



Baking Guide

ITES 60 x 40 & Mini-Shop-System

From zero to delicious in record
time

OUR BAKING GUIDE

Dear Customer,

With this guide, we want to show you how efficiently our ITES high-speed oven works, using a few select products. At the same time, you can use the baking information in this guide for your ITES use.

The core temperatures listed in the tables are not representative since different constituents also require different core temperatures for reasons of hygiene and baking technology. They therefore serve as a guide to the assessment of a realistic baking time.

Our ITES can produce batch or continuous, so that always fresh goods - even without specialist personnel - is available. The ITES is suitable for all TK products that do not require steaming, as well as vacuum-cooled, pre-baked and finished baked products that require light steaming. The infrared waves penetrate into the interior of the pastry and bake it from the inside out. This method improves the taste quality and extends the freshness of the baked goods, since the moisture loss is significantly lower than in conventional thawing and baking.

TABLE OF CONTENT

**Frozen (-18°C) and chilled (4°C) products as well as room temperature (23°C) products
PIZZAS & SNACKS**

- Page 1 **Pizza spicy** from raw yeast dough, deep-frozen, with salami, red hot peppers and onions
- Page 2 **Pizza salami** made from raw yeast dough, deep-frozen, with salami and tomato sauce
- Page 3 **Pizza margherita** made from raw yeast dough, deep-frozen, with Gouda cheese and tomato sauce
- Page 4 **Pizza ham mushrooms** made from raw yeast dough, frozen, with ham, mushrooms
- Page 5 **Pizza peperoni - salami** made from raw yeast dough, deep-frozen, with hot peppers, salami, hot peppers
- Page 6 **Pizza pieces - salami**, pre-proofed, deep-frozen, with salami and Gouda Edam cheese
- Page 7 **Mini-Pizza - ham**, prebaked, deep-frozen, with ham, edam cheese and tomato sauce
- Page 8 **Pizza-Baguette - 4-cheese**, frozen, with edam cheese, cheddar, mozzarella and blue cheese
- Page 9 **Pizza-Baguette - salami**, deep-frozen, with salami, peppers, tomatoes, broccoli, onions, edam cheese
- Page 10 **Pizza-Baguette - speciale**, frozen, with ham, salami, mushrooms, edam cheese
- Page 11 **Crusty bread - tomato-cheese**, sliced, pre-baked, dark slices of bread with tomatoes and cheese

**Products with room temperature (23°C)
BAKERY PRODUCTS**

- Page 12 **Croissants** - ready baked butter croissants to bake
- Page 13 **Baguette - French style**, pre-baked baguette for ready-to-bake
- Page 14 **Breakfast buns**, pre-baked wheat bread for ready-to-bake
- Page 15 **ultigrain buns**, pre-baked small multigrain bread buns for ready-to-bak

**Frozen vacuum-sealed (-18°C) products
BAKERY PRODUCTS**

- Page 16 **Pretzel breadsticks** - ready baked, vacuumed and frozen

**Frozen (-18°C) products
BAKERY PRODUCTS**

- Page 17 **Pretzels** - pre-proofed pretzels for ready-to-bake
- Page 18 **Pretzel rolls** - pre-proofed lye buns for finish baking

