

3 rd. Copenhagen Supply Chain Management Summit

Supply Chain Management powered by “X”

Why DYRUP choose to implement WMS



Group presentation



9. November 2011
Stig Chr. Nielsen

Why Dyrup choose to implement WMS



Ownership



MONBERG & THORSEN A/S

Anders Colding Friis, Chairman of the Board

Jørgen Nicolajsen, CEO



100% owned

Anders Colding Friis, Chairman of the Board

CEO, Jørgen Nicolajsen



46% owned

Helge Isrealen, Chairman of the Board

CEO, Kristian May



Why Dyrup choose to implement WMS

History – how it all began.

- The company "S. Dyrup & Co A/S" was founded in 1928 by the Danish chemical engineer Sigurd Dyrup (1891-1949) and his two former class mates Axel Monberg and Ejner Thorsen. Prior to this Sigurd Dyrup had spent seven years in America working in the paint and lacquer Industry.
- Dyrup expanded through the years, and since the 1940's the headquarters in Denmark has been located on a 120.000 m2 site in Gladsaxe outside of Copenhagen, with both production and administration.
- 1947: Tintas Dyrup in Portugal established
- 1991: Dyrup France established (by acquisition of Xylochimie; then Veraline in 1993 and DIP in 1996)
- 1991: GORI brand acquired (brand existed since 1902)
- 1991: Dyrup Spain established (Pinturas Ricolor + Akro acquired in 1999)
- 1992: Dyrup Germany established
- 1994: Dyrup Poland established – paint production began in 1996
- 2009: GORI industrial activities sold to Teknos
- 2009: Acquisition of Hygæa in Denmark
- 2010: Acquisition of Malfarb in Poland
- 2012: To be acquired by PPG Inc. Active in 60 countries, with annual sales of 13,4 billion \$.

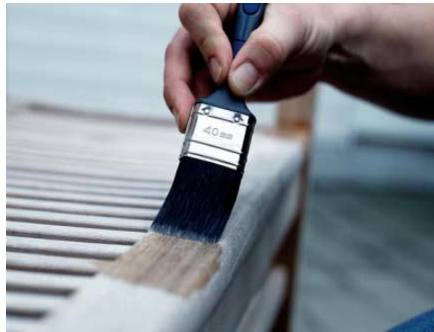


Why Dyrup choose to implement WMS

An overview of who we are.

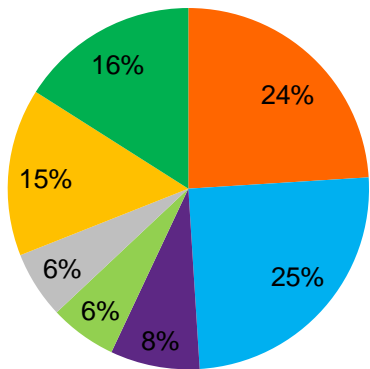
- Broad range of quality paint, wood stain products and varnishes
- Various strong brands: GORI, Dyrup, Bondex, Xylophène, DIP etc.
- Strong presence on the do-it-yourself (DIY) and the professional market
- 6 manufacturing plants (5 by end of 2011)
- Annual turnover 1.500 Mio. DKK.

GORI



Subsidiaries and split of revenue 2010

- ★ Manufacturing
- ▲ Warehousing



Why Dyrup choose to implement WMS

Dyrup products

Wood care

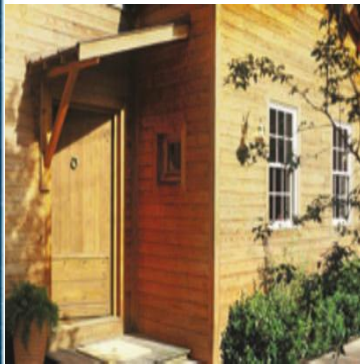
Wood stains
Wood paints
Exterior oils
Wood preservatives
Cleaners

Paint

Ceiling & wall Paints
Facade paint
Primers
Enamels
Anti corrosion paints

Specialities

Floor varnishes
Varnishes
Indoor wood care
Cleaners
Waxes



WMS in Dyrup

- Before 2011 Dyrup A/S was picking and packaging all goods based on a printed pick form.
- There were 6 automated Cranes, but no management overview over warehouse processes or necessary capacity (pickers).
- We had no overview over employee efficiency in the picking area.
- We had many wrong shipments.
- All warehouse locations and documentation was run directly on our ERP system (IFS).

