



Styring av montasjeintensiv produksjon

Christer Bjørshol

Fabrikksjef Glamox Production Molde



/ Creating light for a better life

/ We provide sustainable lighting solutions that improve the performance and well-being of people

3,628

Total revenue MNOK
(LTM per Q3'22)

508

Adjusted EBITDA MNOK
(LTM per Q3'22)



~2,200

Full time employees

>95% of luminaries
delivered are

LED

Order intake LTM
per Q3'22

3,840
MNOK



Operations in

60

Countries worldwide



11

Factories



Largest shareholders
Triton (~76%) and
Must (~24%)

Offices in

17

countries



Values / Competent, Committed, Connected, Responsible

This presentation contains alternative performance measures (APMs). APMs are described in the GLX Holding AS Interim report 3rd quarter 2022.

Glamox at a Glance

Glamox is a leading provider of lighting for professional buildings in Europe and to the world's marine and offshore markets

Professional Building Solutions (PBS):

A leading supplier of lighting for professional buildings e.g., offices, education, health care and industry

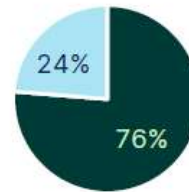
Global Marine & Offshore (GMO):

A global leader in lighting for marine and offshore markets and #1 in Europe

#X = Market position



Adjusted Revenue LTM per Q3'22



■ PBS ■ GMO



Commercial marine

~40%¹



Offshore Energy

~30%¹



Navy

~15%¹



Cruise & ferries

~10%¹



Onshore Energy

~5%¹

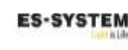


Recreational boats

~5%¹



Recent add-ons:



2018

2019

2019

2021

2021

2021

¹ Percent of GMO total revenue per Q3'22

² Percent of PBS total revenue per YE'21

Green Light Strategic Aspirations 2023 / Creating light for a better life



1
Accelerate growth in existing markets



2
Innovate market driven, human centric, sustainable lighting solutions



3
Accelerate market penetration within light systems



4
Environmental excellence and continuous efficiency improvements



5
Grow people, culture and leadership



/ We provide sustainable lighting solutions that improve the performance and well-being of people

/ Glamox shall be the preferred project partner by offering a superior customer experience

The Glamox organization is divided into **three divisions**, serving markets both on land and at sea

/ Professional building solutions (PBS)

A **leading** supplier of lighting solutions (luminaires, systems and services) to non-residential buildings in Northern- and Central-Europe



Revenue **78%**



FTE **~600**

/ Global marine and offshore (GMO)

One of the world's **leading** suppliers of lighting solutions to the **global marine and offshore** markets



Revenue **22%**



FTE **~200**

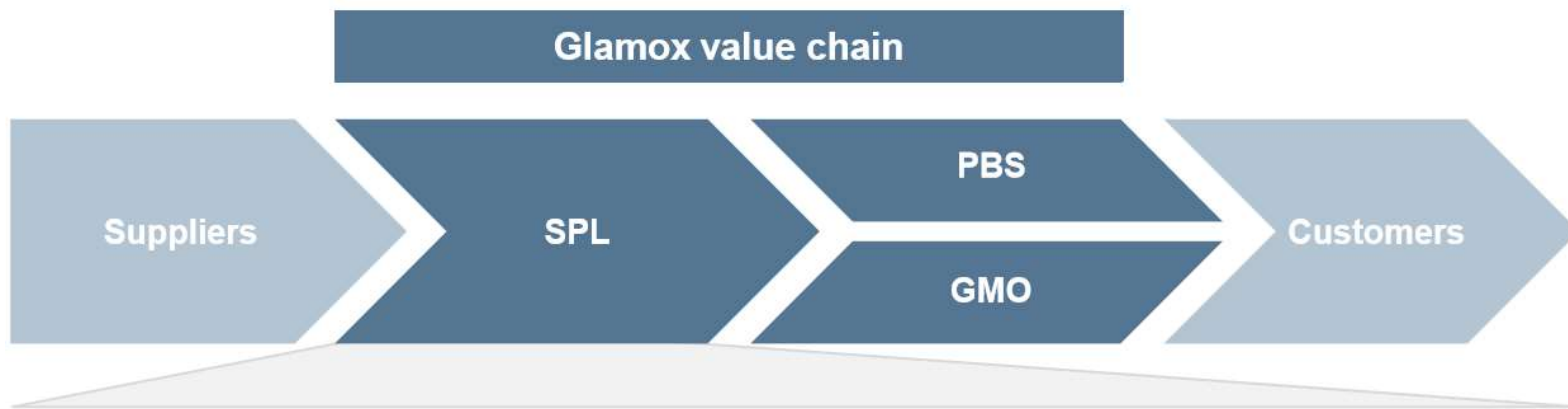
/ Sourcing, Production and Logistic (SPL)

