

THE BAKER'S  
CROWN



**SDD EOS**



**MDI STRATOS**



**SDI PHAROS**



## **TUNNEL OVENS**

**INDUSTRIAL BAKING SYSTEMS  
FOR A WIDE PRODUCT RANGE**

# MDI STRATOS

The indirectly heated multi-deck tunnel oven MDI STRATOS is an extraordinary combination of compact design, modularity, power and control. The heat transfer to the product takes place mainly by radiation, but also by contact and natural convection. The decks are totally independent, also allowing the management of different production rates and/or different products to be baked simultaneously.

## Advanced power system PWR

The advanced power system PWR (Power Where/When Required), Koenig's advanced power distribution and thermoregulation method, allows a careful control of calorie intake onto the product and of the baking environment in each zone of the oven, also ensuring the maximum energy efficiency.

## Forced air jet system

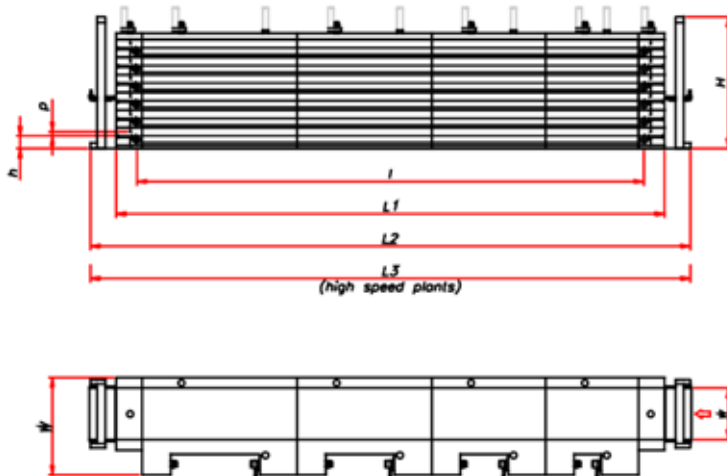
MDI STRATOS can additionally be equipped with Koenig's system FAJ (Forced Air Jet), in case of products requiring a local mixed radiant/convection baking.



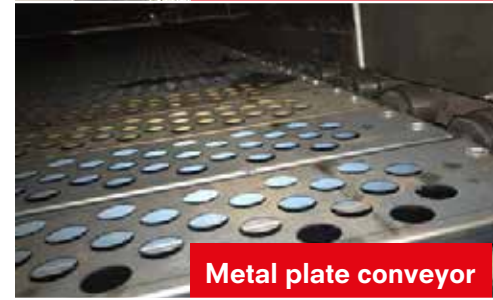
MDI STRATOS with 1 deck



MDI STRATOS with 4 decks



Stone plate conveyor



Metal plate conveyor

## The MDI STRATOS grows according to your demand:

The oven offers extreme flexibility in terms of scalability. Starting from 1 deck, the oven can be easily made higher and/or longer at any time, by adding decks and/or modules, so as to perfectly suit the needs and the development plans of both small artisan bakeries and large industries.



Wire mesh conveyor



Metal slats conveyor

## PERFORMANCE FEATURES

- for baking loose products, in pans or moulds
- standard nominal conveyor width: 2.500 mm
- baking surface up to 500 sqm
- baking temperatures from 100°C to 300°C
- up to 6 decks
- baking chamber of each deck divided in up to 4 zones with dedicated burners for independent temperature setting
- gas or oil burners with a high modulation ratio
- independent control of top and bottom heat of each zone by means of dedicated damper
- fine tuning of lateral heat distribution in each zone by means of micro-dampers controlling flow of each radiant section
- forced steam extraction with adjustable damper for each zone
- possibility to install a baking conveyor pre-heating section
- possibility to have a steaming dedicated zone at infeed, with independent temperature setting
- no influence between the decks (fully enclosed)
- low heat losses thanks to the compact design, to the conveyors running inside the baking chambers and to the efficient insulation
- inspection doors can be installed along the baking chamber
- baking conveyor with stone plates (MDI-SP), metal plates (MDI-MP), wire-mesh (MDI-WM) or metal slats (MDI-MS)
- possibility to have conveyor cleaning system
- possibility to have baking chamber cleaning system
- possibility to operate with different feeding / discharge lines
- high speed elevators for loading and unloading
- modular construction and small footprint
- stainless steel hygienic design