WMS i Dyrup A/S

- In August 2010 it was decided to implement a new WMS system in Dyrup A/S, but the implementation date should be before 1/3-2011, with a project split i 3 phases.
- After a tender and evaluation phase it was decided to choose 1 of 3 suppliers – a local supplier Apport Systems A/S.

Three decisive points for the selection:

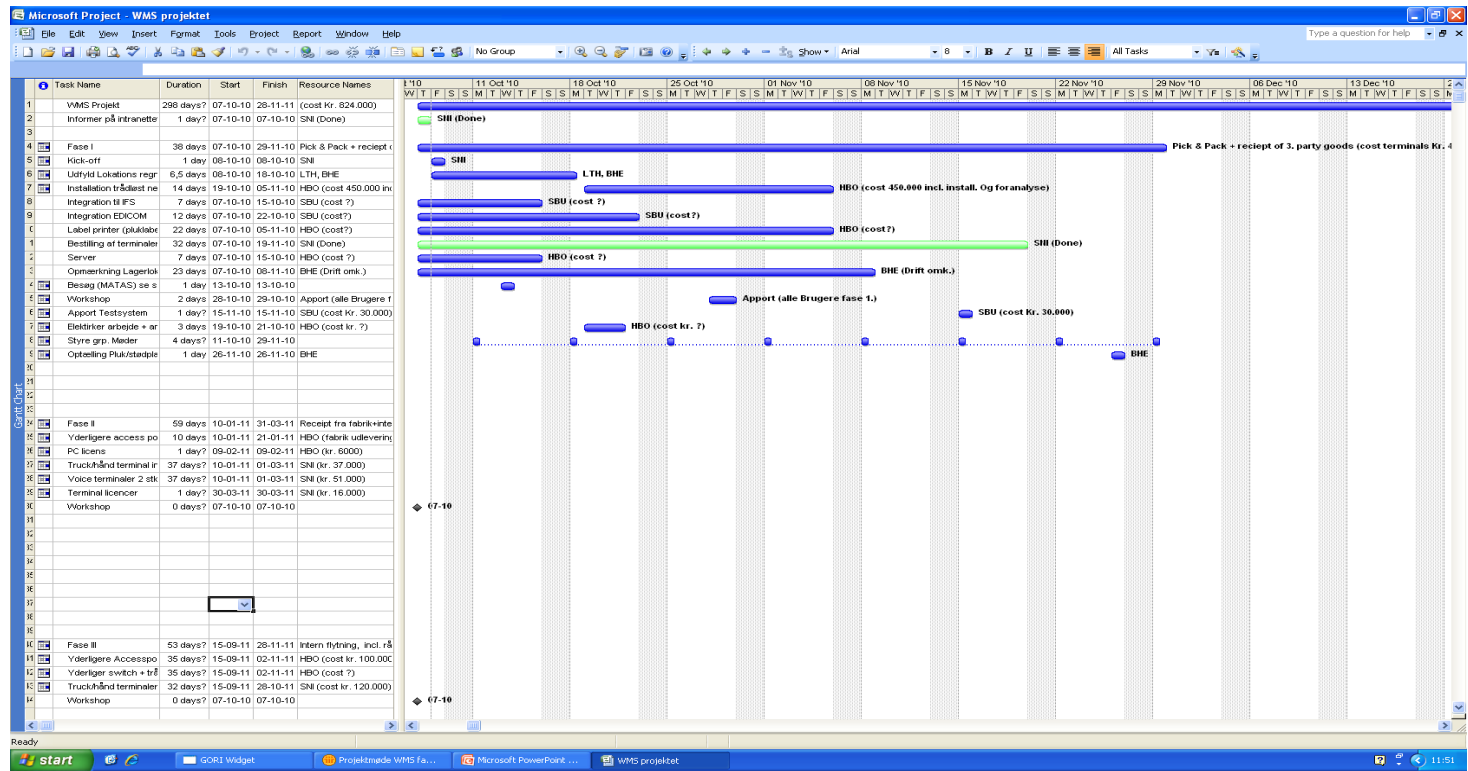
- Flexible in processes and offered support in order to meet target deadline.
- Knowledge about Dyrup A/S as they implemented a new PLC steering in our cranes a year earlier.
- Strong commitment to follow Dyrup and implement in other countries.