Specifications ITES & Mini-Shop-System

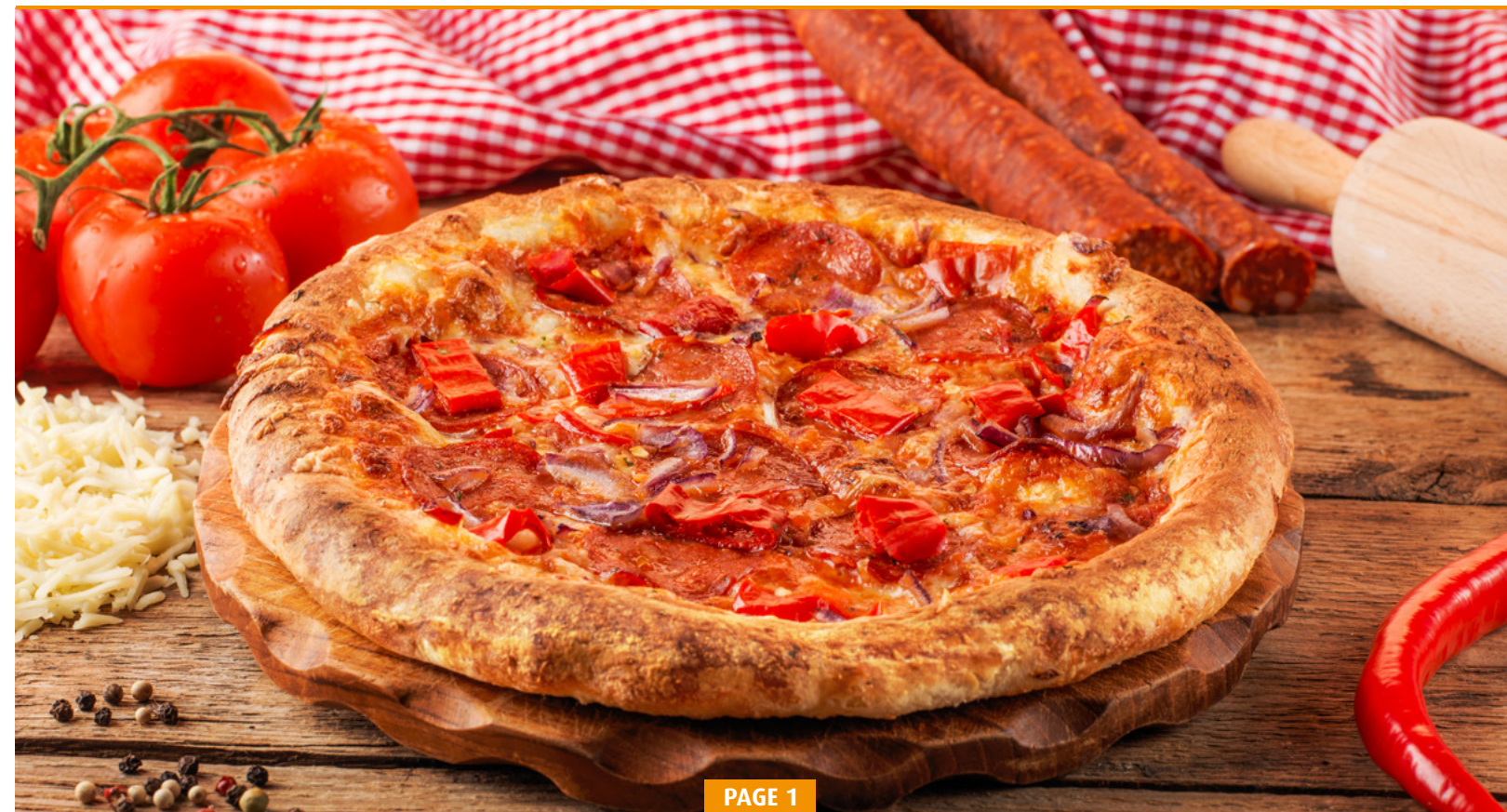
- Page 19 **ITES 60x40**
- Page 20 **Mini-Shop-System**

PIZZA SPICY

PIZZAS

Pizza made from raw yeast dough, deep-frozen with salami, red peppers and onions

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking informationen cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	6:00 min	12 - 14 min	baking time	5:50 min	baking time	4:50 min
top heat	415°C	-	top heat	415°C	top heat	415°C
oven temp.	250°C	250°C	oven temp.	250°C	oven temp.	250°C
core temperature	85.2°C	-	core temperature	91.2°C	core temperature	90.1°C
weight before baking	415 g	415 g	weight before baking	418 g	weight before baking	443 g
weight after baking	398 g	-	weight after baking	404 g	weight after baking	426 g
Total working time	6:00 min	12 - 14 min	Total working time	5:50 min	Total working time	4:50 min



PIZZA SALAMI

Pizza made from raw yeast dough, deep-frozen with salami and tomato sauce

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking informationen cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	6:00 min	12 - 14 min	baking time	5:50 min	baking time	4:50 min
top heat	415°C	-	top heat	415°C	top heat	415°C
oven temp.	250°C	250°C	oven temp.	250°C	oven temp.	250°C
core temperature	86.1°C	-	core temperature	97.1°C	core temperature	94.8°C
weight before baking	404 g	404 g	weight before baking	404 g	weight before baking	443 g
weight after baking	387 g	-	weight after baking	393 g	weight after baking	434 g
Total working time	6:00 min	12 - 14 min	Total working time	5:50 min	Total working time	4:50 min

