



AUTOMATIC LOADING UNLOADING



CONTINUOUS OVEN LOADING SYSTEM

The Infinity series is the ultimate expression in the evolution of automation in bakeries using deck ovens. The deck ovens, far more cheaper than traditional tunnel ovens, have new applications for industrial production due to their vertical development.

The savings

become significant both from the point of view of saving space costs and even more so in terms of energy savings that they offer in comparison to tunnel ovens. Considering constant daily increases of fuel prices, the deck ovens offer an economical alternative for industrial productions. The option to equip the ovens with wood pellet burners can also offer additional savings. Compared to fuel costs in different countries there may be savings varying from 40% up to 65%.

The flexibility

The deck ovens offers a major flexibility in comparison with tunnel ovens due to the quick adaptation to production needs. The deck ovens can be turned on when necessary or switched off when not needed to suit the production requirements at that moment. The software of Infinity can also support the sudden change in plans and the introduction of new products in the production schedule, as well as managing a program made specifically for the demand at a moment's notice.

Adaptability

The Infinity system, can be adjusted to cope with varied industrial production as it can be upgraded to make work fully automatic. With appropriate combinations of additional elements it can work independently by the intervention of the operator who is required only to oversee the production. The system allows connection to other continuous systems for proofing as well as cooling and freezing etc.

Modularity

Infinity system could be updated and implemented as the increasing needs of production are required. In fact it is suitable to run alongside and connect to existing Infinity systems and can be adapted to new production requirements that arise in the bakery. From an investment point of view, the system can grow over time and be strengthened with the elements necessary to make it more automated, faster, more powerful. For example, it is possible to add an automatic loading station, automatic unloading in baskets or on air conveyor to be transported to packaging and shipping areas.

The economy

In addition to the energy savings of the oven the infinity system allows operators to be taken away from the heavy work of loading and unloading ovens manually. If properly implemented it is possible to avoid the use and costs of boxes, tables, trolleys. The same operator can be dedicated to do his job as a baker allowing the business to boost the productivity per employee. Compare the cost of an employee working in front of an oven against the economic use of the Infinity system and the savings are immediately clear.

All the above elements demonstrate the advantage of the continuous deck loading system of the ovens. Everything is possible with Infinity system.