The logo for GORI, consisting of the word "GORI" in a bold, blue, sans-serif font.

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Implementation

- Contract was signed primo October 2010.
- Project plan and specification was ready Ultimo December.



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GORI

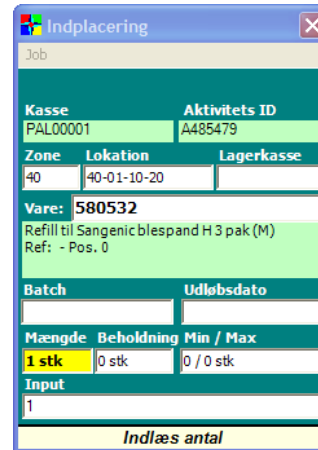
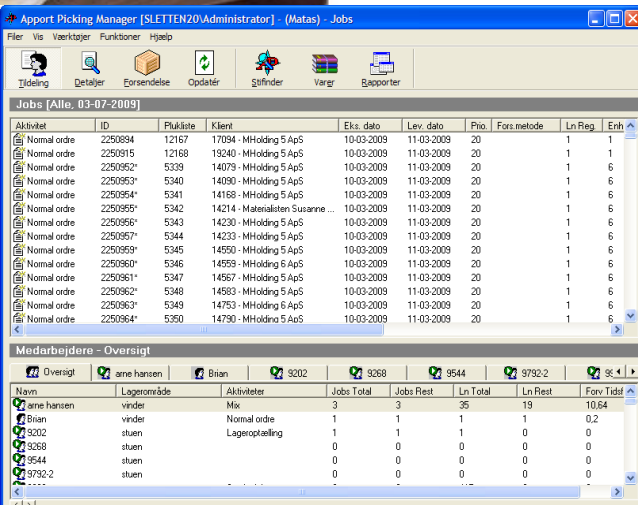
After project plan was ready

- Interfaces was prepared
- Wireless network was installed and tested
- Equipment was ordered
- New server was installed
- Warehouse design, picking routes and picking order was decided
- Warehouse was marked with barcode tags
- Training was planned and executed



Go live last weekend of February.

- Fastest implementation Apport had made
- Very few starting issues (Apport developer on site)
- Everything picked first –and second day
- Employees became familiar with the system very fast.



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Problems in other areas brought into the light

- Master data house cleaning was not up to expected standard: No. units/pack, no. units /layer on pallet, no. units/pallet, weight, size of unit (height, diameter)
- Automatic pallet conveyer steered by sequence makes receipts from own production difficult.
- The way we credited clients on mispicks

Cost/benefit

- Cost for Dyrup was Dkk. 2 mio.
- Benefits: Hard
 - Picking errors reduced by 75% equal to 200 k Dkk/yr.
 - More picked lines per picker 2,5 FTE equal to 875 k Dkk/yr.