PIZZAS

PIZZA MARGHERITA

PIZZAS

Pizza made from raw yeast dough, deep-frozen with Gouda cheese and tomato sauce

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking informationen cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	7:00 min	12 - 14 min	baking time	6:00 min	baking time	5:50 min
top heat	415°C	-	top heat	415°C	top heat	415°C
oven temp.	250°C	250°C	oven temp.	250°C	oven temp.	250°C
core temperature	85.1°C	-	core temperature	99.4°C	core temperature	92,6°C
weight before baking	415 g	415 g	weight before baking	395 g	weight before baking	422 g
weight after baking	392 g	-	weight after baking	380 g	weight after baking	399 g
Total working time	7:00 min	12 - 14 min	Total working time	6:00 min	Total working time	5:50 min



PIZZA HAM MUSHROOMS

Pizza made from raw yeast dough, deep-frozen with ham, mushrooms, tomato sauce and herbs

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking information cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	6:00 min	12 - 14 min	baking time	5:50 min	baking time	4:50 min
top heat	415°C	-	top heat	415°C	top heat	415°C
oven temp.	250°C	250°C	oven temp.	250°C	oven temp.	250°C
core temperature	79.1°C	-	core temperature	98.3°C	core temperature	99.1°C
weight before baking	402 g	402 g	weight before baking	438 g	weight before baking	425 g
weight after baking	388 g	-	weight after baking	423 g	weight after baking	405 g
Total working time	6:00 min	12 - 14 min	Total working time	5:50 min	Total working time	4:50 min

