

FORVET SPECIAL SOLUTIONS

**AUTOMATIC GLASS HANDLING
AND STORAGE SYSTEMS**

SEE IN US,
THE FUTURE

THE BLUE  SOLUTION

FORVET

FORBOT



SORTIFLEX



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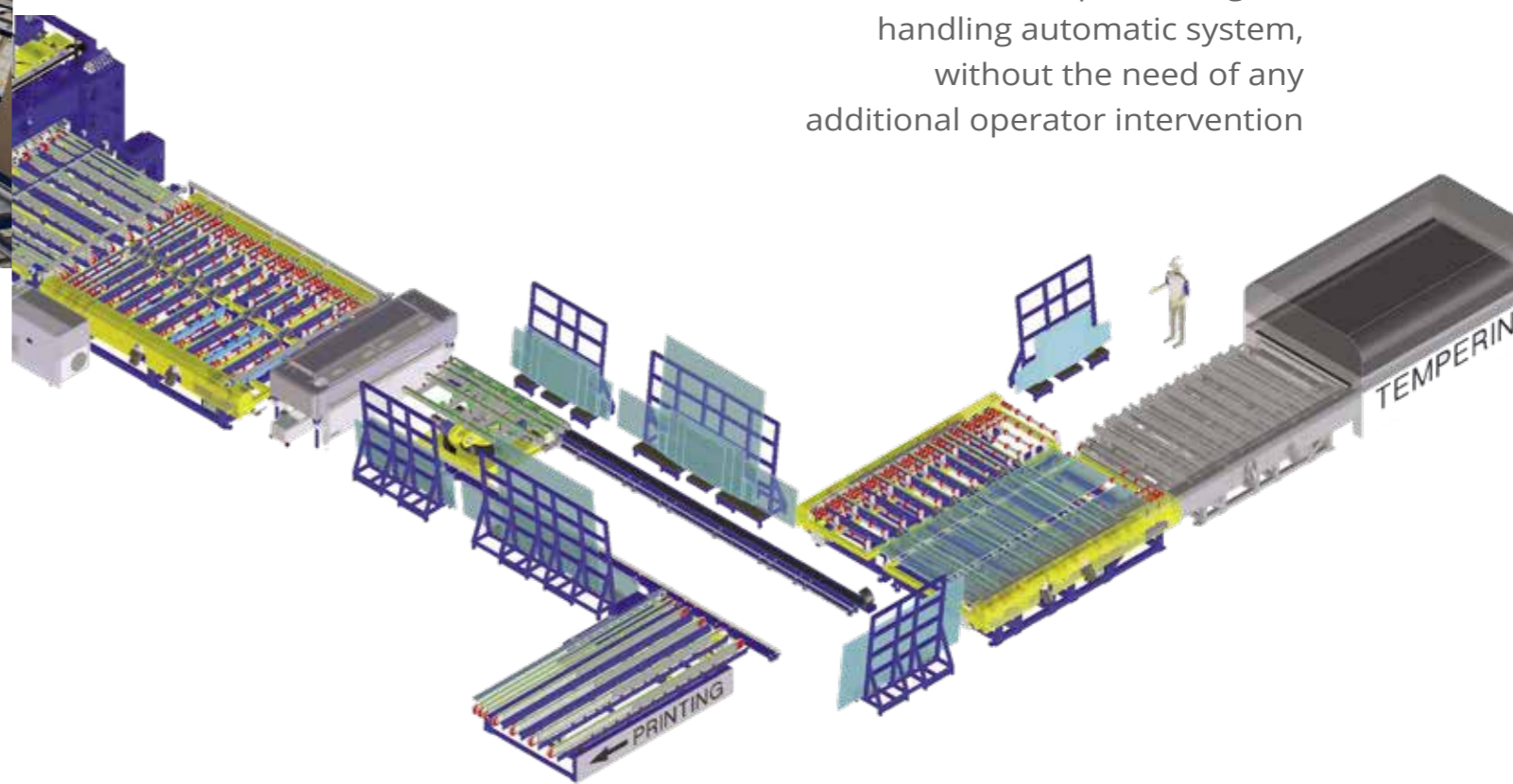