CONTINUOUS OVEN LOADING SYSTEM

*UNLOADING SHUTTLE
WITH COLLECTING TABLE*

*TROLLEY WITH FRAMES (TRANSPATT)
COMING DIRECTLY FROM THE PROOVER*

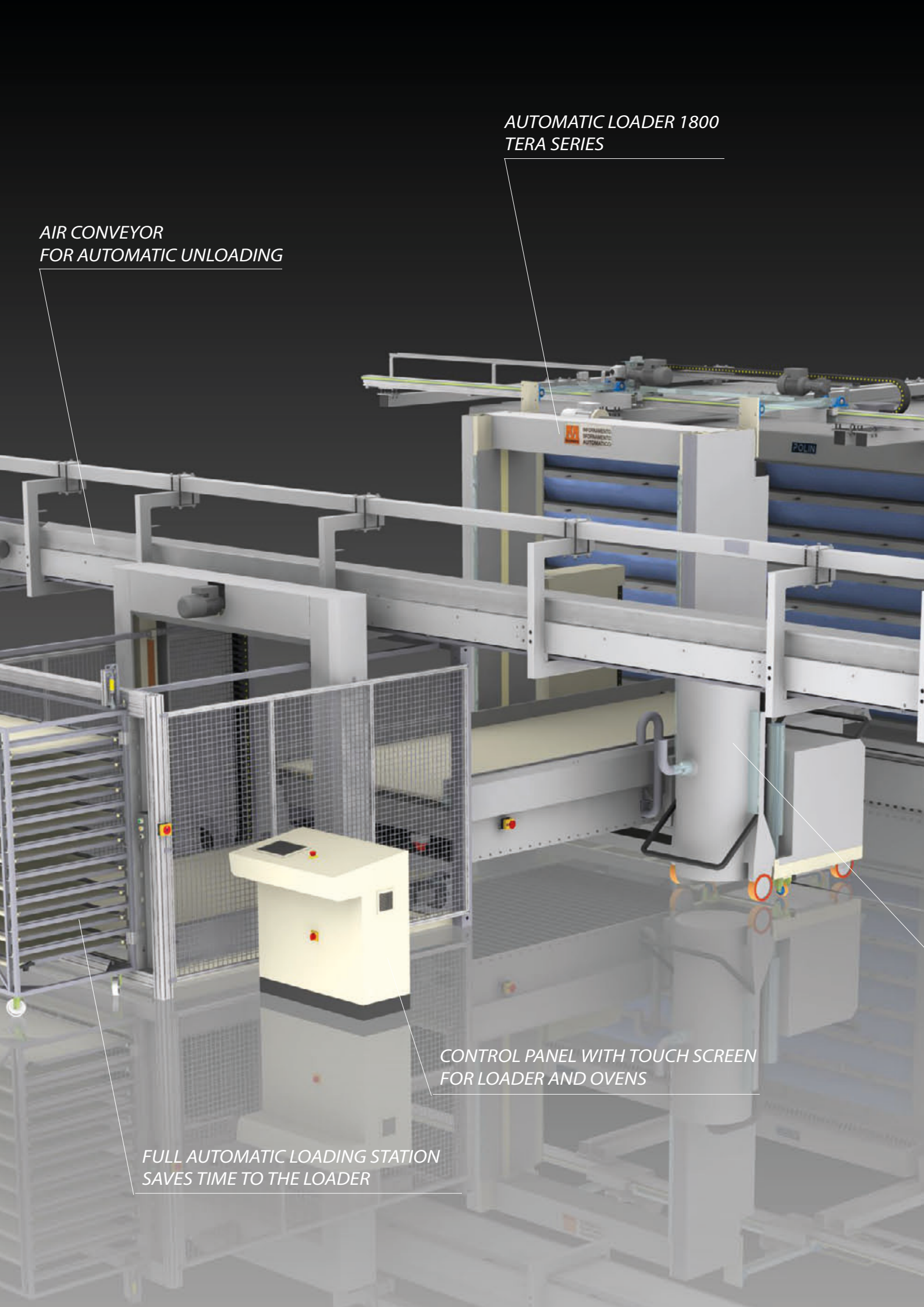


*AUTOMATIC LOADER 1800
TERA SERIES*

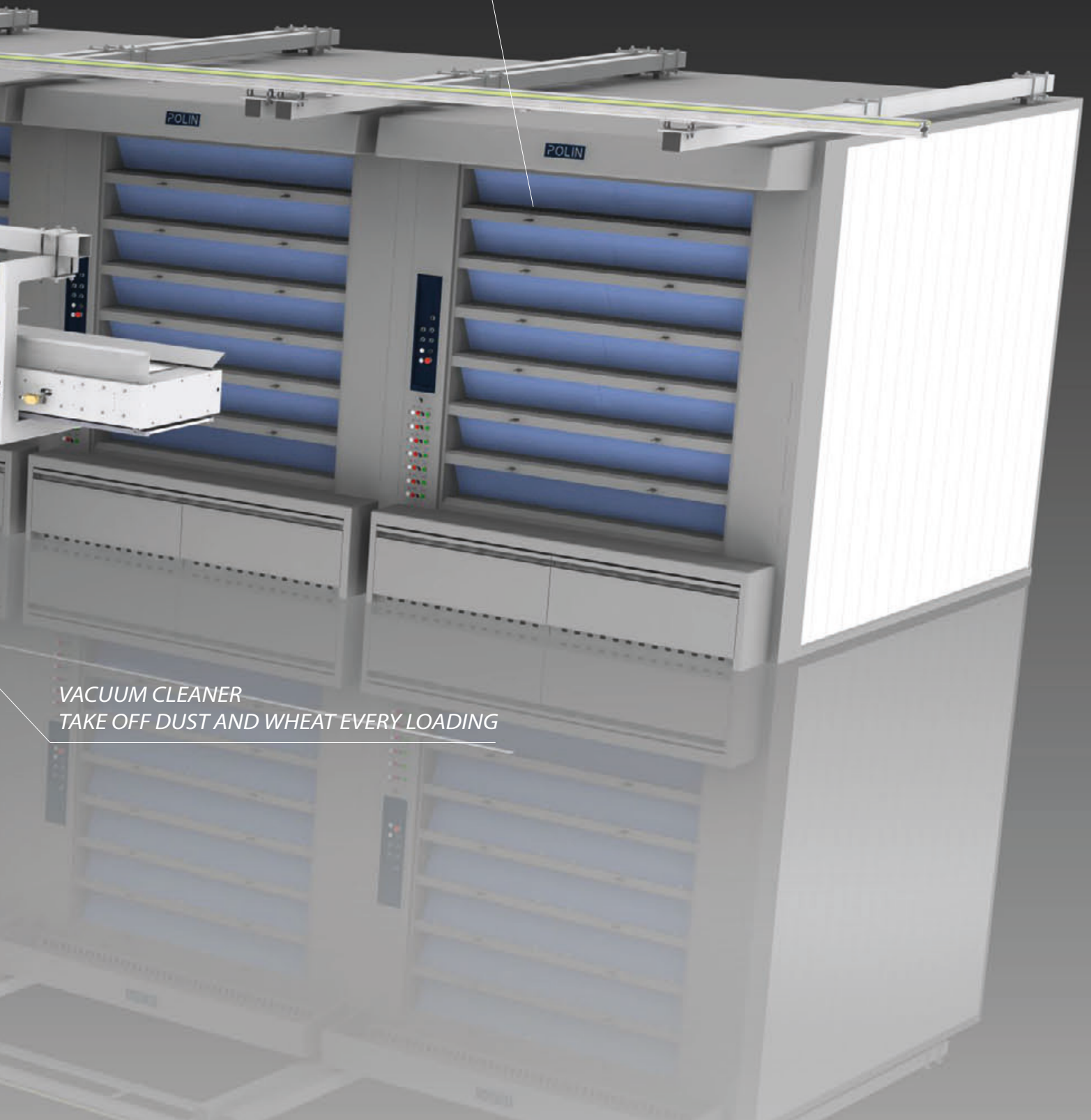
*AIR CONVEYOR
FOR AUTOMATIC UNLOADING*

*CONTROL PANEL WITH TOUCH SCREEN
FOR LOADER AND OVENS*

*FULL AUTOMATIC LOADING STATION
SAVES TIME TO THE LOADER*



7 DECK STEAM OVENS



VACUUM CLEANER
TAKE OFF DUST AND WHEAT EVERY LOADING



INFINITY TERA SYSTEM WITH TWO LOADERS FOR PRE-BAKED BREAD

INFINITY TERA

The Infinity TERA is the ultimate in the Infinity range.

The quality of the elements used and the flexibility of the software applied make Infinity series the top of the range of combining the performance of the loader and the value of the extra elements that help to achieve maximum automation.

The loader may be combined with a virtually unlimited optional elements that allows to automate the work in the bakery according to specific needs of each baker.

How many and which elements to add to the standard configuration of the series Tera depends on the required level of automation of the baker, the number of people who wants to engage on the line or the number of employees that can revert to different jobs.

The TERA series is constructed for continuous heavy-duty work and the execution speed of Tera series is extremely powerful.

The flexibility gives added value that will satisfy all and any organization of the bakery.

The TERA series features very low maintenance costs thanks to the high standard of components used in manufacture.

The loader has an air linear guide built for the continued running of the machine and oversized motors for increased speed.

For higher decks a vacuum cleaner could be added.

If more ovens are installed, or for short baking, the loader could be upgraded by a full automatic loading station where loading is done taking product directly by the frames.

The unloading could be onto a cooling conveyor to be transported directly to the dispatch area.

The TERA series is the "state of the art" that meets any requirement of the modern baker.