MDI STRATOS*															
Decks (no.)	Zones (no.)	Baking Surface (sqm)		Nominal dimensions (mm)					Overall dimensions (mm)					Reference installed power	
		min	max	w	l min	l max	h	p	W	L1	L2 max	L3 max	H	kW	Mcal/h
1	1	13	21	2.500	5.000	8.500	600	200	4.800	l + 2.000	l + 5.000	l + 7.500	1.300	110÷200	95÷170
	2	25	43		10.000	17.000								220÷400	190÷340
	3	38	64		15.000	25.500								330÷600	280÷520
	4	50	85		20.000	34.000								440÷800	380÷690
2	1	25	43		5.000	8.500							220÷400	190÷340	
	2	50	85		10.000	17.000							440÷800	380÷690	
	3	75	128		15.000	25.500							660÷1200	570÷1030	
	4	100	170		20.000	34.000							880÷1600	760÷1380	
3	1	38	64		5.000	8.500							330÷600	280÷520	
	2	75	128		10.000	17.000							660÷1200	570÷1030	
	3	113	191		15.000	25.500							990÷1800	850÷1550	
	4	150	255		20.000	34.000							1320÷2400	1140÷2060	
4	1	50	85		5.000	8.500							440÷800	380÷690	
	2	100	170		10.000	17.000							880÷1600	760÷1380	
	3	150	255		15.000	25.500							1320÷2400	1140÷2060	
	4	200	340		20.000	34.000							1760÷3200	1510÷2750	
5	1	63	106	5.000	8.500	550÷1000	470÷860								
	2	125	213	10.000	17.000	1100÷2000	950÷1720								
	3	188	319	15.000	25.500	1650÷3000	1420÷2580								
	4	250	425	20.000	34.000	2200÷4000	1890÷3440								
6	1	75	128	5.000	8.500	660÷1200	570÷1030								
	2	150	255	10.000	17.000	1320÷2400	1140÷2060								
	3	225	383	15.000	25.500	1980÷3600	1700÷3100								
	4	300	510	20.000	34.000	2640÷4800	2270÷4130								

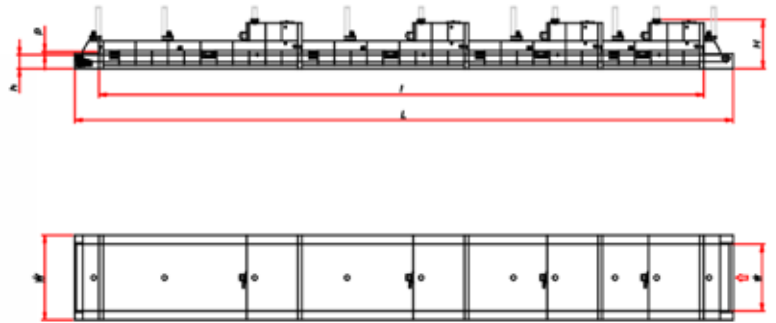
## SDI PHAROS

The indirectly fired single-deck tunnel oven SDI PHAROS takes advantage of the same technology developed for the MDI STRATOS oven, yet with variable working widths available and burners in tower configuration.

In this oven, the **FAJ (Forced Air Jet)** system can be applied in an even more substantial way, to achieve a combined radiant and convection baking process. It is also possible to set the direction of the air flow top-to-bottom or bottom-to-top.

### ADDITIONAL PERFORMANCE FEATURES COMPARED TO MDI STRATOS

- standard nominal conveyor widths: 1.900 to 4.100 mm
- baking surface up to 200 sqm



SDI PHAROS*																								
Zones (no.)	Baking Surface (sqm)		Nominal dimensions (mm)					Overall dimensions (mm)			Reference installed power													
	min	max	w	l min	l max	h	p	W	L	H	kW	Mcal/h												
1	10	31	1.900	5.200	16.200	800	280	3.200	l + 3.300	3.000	350	300												
2	19	61		10.200	32.200						700	600												
3	29	92		15.200	48.200						1.050	900												
4	38	122		20.200	64.200						1.400	1.200												
1	13	31	2.500	5.200	12.200			800			280	3.800	l + 3.300	3.000	350	300								
2	26	61		10.200	24.200										700	600								
3	38	91		15.200	36.200										1.050	900								
4	51	121		20.200	48.200										1.400	1.200								
1	16	32	3.100	5.200	10.200							800			280	4.400	l + 3.300	3.000	350	300				
2	32	63		10.200	20.200														700	600				
3	47	94		15.200	30.200														1.050	900				
4	63	125		20.200	40.200														1.400	1.200				
1	19	49	3.700	5.200	13.200											800			280	5.000	l + 3.300	3.000	350÷550	300÷470
2	38	97		10.200	26.200																		700÷1100	600÷950
3	56	145		15.200	39.200																		1050÷1650	900÷1420
4	75	193		20.200	52.200																		1400÷2200	1200÷1890
1	21	50	4.100	5.200	12.200	800	280		5.400	l + 3.300										3.000			350÷550	300÷470
2	42	99		10.200	24.200																		700÷1100	600÷950
3	62	148		15.200	36.200																		1050÷1650	900÷1420
4	83	198		20.200	48.200																		1400÷2200	1200÷1890

# SDD EOS

The directly fired single deck tunnel oven SDD EOS has been custom designed and realized for baking flat bread and typical pizza to perfection. Baking is realized by means of a series of infrared radiant gas burners installed on top and underneath the oven conveyor. The heat transfer to the product takes place mainly by IR radiation, but also by contact and natural convection. This oven can reach incomparably high temperatures (500°C), yet it can also be widely modulated down to 150° C for baking any type of rustic product.