FORBOT

DYNAMIC SORTING AND LOADING/UNLOADING SYSTEM

FORBOT is a patented glass handling automatic system, without the need of any additional operator intervention



- ✓ It creates an automatic connection between the working zone (grinding, drilling and milling), and the following processes (tempering, printing, etc)
- ✓ It temporarily disjoins the upstream and downstream zones, managing a buffer of configurable dimension
- ✓ It optimizes the glass sheet load on the tempering oven
- ✓ It selects the glass located on the rack and insert it on the following work-bench
- ✓ Completely automatic system
- ✓ Optimized cycle times
- ✓ Breaking risk reduction VS manual handling

Technical data

Horizontal glass transport minimum height	885 mm
Glass dimension with standard structure	
Load/unload both sides	1500x3050x19mm max.
Maximum weight	220 Kg
Translation speed axis	60 m/min
Cycle time (glass to glass rack included)	< 30 s



SORTIFLEX

AUTOMATIC GLASS HANDLING AND STORAGE SYSTEMS



- ✓ The **Sortiflex** is the Forvet answer to glass flow sequencing control and optimization requirements.
- ✓ It has been designed to meet the flexibility requirements of various processes thus it can work within Forvet machineries or integrated with all the other major equipment in flat glass field
- ✓ It works as temporal buffer to optimize glass flows from different origin toward single output, or as single origin toward multiple outputs.
- ✓ The patented double decks storage area improve, by doubling, the number of available slots in the same foot print thus increasing the storage area without requesting more factory floor space.
- ✓ The extremely fast and reliable cycle time, allows various processes to be directly linked in full automatic mode.
- ✓ It can process Low E glass
- ✓ As option, the storage system can be equipped with metal sheet among all the slots to avoid glass fragments diffusion in case of glass breakage after tempering

