EXAMPLE DOCUMENT — NOT A REAL CLIENT STUDY. This concept study shows what Lenokers logistics consulting delivers. The company, site and figures are made up for illustration. A real study is built from your own data, building and goals, and will look different.

LENOKERS.

Warehouse concept study · LK-C-2026-007
Example site · Portland, OR

Warehouse Concept Study

How an 84,000 sq ft distribution center ships five years of growth on time: three options, priced side by side

SITE	BUILDING	TODAY	NEED IN YEAR 5
Example distributor Portland, OR	300' × 280', 32' clear 12 dock doors	3,650 order lines a day 4 h from order to dock	6,100 lines a day 1,100 lines in the peak hour

THE THREE OPTIONS

OPTION	ORDER TO DOCK	MEETS YEAR-5 NEED	INVESTMENT	NET BENEFIT / YEAR	PAYBACK
A · Re-layout and re-slot, manual picking	3 h	NO · FULL IN YEAR 2	$180k	$90k	2.0 yr
B · Pallet shuttle storage and conveyors, manual picking	1.5 h	TO YEAR 4	$2.2M	$820k	2.7 yr
C · Full automation: shuttle storage, mezzanine pick module, vertical conveyor, sorter	24 min	YES	$3.9M	$1.5M	2.6 yr

Net benefit is measured against the default plan: adding a third shift and leasing overflow space as volume grows. Most of option C's saving is labor: the same volume with 12 people on picking and packing instead of 28.

Recommendation: option C. Orders reach the dock 10× faster (24 minutes instead of 4 hours), year-5 volume fits inside the current building, and it pays back in under three years. It is built in four phases while the warehouse keeps shipping.

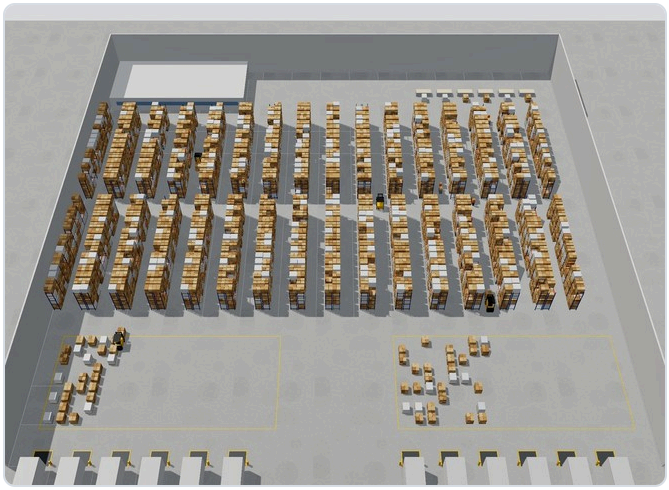
HOW WE COMPARED THEM

CRITERION	A	B	C
Capacity for growth	●	●●●	●●●●●
Speed, order to dock	●	●●●	●●●●●
Investment	●●●●●	●●	●
Disruption while building	●●●●	●●●	●●
Labor needed at year-5 volume	●	●●●	●●●●●
Permit and schedule risk	●●●●●	●●●	●●

More dots is better. Weighted with the management team in a half-day workshop.

The options on the floor plan

The same building, laid out three ways

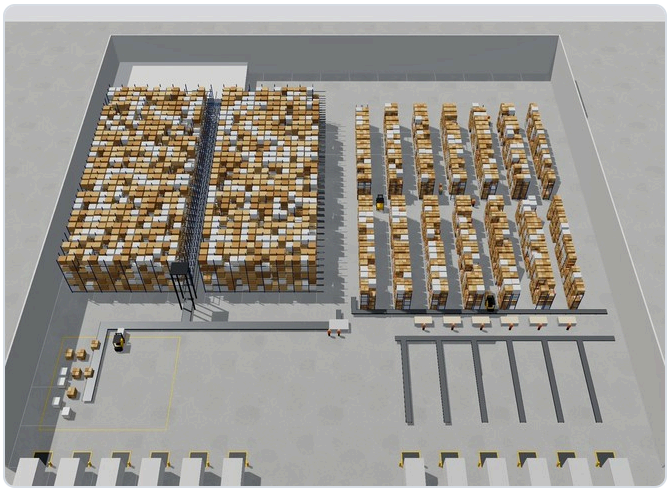


A · Re-layout and re-slot

3 h order to dock

Today's racking, fast movers re-slotted next to packing · reach trucks and pickers with carts · 28 people on picking and packing