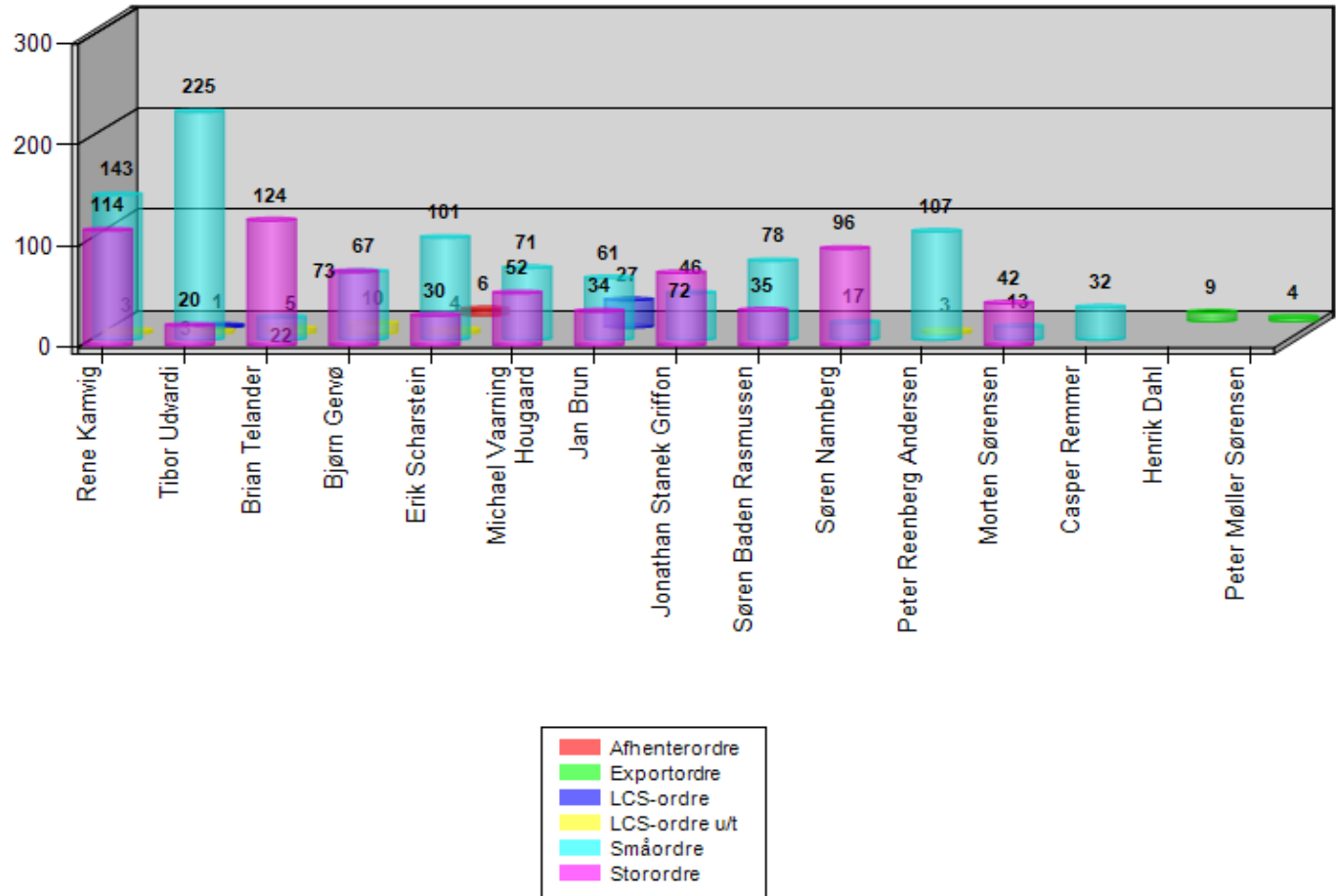
Soft

- Faster to train new employees
- Much more ergonomic for employees (pick by voice)
- Much better overview over processes
- Not yet realized benefits:
 - Cycle counting (expected equal to 100 k Dkk/yr.)
 - Locate AA items close to pack area (expected equal to 350 k Dkk/yr)