Sortiflex can work only with Forvet Navetta 45 system

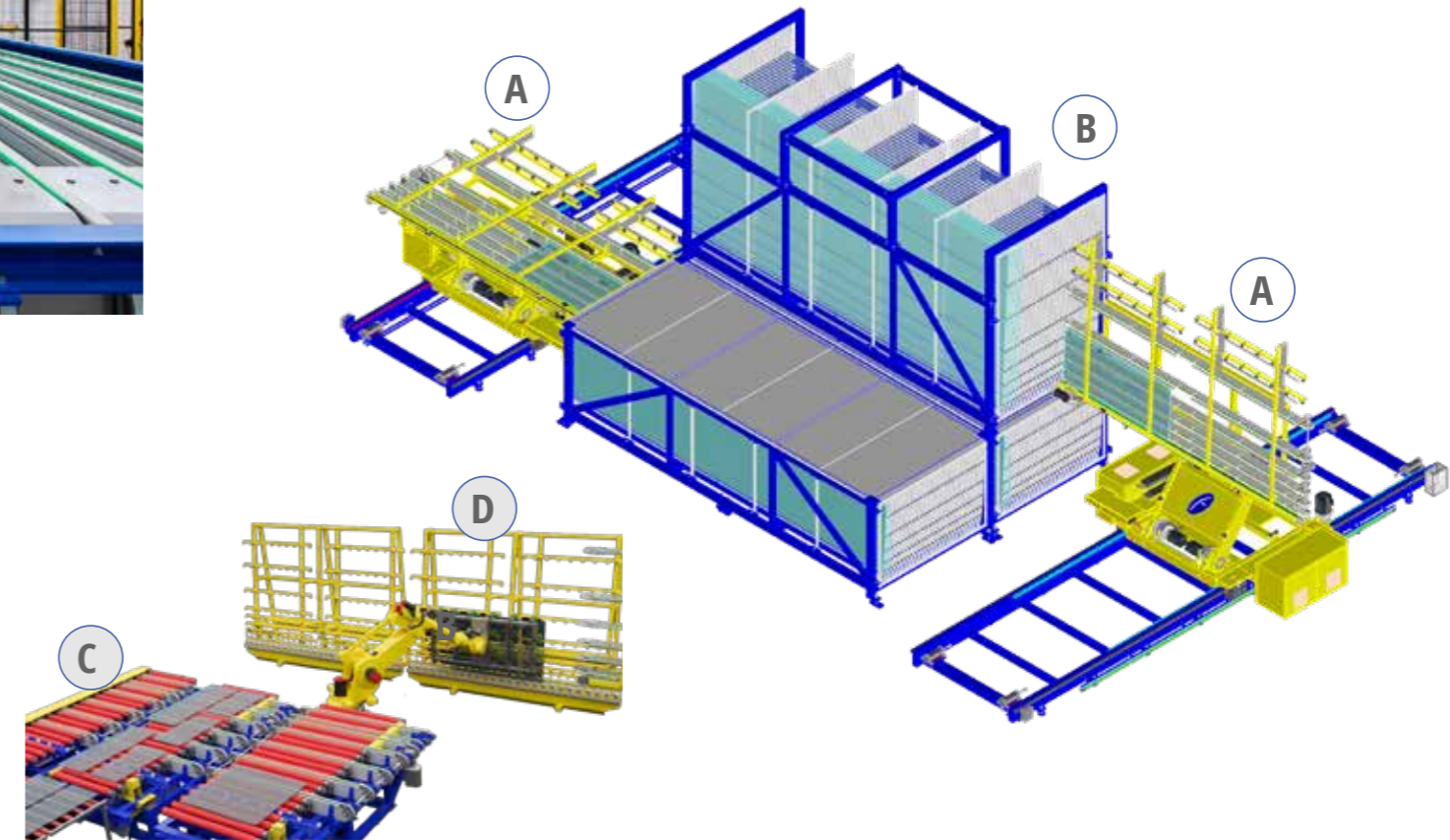


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SORTIFLEX



Technical data Storage for h=1100 mm / 2500 mm glass

	H= 1100mm	H= 2500mm
Storage overall dimensions	6000 x 2310 x 1730 mm	6000 x 2310 x 2970 mm
Maximum slot length	5900 mm	
Maximum glass dimension (X)	as per NAVETTA size	
Minimum glass dimension	400 x 200 mm	
Number of slots	30	
Single storage max capacity	5000 kg	10000 kg
Maximum glass thickness	15 mm	

Navetta 45

Maximum glass dimension	3500/4500 x 2500 mm
Minimum glass dimension	400 x 200 mm
Maximum NAVETTA speed on running ways (Y axis)	200 m/sec
Horizontal/Vertical transport capabilities	
Loading/Unloading capabilities	

The SORTIFLEX could be composed by:

- A. NAVETTA 45: loading and unloading shuttles
- B. STORAGE UNITS: single or double decks storage area
- C. Furnace pre bed optimization
- D. Turning robots to cope with non straight direction (NO LOW-E)
- E. SORTING optimization software



FORBOT

Main differences between FORBOT and SORTIFLEX

	FORBOT	SORTIFLEX
Max glass dimension	3000x1500 mm	2500x4500 mm
Glass transport (in a row)	Single glass	Multiple glass
	Horizontal	Horizontal and vertical
Transportation belt speed	30 m/min	60 m /min
Translation speed axis	Up to 60 m/min	Up to 180 m/min
Storage system	"L"- racks	Multi slots - floors - storages
Optimization	During racks unloading	During storage loading and unloading
Selectivity	Low - medium	High
Glass mix (tk, dim ...)	Low - medium	High
Furnace pre bed optimization	Transfer tables (bidirectional)	Special table with independent belts drivers

SORTIFLEX

Logic will get you from A to B.

IMAGINATION

will take you everywhere.





FORVET S.p.A. - Str. Piosasco, 46 -10040 VOLVERA (TO) ITALY
Phones: +39.011.9855200 - Fax: +39.011.9853032 - sales@forvet.it