <85dB |
| Electrics | Single or 3 phase + N | 380V/415V, 3 Phase, N+E, 50-60Hz OR 230V/240V Single phase, 50Hz | 3 phase +N | 415V, 3 phase, 50Hz | 415V, 3 phase, 50Hz | 380V/415V, 3 phase, Neutral, 50-60Hz | 415V, 3 phase, 50Hz |
| Power Rating | 0.37KW | 1.7Amps per phase, 0.55kW OR 4 Amps 0.75KW | 0.75KW | 0.75KW | 0.75KW | 1.7 Amps per phase, 0.55kW | 2kW with heater option, 0.7kW without heater option |

Specifications correct at time of publication. MONO Equipment reserves the right to amend the specification without prior notice.



INTERESTING FACT:

The Origins of the Baguette

Many stories and myths abound as to how the baguette came into being, including one of Napoleon passing a law decreeing that bread should be made long and thin so that his soldiers could carry them in specially fashioned pockets in their uniforms. The general consensus, however, is that the baguette is probably the product of the influence of an Austrian military officer combined with the introduction of French labour laws.

During the early 19th century, the first deck oven with steam was brought to Paris by an Austrian officer, August Zang, who also introduced the Pain Viennois and the croissant to France. Some sources, therefore, credit August with the origination of the baguette as the steam generated by the oven allowed the crust to expand before settling and melted the dextrose on the bread's surface to create the glazed effect we know today.

Later, in 1920, a law was passed which prevented bakers from working between 10pm and 4am. This meant that the traditionally larger loaves couldn't be baked in time for customers' breakfasts; however, the longer, thinner baguettes, could be prepared and baked quicker and made more readily available. Some say that this is actually how the baguette originated.

MONO Equipment is one of the leading designers and manufacturers of bakery and foodservice equipment in the United Kingdom. This proud heritage of British craftsmanship, combined with a reputation for creating high-quality, innovative products, can be traced back to its origins in 1947.

The very first piece of bakery equipment MONO Equipment ever produced was the Universal Bread Moulder which was built out of necessity from an assortment of spare parts and scrap materials, including a number of bicycle parts. By 1976 over 12,000 of these innovative dough moulders had been sold to almost every corner of the globe.

MONO Equipment still continues to manufacture a comprehensive range of specialist dough moulders, the fundamental designs of which have hardly changed since the very first Universal model back in 1947, that are perfectly suited to both the small artisan bakery and the larger in-store retail bakery.



MONO Equipment

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