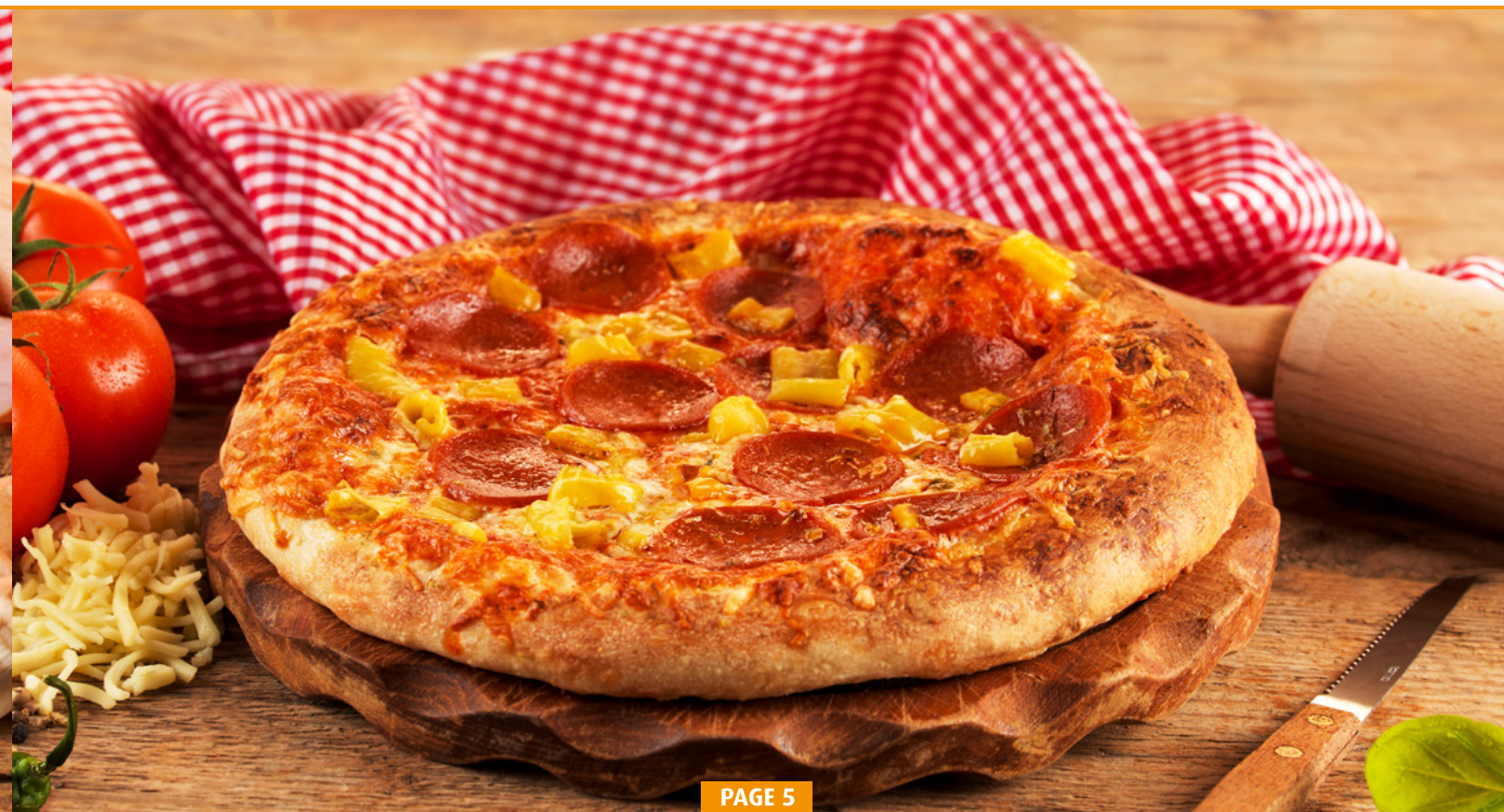
PIZZAS

PIZZA PEPPERONI-SALAMI

PIZZAS

Pizza made from raw yeast dough, deep-frozen with pepperoni salami, hot peppers and tomato sauce

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking information cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	6:00 min	12 - 14 min	baking time	5:50 min	baking time	4:50 min
top heat	415°C	-	top heat	415°C	top heat	415°C
oven temp.	250°C	250°C	oven temp.	250°C	oven temp.	250°C
core temperature	90.7°C	-	core temperature	91.7°C	core temperature	95.2°C
weight before baking	426 g	426 g	weight before baking	411 g	weight before baking	428 g
weight after baking	407 g	-	weight after baking	400 g	weight after baking	416 g
Total working time	6:00 min	12 - 14 min	Total working time	5:50 min	Total working time	4:50 min



PIZZA PIECES - SALAMI

Pizza pieces pre-proofed, deep-frozen with salami and Gouda Edam cheese

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions
baking time	8:00 min	12 - 14 min
top heat	415°C	-
oven temp.	250°C	250°C
core temperature	89.7°C	-
weight before baking	130 g	130 g
weight after baking	124 g	-
Total working time	8:00 min	12 - 14 min

PIZZAS MINI-PIZZA HAM

Mini-pizza, pre-baked, frozen with ham, edam cheese and tomato sauce

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking information cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	5:00 min	9 - 11 min	baking time	4:50 min	baking time	4:00 min
top heat	380°C	-	top heat	380°C	top heat	380°C
oven temp.	220°C	200°C	oven temp.	220°C	oven temp.	220°C
core temperature	77.9°C	-	core temperature	69.9°C	core temperature	71.7°C
weight before baking	30 g	30 g	weight before baking	30 g	weight before baking	30 g
weight after baking	28 g	-	weight after baking	28 g	weight after baking	28 g
Total working time	5:00 min	9 - 11 min	Total working time	4:50 min	Total working time	4:00 min



PIZZA-BAGUETTES 4-CHEESE

Served baguettes, frozen, with edam cheese, emmentaler, cheddar, mozzarella and blue cheese

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking information cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	9:00 min	14 - 16 min	baking time	8:00 min	baking time	8:00 min
top heat	385°C	-	top heat	385°C	top heat	385°C
oven temp.	210°C	230°C	oven temp.	210°C	oven temp.	210°C
core temperature	79.3°C	-	core temperature	79.2°C	core temperature	78.4°C
weight before baking	125 g	125 g	weight before baking	123 g	weight before baking	128 g
weight after baking	119 g	-	weight after baking	118 g	weight after baking	121 g
Total working time	9:00 min	14 - 16 min	Total working time	8:00 min	Total working time	8:00 min

PIZZAS

PIZZA-BAGUETTES SALAMI

Served baguettes, frozen, with salami, peppers, tomatoes, broccoli, onions, tomato sauce and Edam cheese

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking information cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	9:00 min	13 - 16 min	baking time	8:00 min	baking time	8:00 min
top heat	385°C	-	top heat	385°C	top heat	385°C
oven temp.	210°C	230°C	oven temp.	210°C	oven temp.	210°C
core temperature	67.7°C	-	core temperature	71.3°C	core temperature	76.7°C
weight before baking	120 g	120 g	weight before baking	132 g	weight before baking	121 g
weight after baking	114 g	-	weight after baking	125 g	weight after baking	114 g
Total working time	9:00 min	13 - 16 min	Total working time	8:00 min	Total working time	8:00 min