## DHM System

The baking process control is realized by **DHM (Direct Heating Management)**, Koenig's high efficiency thermoregulation system.

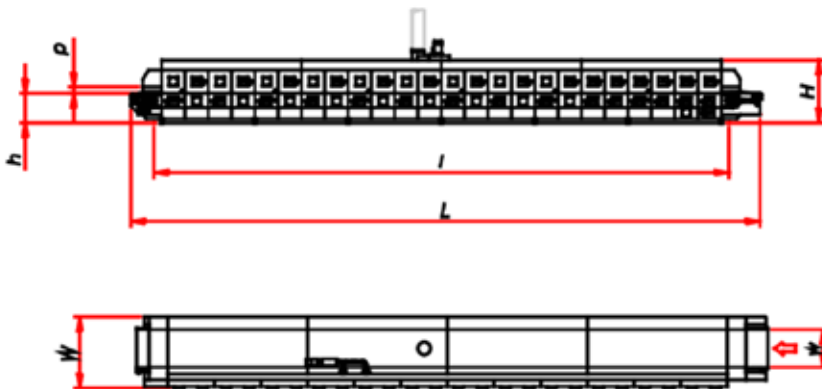


### OPTIONS SDD EOS:

The single deck direct tunnel oven SDD EOS can also be provided in compact version as SDD MINI. (nominal width= 800 mm; length= 2000 to 5000 mm)

## PERFORMANCE FEATURES

- for baking loose products or in pans
- standard nominal conveyor widths: 900-1.700 mm
- baking surface up to 67 sqm
- baking temperatures from 150°C to 500°C
- baking chamber divided in up to 1 zone every 1500 mm with dedicated burners for independent temperature setting
- gas burners with a high modulation ratio
- independent control of top and bottom heat of each zone
- adjustable forced steam/fumes extraction
- possibility to install a baking conveyor high precision pre-heating section
- low heat losses thanks to the efficient insulation
- inspection doors can be installed along baking chamber
- baking conveyor with stone plates (SDD -SP), metal plates (SDD -MP), wire-mesh (SDD-WM) or metal slats (SDD -MS)
- possibility to have conveyor and baking chamber cleaning systems
- possibility to install a steamer at infeed
- possibility to install turbulences inside the baking chamber
- modular construction
- stainless steel hygienic design



SDD EOS*											
Baking Surface (sqm)		Nominal dimensions (mm)					Overall dimensions (mm)			Installed power	
min	max	w	l min	l max	h	p	W	L	H	kW/sqm	Mcal/h sqm
1,8	36	900	2.000	39.500	950	200	1.990	l + 1.750÷2.800	2.020	19÷80	16÷70
2,2	43	1.100	2.000	39.500			2.190				
2,6	51	1.300	2.000	39.500			2.390				
3,0	59	1.500	2.000	39.500			2.590				
3,4	67	1.700	2.000	39.500			2.790				

\* Our technical department is open to analyze ovens with characteristics outside the declared ranges. Indicative values, to be checked depending on oven characteristic.

# PRODUCT RANGE

		SDD EOS	MDI STRATOS	SDI PHAROS
max. baking surface (sqm)		67	500	200
max temperature (°C)		500	300	300
max no. of zones		1 Zone alle 1,5m	4	6
rolls			X	X
baguette			X	X
ciabatta			X	X
loaves			X	X
toast bread/ tin bread			X	X
snacks			X	X
rusks			X	X
croissants			X	X
puff pastry			X	X
cakes			X	X
rustic bread		X	X	X
focaccia		X	X	X
pizza		X	X	X
italian pizza		X		
flat bread		X		
pita bread		X		

# TRUST BASED ON EXPERIENCE AND SECURITY OF INVESTMENT

TEST OUR MACHINES AT THE DEMONSTRATION  
CENTER FOR CUSTOMERS!

Any investment that you make will improve your opportunities for success in the future. Profitability can only be guaranteed if the investment is made wisely. Whether this is the case can often only be assessed afterwards. Koenig however gives you the opportunity to check out its machines before spending any money.

To make sure that you don't buy the pig in a poke:  
Thoroughly test the Koenig machines at our Demonstration Center.

Visit our centers in Graz and Dinkelsbühl. Based on your recipes and raw materials, we will work out the best solution for you until you are fully happy with our suggestion. If necessary, we adjust the units again and start the entire customisation process over again. This ensures that you can offer your customers what they expect from you.

## SERVICES AND SPARE PARTS FROM THE MANUFACTURER!

Each machine and unit undergoes a number of test runs with and without dough. Most of our technicians are actually trained bakers. They assemble the machine at our premises and then commission them, using their in-depth knowledge of the baking trade. If you should encounter any problems, simply contact our spare parts and service department. We are available day and night from anywhere in the world:

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**KÖNIG** THE BAKER'S  
CROWN

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