Build time: 6 weeks

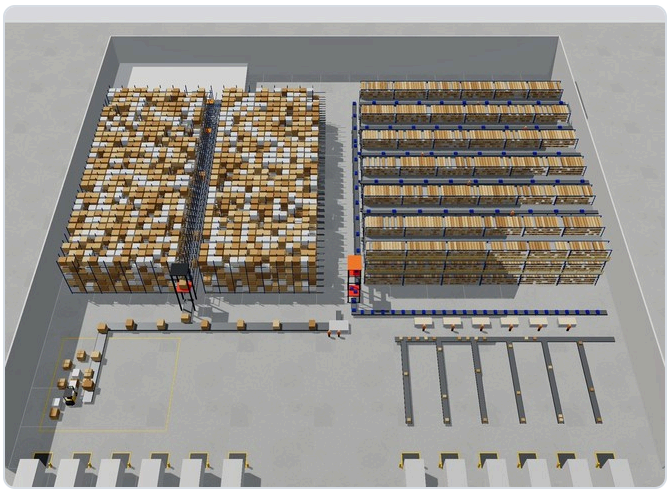


B · Pallet shuttle storage

1.5 h order to dock

Shuttle storage, 5 levels, about 3,800 pallet positions · pallet lift and conveyors to receiving · sorter to every door · picking stays manual · 20 people

Build time: 26 weeks, in 3 phases



C · Full automation

24 min order to dock

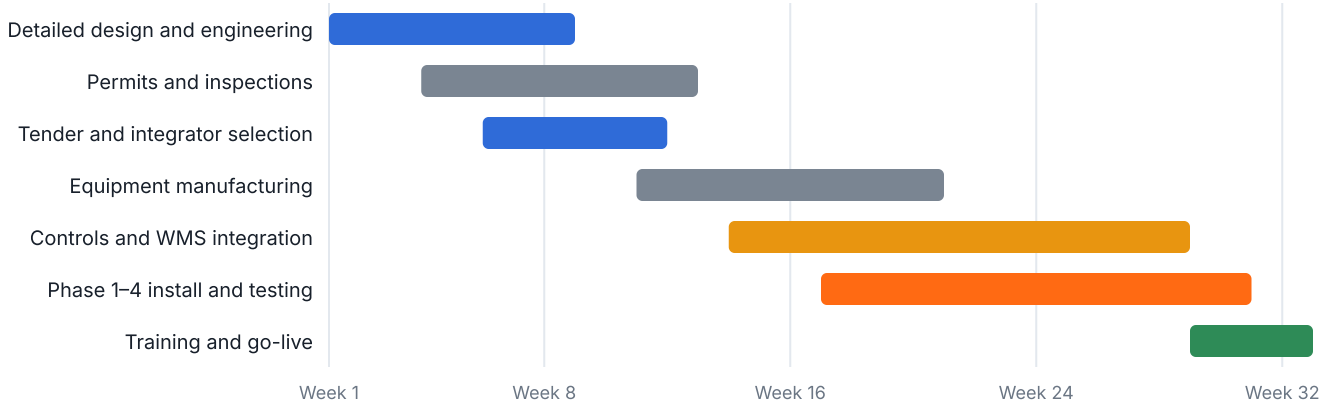
Shuttle storage and lifts · decant station · 3-level mezzanine pick module with a tote conveyor in every aisle · vertical conveyor · pack stations · sorter to every door · 12 people

Build time: 32 weeks, in 4 phases

Same building, docks and volumes in every option. Order to dock: from the order landing in the WMS to the carton on the truck.

Option C: how it gets built

Four phases, so the warehouse keeps shipping throughout



INVESTMENT, OPTION C

ITEM	COST
Pallet shuttle storage with lifts, about 3,800 positions	$1.55M
Mezzanine pick module and carton flow racking, 3 levels	$620k
Conveyors, vertical conveyor and sorter	$980k
WMS upgrade and warehouse controls	$450k
Engineering, permits, project management, contingency	$300k
Total	**$3.9M**

DECISIONS NEEDED FROM YOU

1. **Go / no-go on option C** by the end of the month, to start permits before the next peak.
2. **Software:** upgrade the current WMS or replace it; we score both against the requirements before you decide.
3. **Tender:** approve the shortlist of three automation integrators. Lenokers is independent of all of them.