	LOADERS-OVENS		LOADING	LATERAL MOVING	UNLOADING	ANCHORED	WORKING AREA SAFETY
	pcs	m ²					
TERA 1800 - A	1 2÷5	48÷134	automatic on side of the ovens	automatic on upper rail	automatic on side of the ovens	included on top of ovens	protected - grids
TERA 1800 - B	1 2÷5	48÷134	automatic on back	automatic on upper rail	automatic on back	included on top of ovens	protected - grids
TERA 1800 - C	2 2÷5	144÷201	automatic on side of the ovens	automatic on upper rail	automatic on side of the ovens	included on top of ovens	protected - grids
TERA 1800 - D	2 2÷5	144÷201	automatic on back	automatic on upper rail	automatic on back	included on top of ovens	protected - grids

INFINITY GIGA

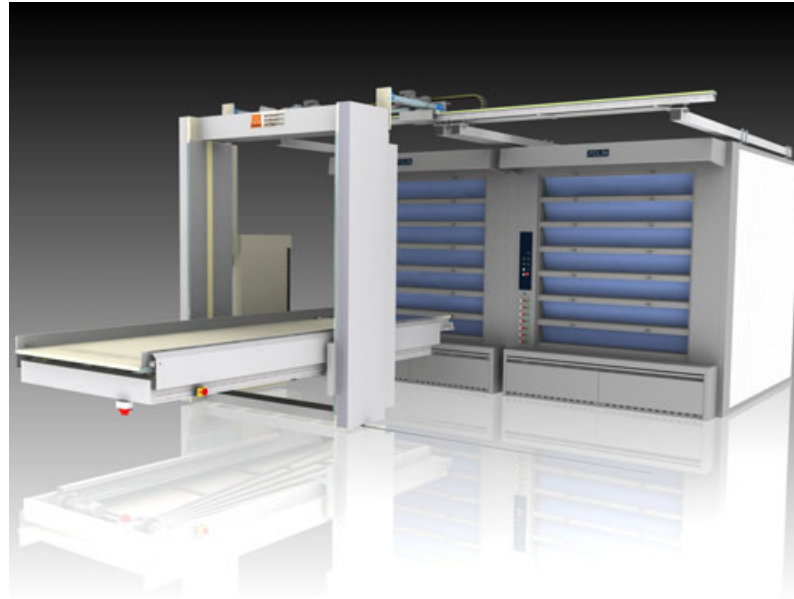
The Infinity GIGA series is expression of strength which excels in the Infinity series.

The perfect balance between the quality of the elements and software configurations leads to the choice of this series of loaders.

Engineered for applications of medium-high productivity the giga series ensures consistent productivity and can also be combined with the optional elements that ensure more comfortable work in bakery and which can make you have significant savings compared to the heavy work of loading and unloading of the ovens by operators.

The Giga series is preferred by those that need flexibility compared to a high number of different products that often do not correspond to high productivity of a single product. It is also suitable for a shorter list of products with rather high baking times and high productivity.

The loader may be upgraded with optional elements that allows to automate the work in bakery according to specific needs of the baker. It's engineered to be coupled with an automatic loading station in relation of a high number of decks (ovens) to serve.



	LOADERS-OVENS		LOADING	LATERAL MOVING	UNLOADING	ANCHORED	WORKING AREA SAFETY
	pcs	m ²					
GIGA 1800 - A	1 2÷4	32÷134	automatic on side of the ovens	automatic on upper rail	automatic on side of the ovens	on top of ovens	protected - grids
GIGA 1800 - B	1 2÷4	32÷134	automatic on back	automatic on upper rail	automatic on back	on top of ovens	protected - grids

INFINITY MEGA

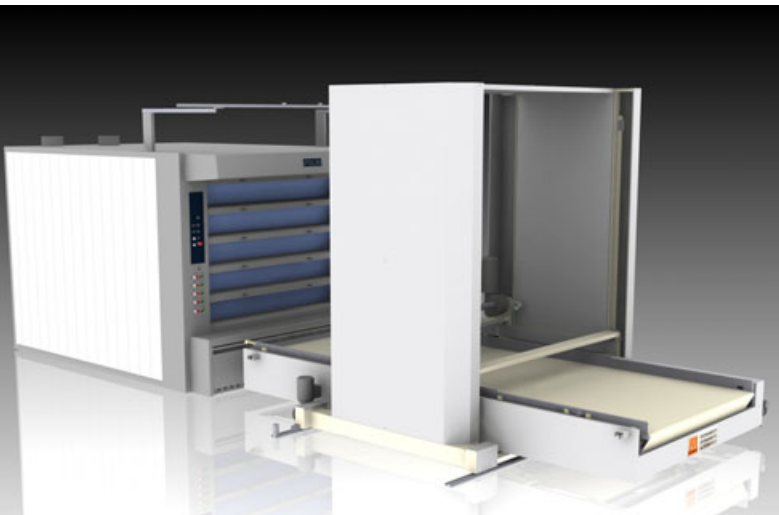
The Infinity MEGA series is designed for those who want to have the heart of their average production of 2-3 ovens in less than three shifts saving space with a loader that reaches the highest decks.