The prime objective is to serve Glamox's customers with excellent services and products. Responsibilities include **procurement, manufacturing of goods, warehousing and distribution**



FTE **~1300**

Sourcing, Production and Logistics (SPL)



The purpose of the division is to serve our sales divisions and their customers with:

- Competitive products of high quality
- Good delivery capability
- Technical support of our own produced products

Glamox Production Molde

Key Facts

Norway

Total revenue
MNOK (2021)

665 

Revenue per
division 2021:



Light fittings
produced (2021)

400k



FTE-s (Sep. 22)
White collar: 28
Blue collar: 132
Total: 159



Total space:	24 000 m2
Assembly:	6 000 m2
Metal dep.:	4 000 m2
Painting:	800 m2
Warehouse:	6 000 m2
Office/support:	1 000 m2

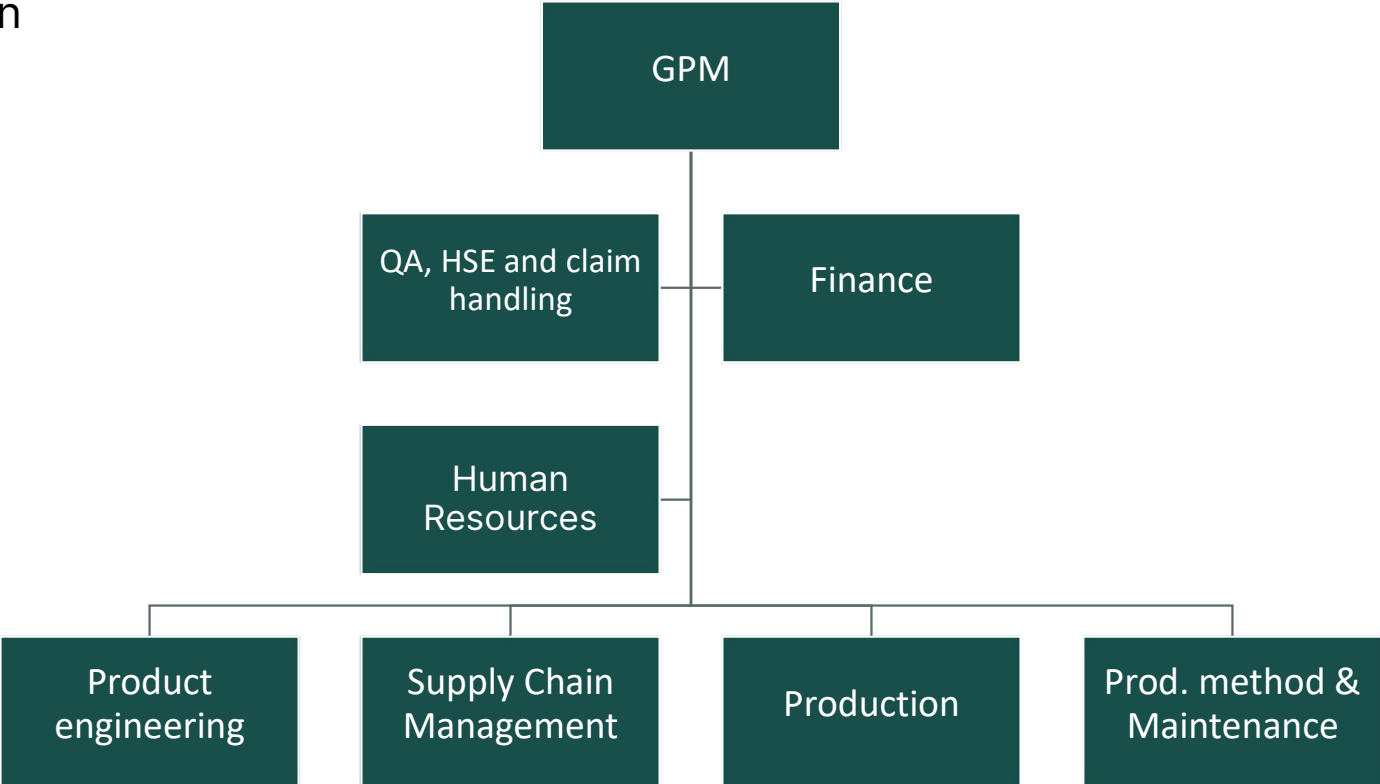
TOP 5 product families 2021:

