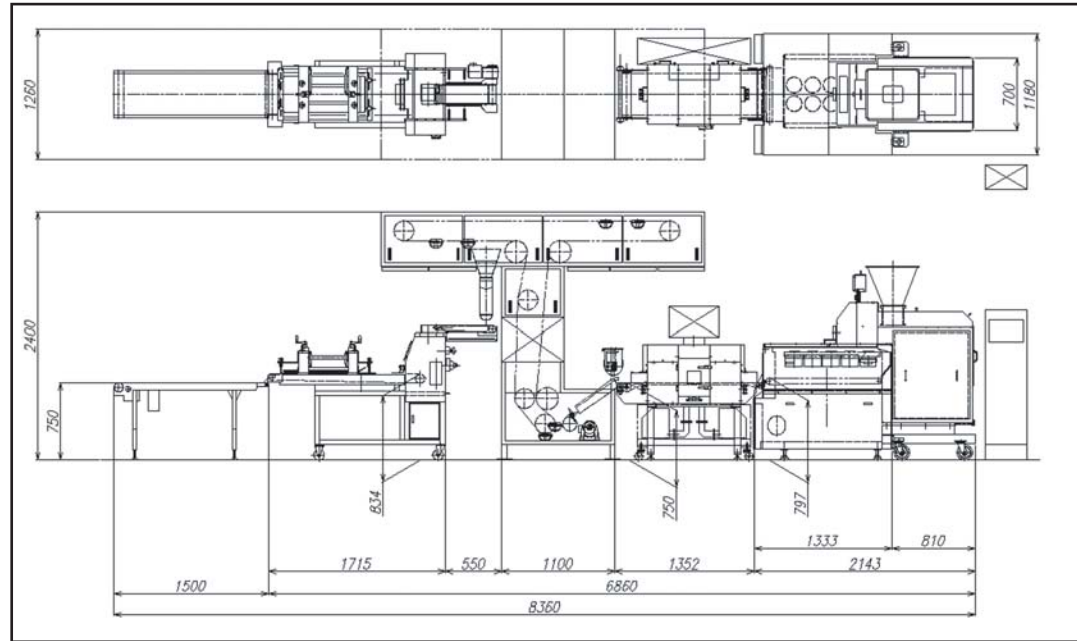


Microwave Proofing System

Dimensional Drawing



Specifications

Specifications and dimensions may be subject to change without prior notice.

Two rows small divider for connection of Gyrator <DQG>	
Number of pocket	2 (Cassette type of pockets)
Scaling range	30 - 230g
Stroke/min	10 - 20st.(every 2 strokes adjustable)
Capacity	1200 - 2400 pcs/hr
Hopper capacity	45 liters
Required electric	main drive : 1.5kW
Machine weight	Approx 1000kg

Two rows conveyor Microwave <MWS>	
Max. output of oscillator	2kW
Treatment capacity	white bread (230g) : 1500pcs/hr variety (30g ~ 110g) : 2000pcs/hr
Required electric (Input Power :5kVA)	oscillators : 1kW×2 conveyor drive : 90W spin roller : 40W shutter drives : 40W×2
Machine weight	Approx 300kg

Single row moulder with infeed conveyor <WFS>	
Capacity	230g : 3000pcs/hr 30g : 4500pcs/hr
Dough weight	30 - 230g
Dia. of rollers	upper : 85mm lower : 100mm
Roller clearance	upper : 9 - 14mm lower : 1 - 9mm
Roller speeds	20 - 46m/min
Height of pressure board	10 - 50mm
Range of width plate	100 - 330mm
Required electric	main drive : 0.4kW
Machine weight	Approx 350kg

Gyratory Rounder <GQS>	
Rounding method	Gyaratory type
Number of rounding station	1 station
Number of cup	2cups * 5 = 10cups
Required electric	up and down of cup : 1.5kW gyration of cup : 0.75kW conveyor drive : 0.75kW spin roller : 40W brush roller : 0.1kW
Machine weight	Approx 1200kg

Two rows belt driving proofer <PQA>	
Number of tray	60 trays
Capacity	2400pcs/hr (7.5 min. as standard)
Proofing time	7.5min. as standard
Dough weight	30 - 230g
Required electric	main drive : 0.2kW flour duster : 90W
Machine weight	Approx 1500kg

Power Source	AC200V 3Phases
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Note
Replacement of existing single machine can be possible.



Challenge to Innovation
(New Model of Home Line)

Microwave Proofing System

Make-Up Line by Oshikiri's Original Creativity and Engineering



Bakery plants from Small and Medium Size of Bakery

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What is Microwave Proofing System ?

Divided and rounded dough pieces are irradiated by microwave to rise dough temperature about 5°C, which leads to promotion of relaxation of dough structure, expansion of gas in the dough, and acceleration/shortening of proofing time by helping fermentation of yeast.

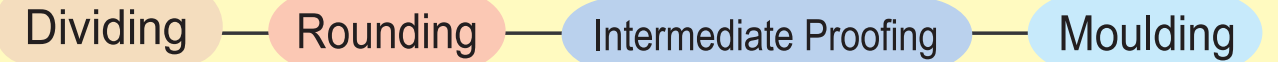
Proofing time cuts down to half of conventional proofing time

Graph 1 shows the comparison of conventional proofing and microwave irradiation treatment for dough specific gravity after dividing and rounding dough. Specific gravity after 15 minutes conventional proofing is equivalent to 7.5 minutes microwave irradiation treatment.