The same configuration can be adapted, when production grows, thanks to the modularity of the Infinity systems.

The MEGA series also allows the user to make intermediate steps in the growth adding elements for a higher degree of automation as an automatic loading station or other optionals.

The MEGA series for the quality of the elements and software configurations is perfectly balanced in speed and productivity referred to the number of ovens.

The MEGA series is available in two versions depending on the individual needs. The loader can move on a lower rail or on an upper rail. The first allows fast loading coupled with simple moving, the second is more suitable for higher number of different products thanks to its higher flexibility.



	LOADERS-OVENS		LOADING	LATERAL MOVING	UNLOADING	ANCHORED	WORKING AREA SAFETY
	pcs	m ²					
MEGA 1800 - A	1 2	32÷67	manual on side of the ovens	semiautomatic on down rail	manual from the loader	on floor/on top of ovens	on loader
MEGA 1800 - B	1 2	32÷67	semiautomatic on loader	automatic on down rail	manual from the loader	on floor of ovens	protected - grids
MEGA 1800 - C	1 2	32÷67	semiautomatic on loader	automatic on upper rail	manual from the loader	on top of ovens	protected - grids

INFINITY KILO

The Infinity KILO is designed for those who want to automate their production having a medium-low production of a few number of products and they do not need the flexibility offered by other series in the Infinity range.

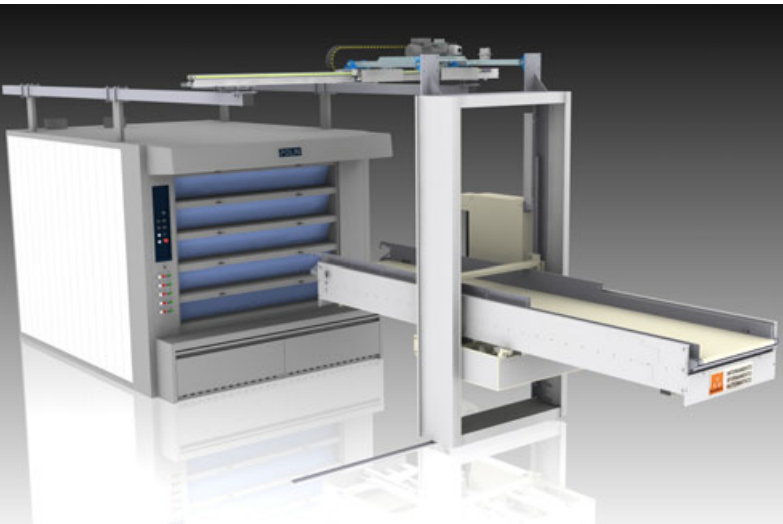
The multiloader allows loading to all floors of the oven in just one or two stages depending of the width of the oven.

A nice plus for an economic system that allows to work faster and easier.

Infinity KILO could be coupled with a loading table or semi-automatic loading station for a higher rate of automation and with an unloading station.



	LOADERS-OVENS		LOADING	LATERAL MOVING	UNLOADING	ANCHORED	WORKING AREA SAFETY
	pcs	m ²					
KILO 900 - A	1 1	16÷32	manual on side of the ovens	manual on down rail	manual on side of the ovens	on floor	on loader
KILO 900 - B	1 2	16÷57	manual on side of the ovens	semiautomatic on down rail	manual on side of the ovens	on floor	on loader



The KILO series is available in two versions depending on the needs of individuals, accompanied by multiloader for a fast loading and unloading, but less flexibility, or a lower rail loader for greater flexibility, but with a longer time of loading and unloading.

The choice depends on the widths of combined ovens.