1. I60 LED	85 MNOK	99k
2. MIR LED	65 MNOK	42k
3. I10	57 MNOK	56k
4. C90	52 MNOK	41k
5. C10 LED	44 MNOK	42k



Glamox Production Molde (GPM)

Organisation



GPM production capability

- / Production tool making
- / Production automation competence
- / Fully automated stamping and bending lines
- / Fully automated bending robot for complex bending operations
- / Powder coat and wet paint
- / Reflector production
- / Line- and single assembly
- / ESD safe production
- / Automatic palletizing and transport with collaborative robots

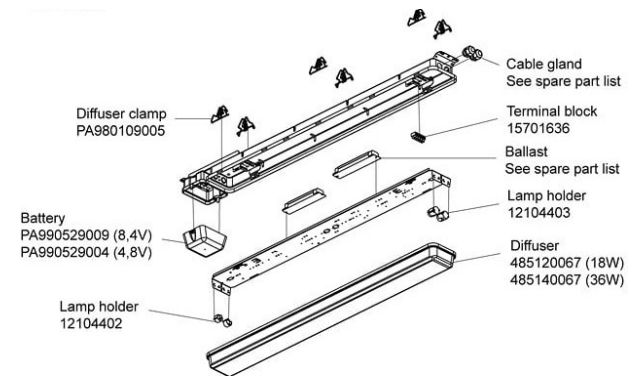


Complexity

Multi series

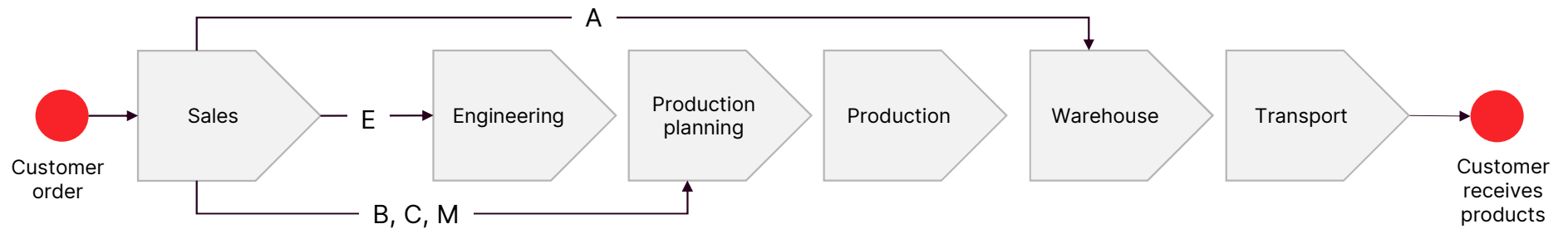


80 000 light fittings
30 000 light fitting kits
Average order size 20-30 pcs



700 sold variants

Supply chain process



Delivery times finished products

	Distribution of sales
A – day after	(45%)
B – 10 days	(13%)
C – 15 days	(13%)
M – 25 days	(11%)
E – on demand	(18%)

Production planning

Production completed
3 days before outgoing
transport

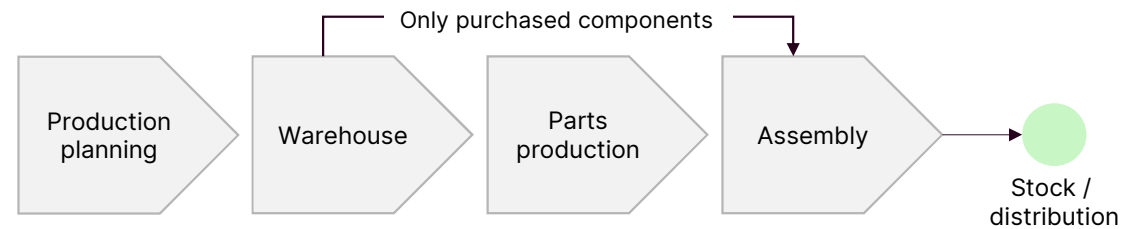
KPIs:
Capacity utilisation
Delivery time
Production output