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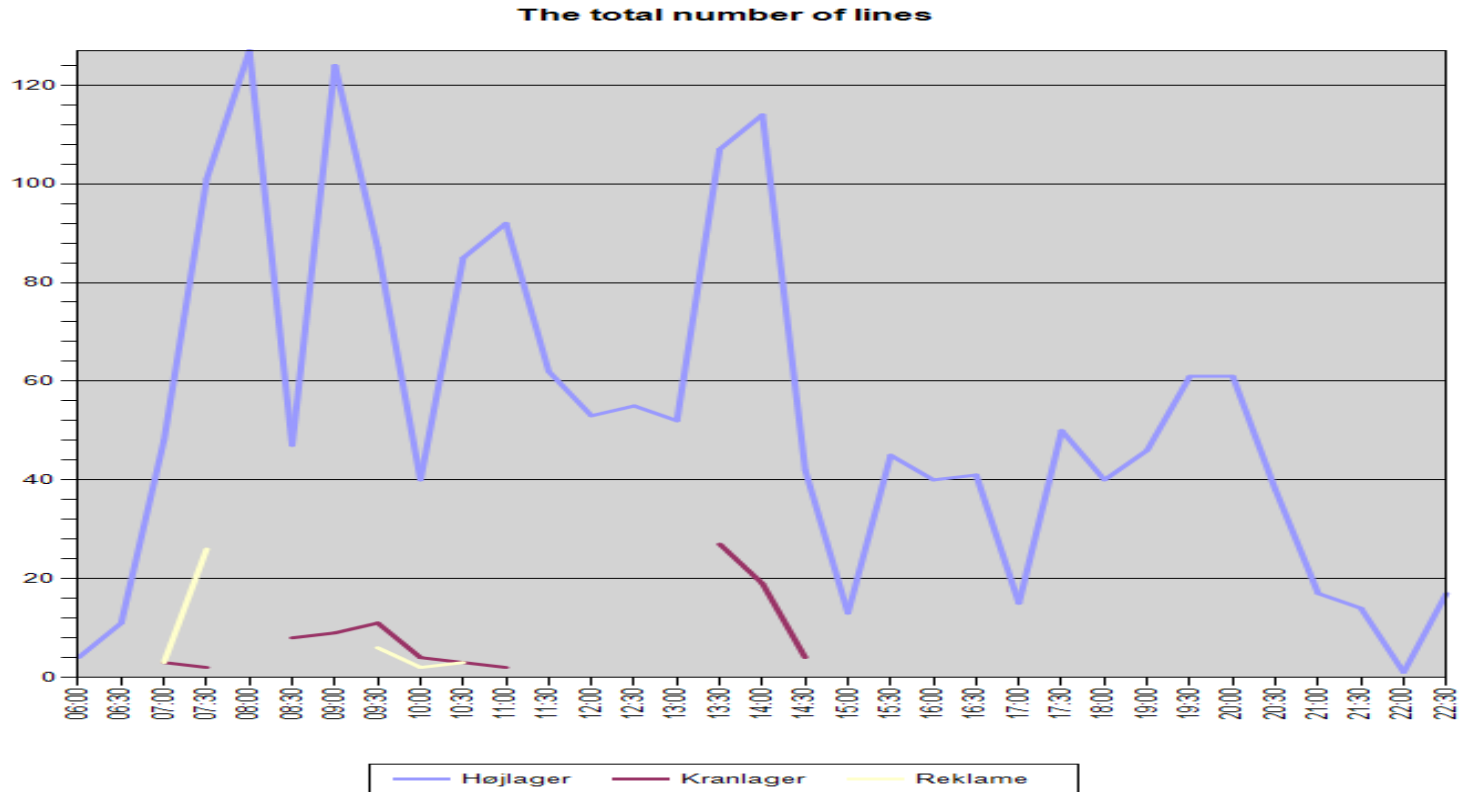
Picked lines/employee



Why Dyrup choose to implement WMS



Picked lines over the day



Delivery performance and employee efficiency

H10. Lagerets servicegrad

Ordretyp	Lagerområde	Leveringskundernummer	Bestilt mængde	Bekræftet mængde	Modtaget mængde	Totalt antal linier bestilt	Modtaget antal linier	Linie servicegrad
Afhenterordre			1.000	1.000	100.00	1	1	100.00
Exportordre			20945.000	18505.000	88.35	478	460	96.23
LCS-ordre			124.000	124.000	100.00	23	23	100.00
LCS-ordre u/t			4734.000	4350.000	91.89	343	326	95.04
Personaleordre			13.000	13.000	100.00	5	5	100.00
Småordre			7239.000	6957.000	96.10	1790	1722	96.20

	Område	Dato	Linier	Tid
dksni	2,5 min/line		117	4:56
	Højlager		117	4:56
	2,7 min/line	01-03-2011	27	01:14
	2,5 min/line	02-03-2011	90	03:41



Still open issues

Phase II:

Other warehouses should be registered in WMS as well (Raw materials, Packaging) additional all orders to and from Production incl. Internal transport.

Phase III:

Return materials warehouse and scan to truck (finished goods)

Phases II and Phase III to be started when new owner has taken over.



Questions