If we have ovens width of multiples of 900 mm a multiloader can be used.

While ovens with widths in multiples of 1200 mm will use a lower rail system.

Nevertheless the solutions proposed by KILO series are distinguished again for the strength and reliability of Infinity systems.

This series allows combinations of options to automate the process of loading and unloading and therefore savings in the number of operators.

	LOADERS-OVENS		LOADING	LATERAL MOVING	UNLOADING	ANCHORED	WORKING AREA SAFETY
	pcs	m ²					
KILO1800 - A	1 2	19,2÷25,2	manual on side of the ovens	semiautomatic on upper rail	manual from the loader	on top of ovens	protected - grids
KILO 1800 - B	1 2	19,2÷25,2	manual on back	automatic on upper rail	manual from the loader	on top of ovens	protected - grids

Technical specifications

	INFINITY TERA	INFINITY GIGA	INFINITY MEGA	INFINITY KILO
Max number ovens	4-5	3-4	2-3	1-2
Max decks per oven	7	7	4-6	4-5
Max high deck	2900 mm optional more	2900 mm optional more	2000 mm	2000 mm
Min high first deck	500 mm	650 mm	650 mm	300 - 650 mm
Wide of the deck	1200-1500-1800	1200-1500-1800	1200-1500-1800	600-900-1200
High loader in deck	45 mm	45 mm	45 mm	45 mm
Working hours granted	24	16	8-10	8-10
Electrical lateral move	On rails - upper second motor optional	On rails - upper second motor optional	On rails -down or upper	On rails -down or upper
Speed of lateral move	0,45m/s; 0,70m/s with second motor optional	0,35m/s; >0,45m/s with second motor optional	0,14 m/s down rail; 0,35m/s upper rail	0,14 m/s down rail; 0,35m/s upper rail
Speed of vertical move	0,40m/s	0,20m/s ; 0,35m/s with second motor optional	0,20m/s	0,20m/s ; 0,35m/s with second motor optional
Mobile nose to bring up little breads	Yes	Optional	Optional	optional
Semiautomatic cycle	Yes	Yes	Yes	Yes
Fully automatic cycles of loading & unloading	Optional, only with loading & unloading station	Optional, only with loading & unloading station	Optional, only with loading & unloading station	Optional, only with loading & unloading station
Programs adjustments	Optional, only with loading station	Optional, only with loading station	Optional, only with loading station	Optional, only with loading station
Optional accessories	Various loading tables and automatic stations. Unloading tables and conveyors. Sprayers. Accessories (transpatt, trolleys, conveyors etc.)	Various loading tables and automatic stations. Unloading tables and conveyors. Sprayers. Accessories (transpatt, trolleys, conveyors etc.)	Various loading tables and automatic stations. Unloading tables and conveyors. Sprayers. Accessories (transpatt, trolleys, conveyors etc.)	Various loading tables and automatic stations. Unloading tables and conveyors. Sprayers. Accessories (transpatt, trolleys, conveyors etc.)
Statistics programs	Optional	Optional	Optional	Optional
Touch-screen with all functions for loader and ovens leading	Yes	Optional, only with loading station	Optional, only with loading station	Optional, only with loading station
Programms	Flexible (as client needs)	Flexible (as client needs)	Standard functions - flexible (on request)	Standard functions - flexible (on request)
Automatica greesers	Optional	Optional	No	No
Security devices on loader	Propers as per CE	Propers as per CE	Propers as per CE	Propers as per CE
Security devices for installation serving more ovens and stations (automatic system)	Grids or optionally laser or wire barriers	Grids or optionally laser or wire barriers	Grids or optionally laser or wire barriers	Grids or optionally laser or wire barriers
Help on-line	Yes	Yes	Optional	Optional
Carters	Stainless steel	Stainless steel	Coloured iron, optional Stainless steel	Coloured iron, optional Stainless steel



Full automatic loading station



Infinity Giga system with simple unloading system



MARDEN srl

Viale del Lavoro, 4 - 37050 Belfiore (VERONA) ITALY

Tel. +39 045 6149036 - Fax +39 045 6149031

e-mail: info@marden-srl.com

www.marden-srl.com