Inventory management

A – sales last 4 weeks
Safety stock for components for ABC
set by purchasers based on running
speed last weeks / months and lead time
Auto-purchase based on re-order points

KPIs:
Stock-turn
Component and semi-finished inventory
ABC – inventory levels

Production process



Production planning

Planning for next 2-3 weeks. All new sales orders will generate a demand for production resources.

Assembly production is planned first and parts production accordingly.

Production planners will finalise plan for next ~5 days based on delivery date.

Production capacity

All work centers are set with a finite processing capacity.

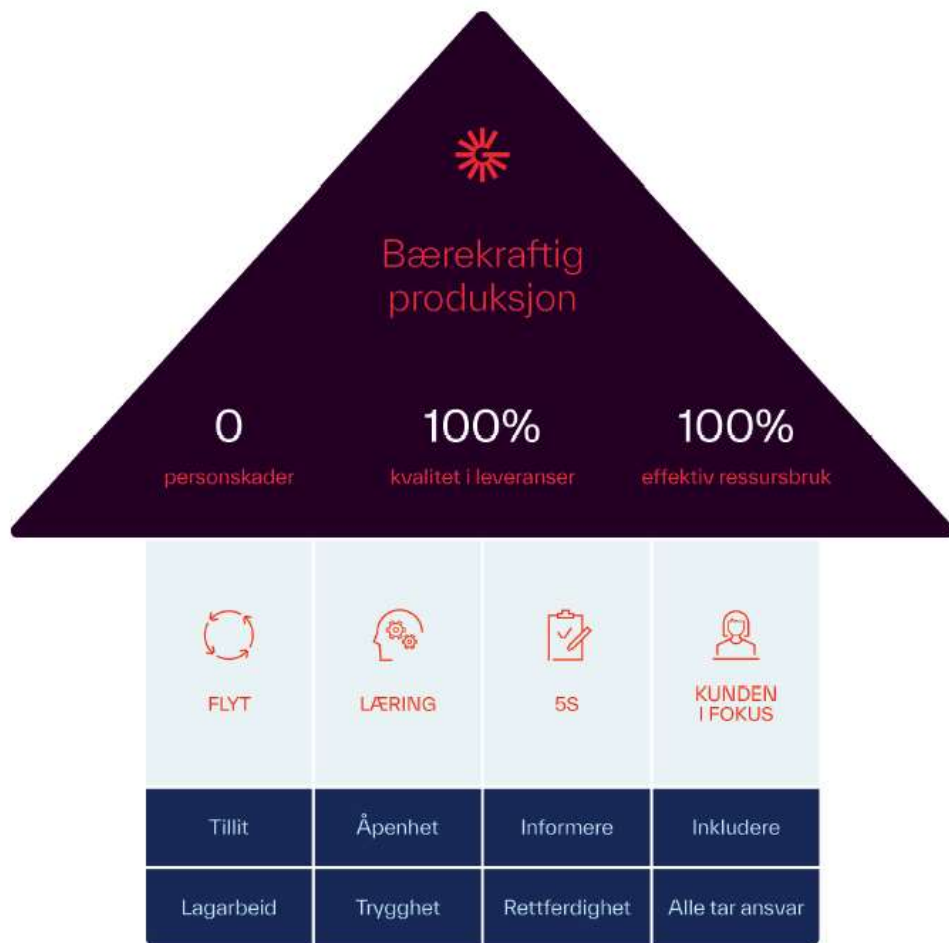
All parts and products are set with a set cycle time to complete (BOM and routing).

Production

All work centers team leaders get a production plan for the next day and sets their target production output for operators.