PIZZAS



PIZZA-BAGUETTES SPECIALE

Served baguettes, frozen, with ham, salami, mushrooms, edam cheese, onions and Tomato sauce

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking informationen cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	8:30 min	13 - 16 min	baking time	8:00 min	baking time	7:30 min
top heat	385°C	-	top heat	385°C	top heat	385°C
oven temp.	210°C	230°C	oven temp.	210°C	oven temp.	210°C
core temperature	81.9°C	-	core temperature	71.6°C	core temperature	79.2°C
weight before baking	120 g	120 g	weight before baking	133 g	weight before baking	121 g
weight after baking	117 g	-	weight after baking	129 g	weight after baking	116 g
Total working time	8:30 min	13 - 16 min	Total working time	8:00 min	Total working time	7:30 min

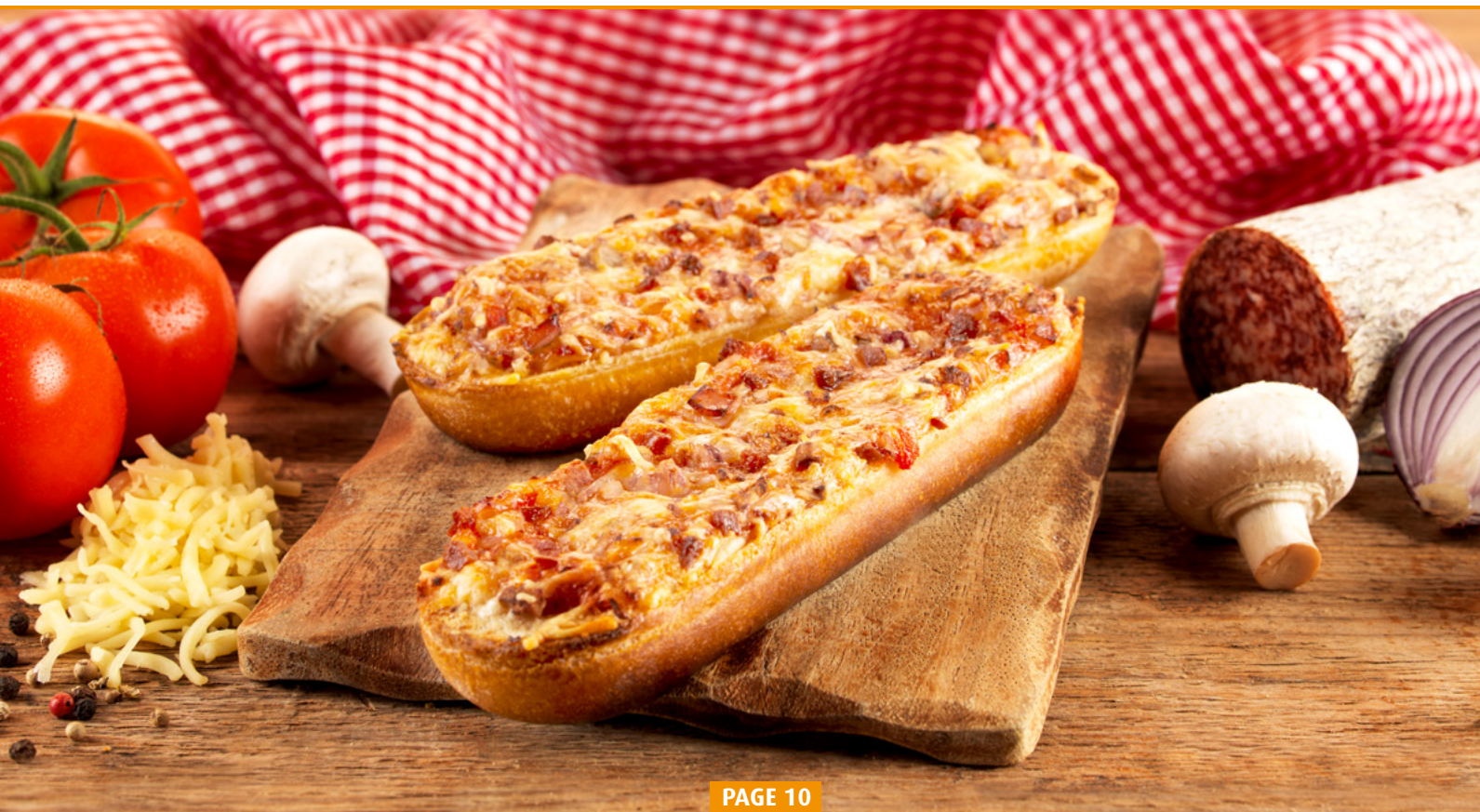
PIZZAS

CRUSTY BREAD - TOMATO-CHEESE

Served, pre-baked, dark slices of bread with tomatoes, edam cheese and mozzarella

