



Our added value is our experience in the cardboard sector, we have been offering innovative solutions to our customers for more than 20 years. Vertical storage is the next step in the evolution of the sector, and the projects we have carried out prove it.

We study each case according to the manufacturing needs, and we design customised solutions. We calculate the return on investment through virtual simulation with real values of the machinery installed in the factory.

If you think it is time to take a step forward and improve your quality and productivity, do not hesitate to contact us.



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**VERTICAL STORAGE
FOR
INTERMEDIATE
PRODUCT
WORK IN PROGRESS**

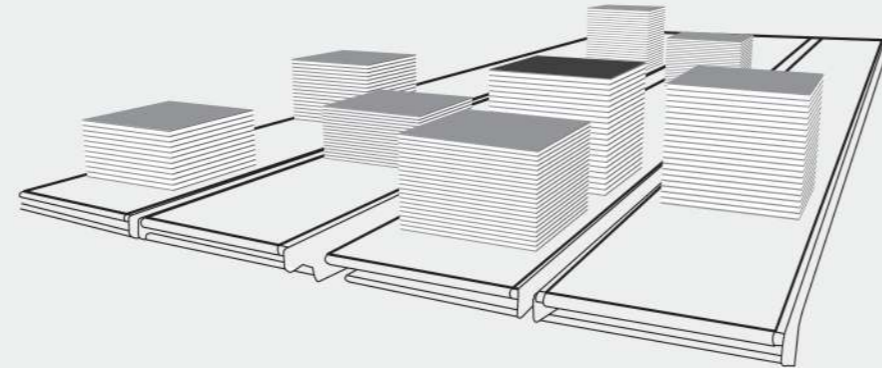
LOGISTICS AND CARTON STORAGE NEEDS

Warak consulting is an engineering company dedicated to the improvement of manufacturing processes in the cardboard sector for more than 20 years.

In this catalogue, we present our **vertical storage solution** that has been offering great improvements in logistics for intermediate products in cardboard factories around the world for 10 years.

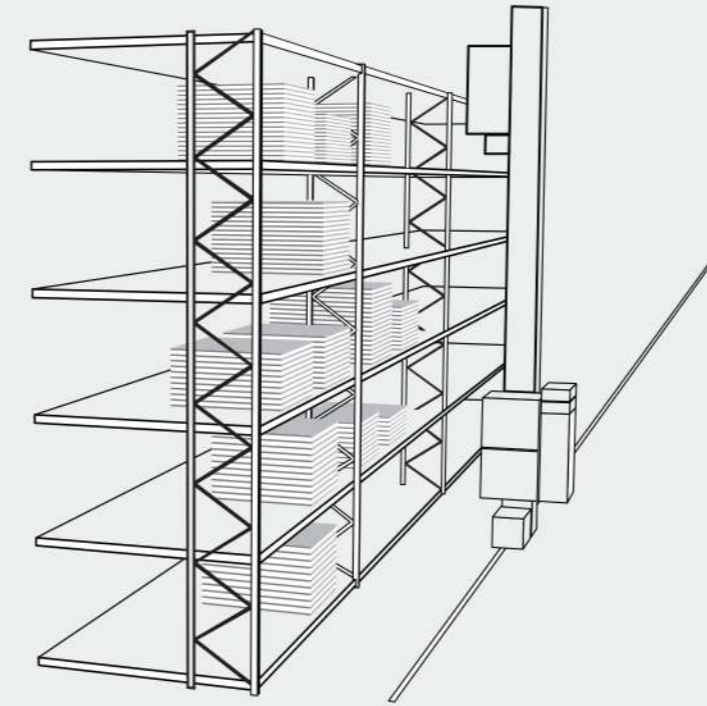
FUNDAMENTAL ASPECTS OF THE CORRUGATED BOARD STORAGE

HORIZONTAL STORAGE



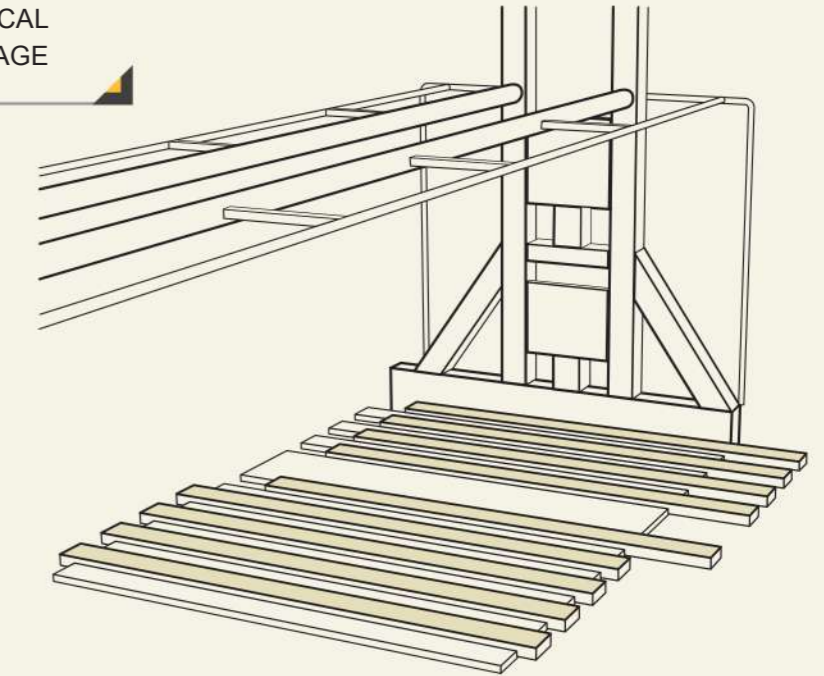
- Traditional storage follows the FIFO system.
- 40% loss of operating surface.
- Low control over stocks.

VERTICAL STORAGE



- Independent movement of each block, eliminating the FIFO system.
- Increase the current storage capacity by 3 to 4 times with the same surface area.
- Integral control of stock in real time.

WARAK VERTICAL STORAGE



- Stacker crane capable of transporting 5.5 metre sheets.
- Large cells with variable stack distribution.
- Intelligent drive forks allowing the transport of two orders at the same time.



LOGISTICS



COSTS



QUALITY AND SAFETY

- Consumption due to redundant movements.
- Maintenance of components and installed power.
- High operational and management costs.

- Manual restacking and forced manual intervention, high waste.
- Difficulty in complying with BRC food health regulations.
- Losses due to lack of traceability.

- 80% reduction in control components.
- 80% reduction in installed power.
- Less auxiliary costs (maintenance, cleaning...).

- Better preservation and drying of cardboard stacks.
- Rack enclosure without operators 100% safety.
- Traceability of each order throughout the process.

- Project planning on 3D digital twin based on real production data.

- IMOVE control software specialised in carton logistics.
- Real-time control of stock and machinery.
- Ability to audit the entire warehouse at any time.