All required components and parts are made available through an internal supply- and Kanban system

KPIs:
Production output
Productivity



/ Direction

Sustainable production through safety, quality and efficiency

/ Continuous improvement

Improvement culture based on flow, learning, 5S and customer focus

/ Work environment

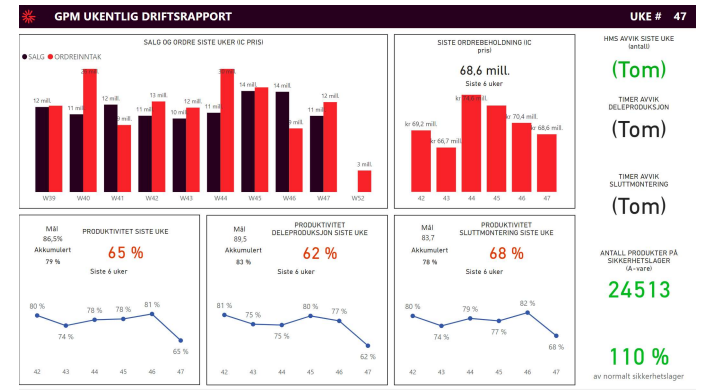
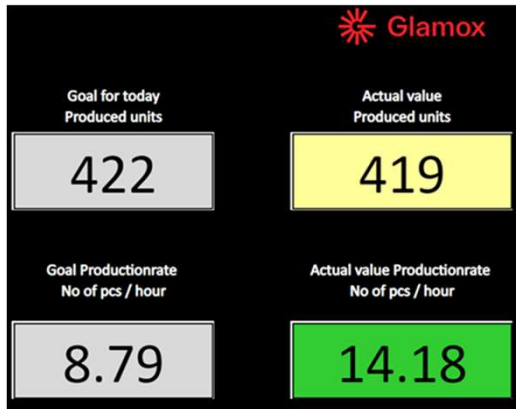
A work environment where everyone takes responsibility and that is characterized by trust, openness, inclusion and teamwork

Making production visual – a work in progress

Visualisation for operators

Visualisation for management teams

Visualisation for organisation



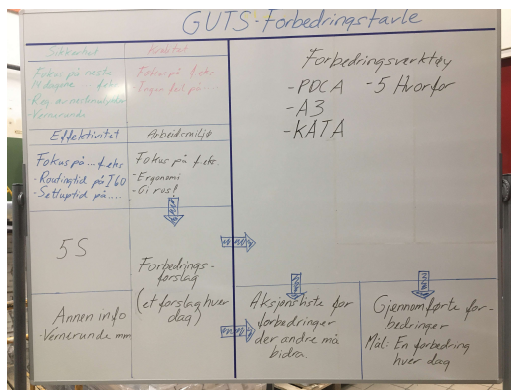
«The more people who know what is going on the more people can contribute»

Eirik Kristoffersen, Norwegian Chief of Defense

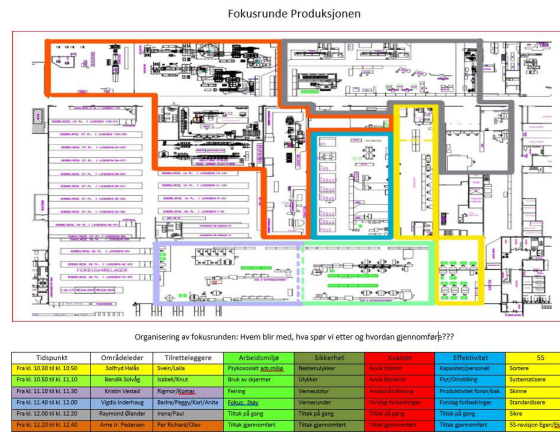


Strengthening continuous improvement work – also a work in progress

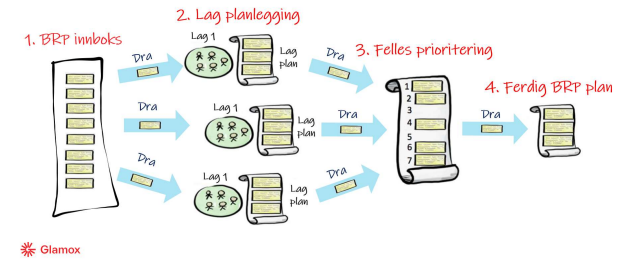
Improvement visualisation boards



Structured GEMBA walks



6 x Big Room Planning



* Glamox





1

personnel injury
with absence



1.5%

claim rate



80%

productivity



420k

production output
(light fittings)

Thank you for your
attention!

Christer Bjørshol

Plant- and Factory Manager

Glamox AS // Glamox Production Molde

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// **creating light for a better life**