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions	Baking informationen cooled +4°C	ITES 60x40	Baking information room temp. +23°C	ITES 60x40
baking time	6:00 min	11 - 13 min	baking time	5:50 min	baking time	4:50 min
top heat	415°C	-	top heat	415°C	top heat	415°C
oven temp.	250°C	230°C	oven temp.	250°C	oven temp.	250°C
core temperature	60.1°C	-	core temperature	69.2°C	core temperature	72.3°C
weight before baking	201 g	201 g	weight before baking	214 g	weight before baking	185 g
weight after baking	188 g	-	weight after baking	201 g	weight after baking	174 g
Total working time	6:00 min	11 - 13 min	Total working time	5:50 min	Total working time	4:50 min

PIZZAS



CROISSANT

BAKERY PRODUCTS

BAGUETTES FRENCH STYLE

BAKERY PRODUCTS

ready baked butter croissants to heat up

Pre-baked baguettes ready-to-bake

Baking information room temp. +23°C	ITES 60x40	Manufacturer instructions
baking time	1:20 min	3:00 min
top heat	390°C	-
oven temp.	230°C	150°C
core temperature	60.9°C	-
weight before baking	49 g	49 g
weight after baking	48 g	-
Total working time	1:20 min	3:00 min

Baking information room temp. +23°C	ITES 60x40	Manufacturer instructions
baking time	3:30 min	8:00 min
top heat	400°C	-
oven temp.	240°C	200°C
core temperature	89.3°C	-
weight before baking	73 g	73 g
weight after baking	69 g	-
Total working time	3:30 min	8:00 min



BREAKFAST BUNS

Pre-baked wheat buns ready to bake

Baking information room temp. +23°C	ITES 60x40	Manufacture instructions
baking time	2:50 min	8:00 min
top heat	400°C	-
oven temp.	240°C	200°C
core temperature	90.2°C	-
weight before baking	51 g	51 g
weight after baking	49 g	-
Total working time	2:50 min	8:00 min



BAKERY PRODUCTS MULTIGRAIN BUNS

Pre-baked small multigrain buns ready to bake

Baking information room temp. +23°C	ITES 60x40	Manufacturer instructions
baking time	4:00 min	8:00 min
top heat	420°C	-
oven temp.	240°C	220°C
core temperature	82.2°C	-
weight before baking	63 g	63 g
weight after baking	60 g	-
Total working time	4:00 min	8:00 min



PRETZEL BREADSTICKS

BAKERY PRODUCTS

PRETZELS

BAKERY PRODUCTS

ready-baked, vacuumed and frozen pretzel breadsticks

Pre-cooked, frozen pretzels ready-to-bake

Baking information frozen -18°C	ITES 60x40
baking time, solo baked	5:30 min
baking time continuously	4:30 min
top heat	250°C
oven temp.	200°C
core temperature	70.4°C
weight before baking	88 g
weight after baking	86 g
Total working time, solo baked	5:30 min
Total working time, continuously baked	4:30 min

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions
baking time, solo baked	8:30 min	12:00 min
top heat	350°C	225°C
oven temp.	208°C	-
core temperature	101.2°C	-
weight before baking	95 g	95 g
weight after baking	91 g	-
thaw, cutting & salting	30 Sek.	15 min
Total working time	9:00 min	27:00 min





PRETZEL ROLLS

Pre-proofed, frozen pretzel rolls ready-to-bake

Baking information frozen -18°C	ITES 60x40	Manufacturer instructions
baking time, solo baked	5:30 min	12:00 min
baking time continuously	4:30 min	-
top heat	250°C	225°C
oven temp.	200°C	-
core temperature	70.4°C	-
weight before baking	88 g	88 g
weight after baking	86 g	-
Total working time, solo baked	5:30 min	12:00 min
Total working time, continuously	4:30 min	-



BAKERY PRODUCTS HIGH SPEED INFRARED-OVEN ITES

EQUIPMENT

- Conventional oven and patented infrared technology in one
- Touchscreen-control
- 50 individual baking programs can be stored
- Full stainless steel construction
- Developed and produced in Germany
- Meets NSF hygiene standards

BENEFIT

- Infrared technology reduces processing time up to 70%
- In addition to the heat from the outside, the infrared waves bake from the inside out
- Less moisture loss = higher sales weight and longer freshness
- Thawing in the oven possible
- Enormous reduction of reaction times to the customer

OPTIONS

- The salter automates the entire production process – directly from the freezer to the saleable product.

