SUPPLY CHAIN & LOGISTICS

Inventory Turnover and Days on Hand

Inventory turnover counts how often average stock is used up and replaced in a period. Days on hand expresses the same ratio as time: how long today's stock lasts at the current rate of use.

01 THE CORE MODEL

TWO LINKED KPIS · ONE RATIO

A INVENTORY TURNOVER



Turnover = COGS ÷ Average inventory

Turns per period. Higher means stock flows faster.

SAME RATIO, INVERTED

DOH = 365 ÷ T

B DAYS ON HAND (DOH)



Days on hand = 365 ÷ Turnover

= Average inventory ÷ COGS × 365. Lower means leaner stock.

COGS

Cost of goods sold for the same period. Never set revenue against stock valued at cost.

Average inventory

(Opening + closing stock) ÷ 2, valued at cost. More snapshots give a truer average.

Period length

365 days for a year. For a quarter or month, use 90 or 30 days with that period's COGS.

02 THE TRADEOFF

Target: the lowest stock that still meets the agreed service level.

MORE BUFFER — FASTER FLOW

HIGH DAYS ON HAND · LOW TURNOVER

- \+ Absorbs swings in demand and supply
- − Ties up working capital, space and handling
- − Raises obsolescence risk and hides process problems

LOW DAYS ON HAND · HIGH TURNOVER

- \+ Frees cash and floor space, exposes problems sooner
- − Stockout risk when demand or lead times vary
- − More frequent orders, deliveries and handling

03 WORKED EXAMPLE

SPARE-PARTS WAREHOUSE OF A MACHINE BUILDER · ILLUSTRATIVE FIGURES

COGS PER YEAR
EUR 12.0 M

÷

AVERAGE INVENTORY
EUR 2.4 M
(2.6 + 2.2) ÷ 2, at cost

=

TURNOVER
5.0×
per year

365 ÷ 5.0 →

DAYS ON HAND
73 days
stock covers ~2.4 months

04 MANAGEMENT TAKEAWAYS

01

Segment before you set targets

Measure by ABC class or product family. A site average hides slow movers.

02

Pair turns with service level

Track fill rate or OTIF alongside, so speed is not bought with stockouts.

03

Fix the drivers, not the ratio

Cut lot sizes, lead times and variability. Days on hand then fall safely.

05 COMMON MISTAKE

LIMITATION

Mixing valuation bases

Revenue ÷ stock at cost inflates turnover. Keep both at cost and average over the period: one year-end snapshot hides seasonal peaks.