Graph 2 shows the comparison of pressure value required to the rollers when moulding the dough after dividing and rounding. As same as specific gravity value, pressure value after 15 minutes conventional proofing is equivalent to 7.5 minutes microwave irradiation treatment.

As result of these experiments, **microwave irradiation treatment can be cut down to half of conventional proofing time.**
The quality such as taste, smell of bread make little difference from conventional Proofing.

Conventional Finishing Process



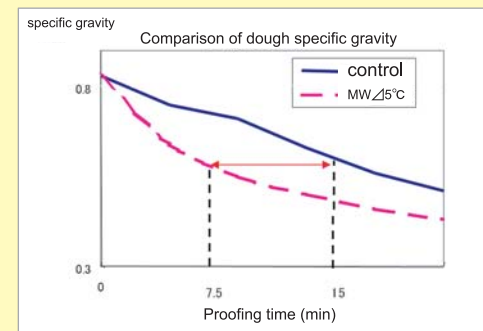
- Requires the time from 15 to 20 minutes
- Needs spaces to be installed

Finishing process of microwave proofing system

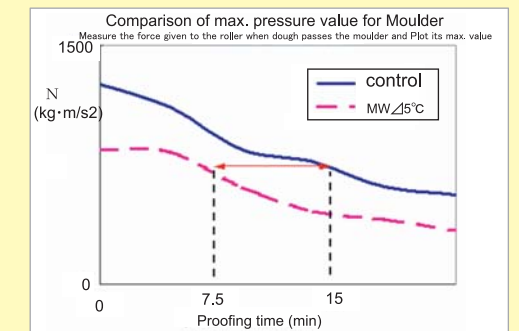


Microwave treatment

- Dough temperature is risen about 5°C by microwave treatment
- Cut the intermediate proofing time down to half
- Smaller machines and easy cleaning to be sanitized



Graph 1



Graph 2

Dividing/Rounding



1 Two rows small divider for connection of Gyrotor MODEL DQG

Compact Divider/Rounder to handle 30 to 230 grams of variety bread dough

- Cassette type of pocket to fit dough weight
- Advancement of cleaning by construction improvement of product zone
- Sanitation by separation of product zone and driving system/ advancement of maintenance

2 Gyrotory Rounder MODEL GQS

The first gyrotory small rounder for variety bread

- Changeable rounding eccentric amount according to dough weight
- Variety rounding by easy cup replacement
- Easy daily maintenance with see-through cover

Proofing -1



3 Two rows conveyor Microwave MODEL MWS

Microwave rising temperature unit to promote relaxation of dough construction and to shorten proofing time

- Controllable output according to dough weight
- Continuous treatment in two rows
- Easy operation with programming selection

Proofing -2

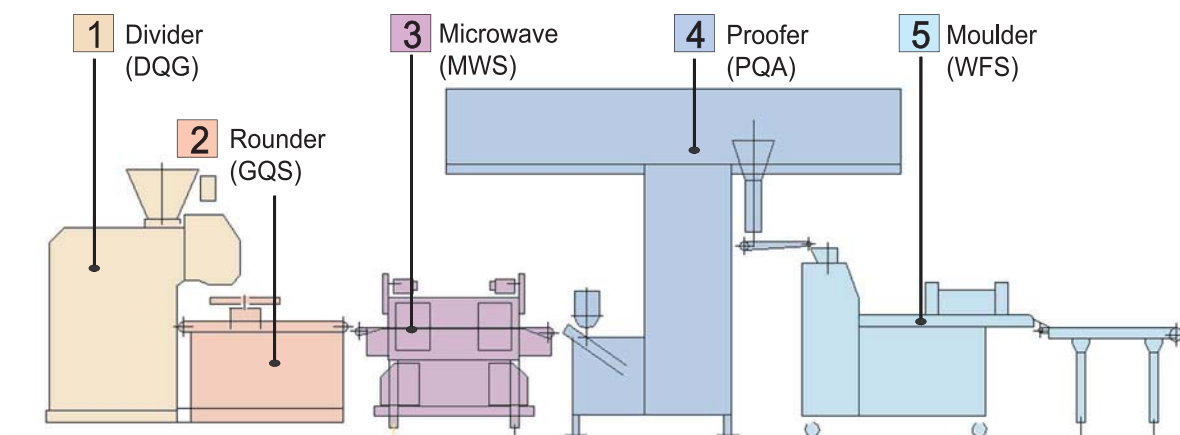


4 Two rows belt driving proofer MODEL PQA

Belt drive type of proofer from new viewpoint

- Less noise and energy saving by less metal to be used
- Foreign substance creation countermeasure by combination of materials at contact section
- Easy removing tray
- Oil-free

System layout



Production capacity for each product

White bread	230g (1500pcs/hr max)
Variety / Roll breads	30 - 110g(2000pcs/hr max)
Butter rolls	30 - 70g(2000pcs/hr max)
Donut dough	30 - 110g(2000pcs/hr max)



Moulding



5 Single row moulder with infed conveyor MODEL WFS

New type of evolved moulder from the function of WF moulder

- Using two stages roller soft to the dough
- Reduction of dough damage by relief mechanism
- Digital display for adjustment
- Betterment of cleaning and maintenance