TECHNICAL DETAILS	ITES 60x40	ITES 60x40 incl. salter	ITES 30x30
Length	1,497 mm	1,497 mm	1,197 mm
Width	840 mm	840 mm	540 mm
Height with salter	-	645 mm	-
Height without salter	543 mm	-	543 mm
Weight	ca. 170 kg	ca. 175 kg	ca. 95 kg
Voltage	3x230V/400V/N/PE/50Hz	3x230V/400V/N/PE/50Hz	1x230V/N/PE/50Hz
max. connected load	9,2 kW/14 A	9,3 kW/14 A	3,4 kW/15 A
Standard belt	wire mesh, non-stick	wire mesh, non-stick	wire mesh, non-stick
Automatic salter	-	yes	-
Max. product height	80 mm	80 mm	80 mm



ITES MINI-SHOP-SYSTEM

The new ITES Mini-Shop-System: clever combined high-speed ovens for modern sales concepts.

Mini-bakery and mini-pizzeria in one – this is just one of the many options of the new ITES mini-shop system offers. Developed for modern bakery concepts, the compact system can be positioned flexibly in the sales room, customized in look and feel, and produces high-quality frozen products with a time savings of **up to 50 percent**. In the "self-service variant" customers can even independently prepare their desired products.

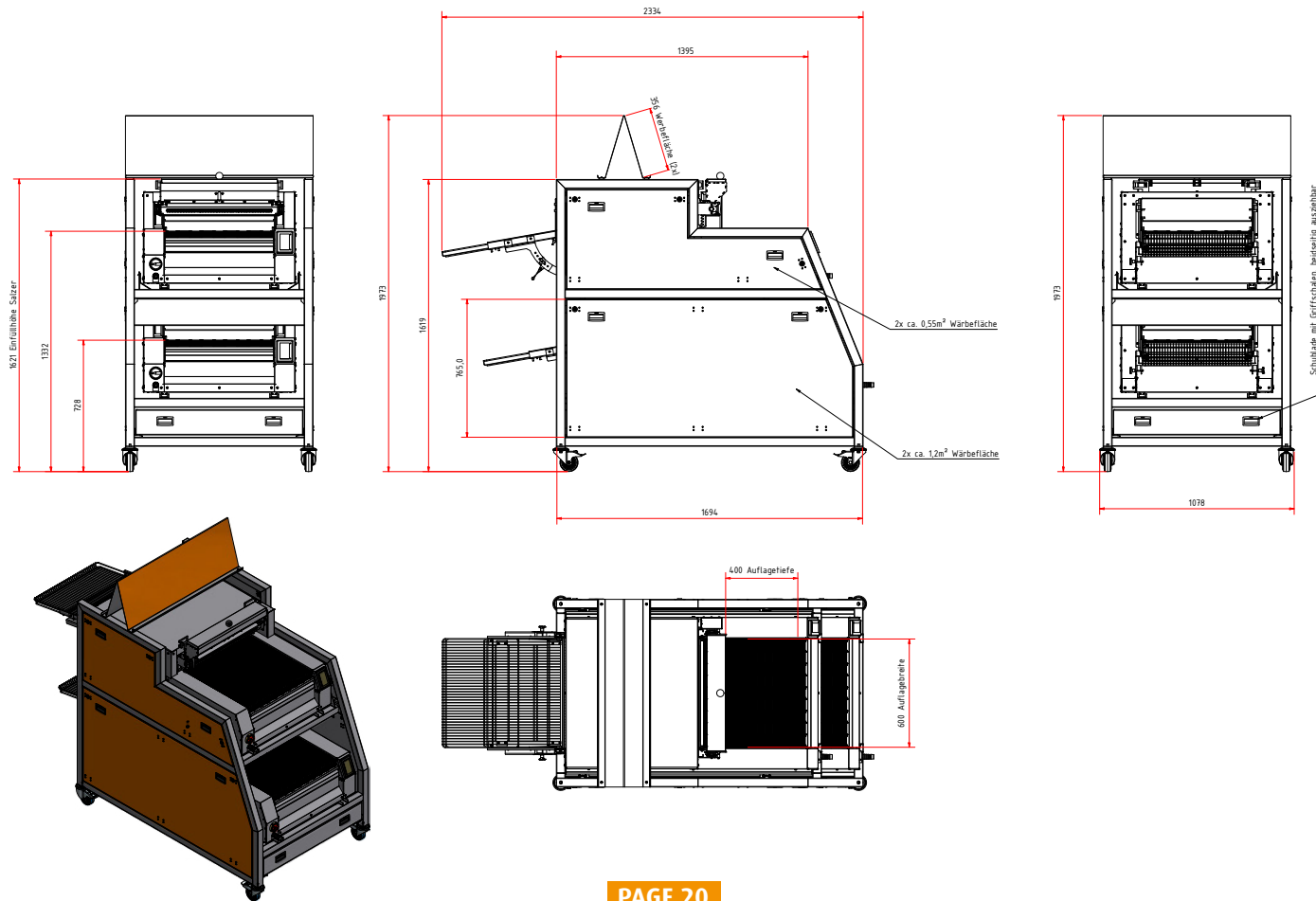
The **ITES Mini-Shop-System** consists of two stacked ITES conveyor ovens. The upper oven, which can have an automatic salter, is particularly suitable for baking bakery products, such as lye pastry. Regardless, other frozen pastries and snacks can be processed simultaneously on the lower oven.

Mini-bakery at the top, mini-pizzeria at the bottom: this is also easy to do because the products are sold ready for sale in easy-to-install chutes. And all in a short time. Compared to the conventional thawing and baking process, the ITES ovens require up to 50 percent less time thanks to its patented infrared technology.

The **ITES Mini-Shop-System** is created according to the requirements of the modern shops' design. The top and side panels can be covered with heat-resistant printed foil

which is intended for printing of the customers design. The self-service option enables the customer to start the baking process on their own. The **ITES Mini-Shop-System** can be integrated into existing shop concepts.

The **ITES Mini-Shop-System** can produce fresh pastries batch or continuously. The system is suitable for all non-humidified frozen products, as well as vacuum-cooled, pre-baked products that require slight steaming. The infrared waves penetrate into the interior of the pastry and bake it from the inside out. This process improves the taste quality and extends the freshness of the baked goods, since the moisture loss is significantly lower compared to the conventional thawing and baking process.



ITES MINI-SHOP-SYSTEM

EQUIPMENT

- Award-winning ovens with patented infrared technology
- Full cladding with customized 4-color foiling
- Intuitive-usable touch panel controls
- 50 individual baking programs per oven
- On request: Self-Service function for the consumers
- Developed and produced in Germany
- Meets the NSF hygiene standard

BENEFIT

- Infrared technology reduces process time up to 70%
- In addition to the heat from the outside, the infrared waves bake from the inside out
- Less moisture loss = higher sales weight and longer freshness
- Thawing in the oven possible
- Enormous reduction of reaction times to the customer
- Noticeable economic optimizations
- Shop-in-shop system in the „look and feel“ of your branch

TECHNICAL DETAILS	Mini-Shop-System
Length without dispensing spout	1,730 mm
Length with output chute	variabel
Width	1,078 mm
Height with advertising space	1,968 mm
Dimensions of advertising space laterally (LxH)	2 x ca. 1,7 qm
Dimensions of advertising space above (LxH)	1040 x (2x) 356 mm
Weight	ca. 1,245,6 lb
Voltage	2x 3x230 V/400 V/N/PE/50Hz
max. connected load	1x 9,2 kW/14 A 1x 9,3 kW/14 A
Standard belt	wire mesh, non-stick
Max. product height	2x 80 mm





**DISCOVER OUR NEW SHOP SOLUTION WITH ITES
- THE SHOP-GLAZER REVOLUTION,
FOR THAWING AND GLAZING FROZEN DONUTS!**

WP LEBENSMITTELTECHNIK RIEHLE GMBH

Heinrich-Rieger-Str. 5 // D-73430 Aalen, Germany // Tel. +49 7361 5580-0 // Fax +49 7361 5580-2281
info@riehle.de // www.wp-riehle.de

IMAGERY

All of the photos in this guide show products using the ITES 60x40 High Speed Infrared Oven from WP Riehle baked.
All product images are the property of WP Lebensmitteltechnik RIEHLE GmbH, based in Aalen.
Further use without the express written consent is prohibited.