\$\text{Valka}

Modern onboard production with new tecnology

10.01.2019

### About Valka

- Founded 2003
- Headquarters in Iceland & subsidiary in Norway
- Valka has around 90 employees
- In forefront of developing progressive equipment, software & system solutions for the fish processing industry.
- Valka has sound operations and has been growing fast during the past few years.

#### **MISSION STATEMENT**

"Our mission is to increase customers productivity, with a range of products and solutions"



### Experts in whitefish processing









**RAW MATERIAL** 

**PROCESSING** 

**PRODUCTS** 

**SALES** 

- Raw Material grading
- Traceability management

- Pre-Trimming
- Cutting
- Weighing
- Routing
- Ice Dosing
- Labelling
- Packing
- Process Monitoring

- Product management
- Inventory control
- Contribution monitoring
- Planning against Sales
  Orders
- Order & Client handling
- Price & Cost handling
- Dispatching & Document handling
- Customer self service
- Logistics management



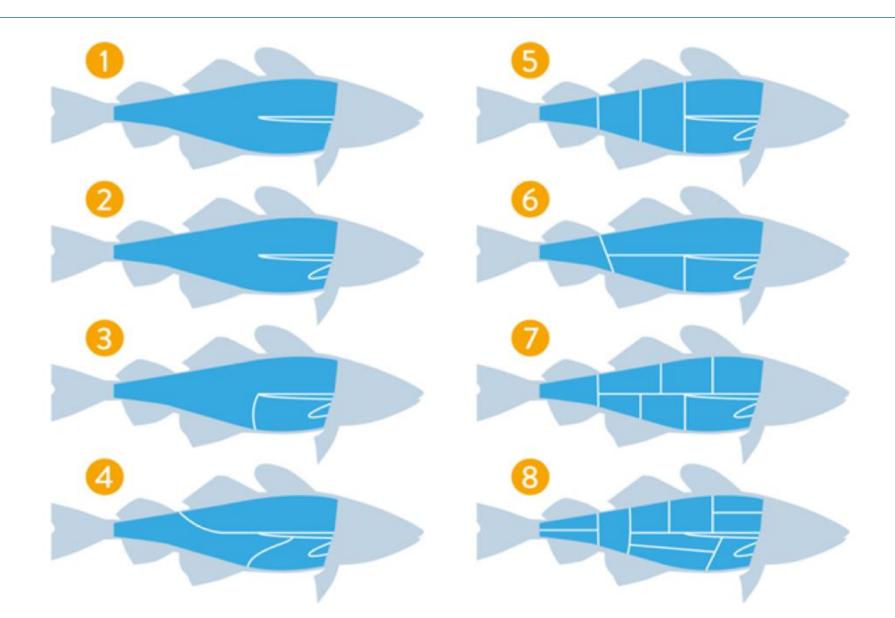
## Portion grading and distribution



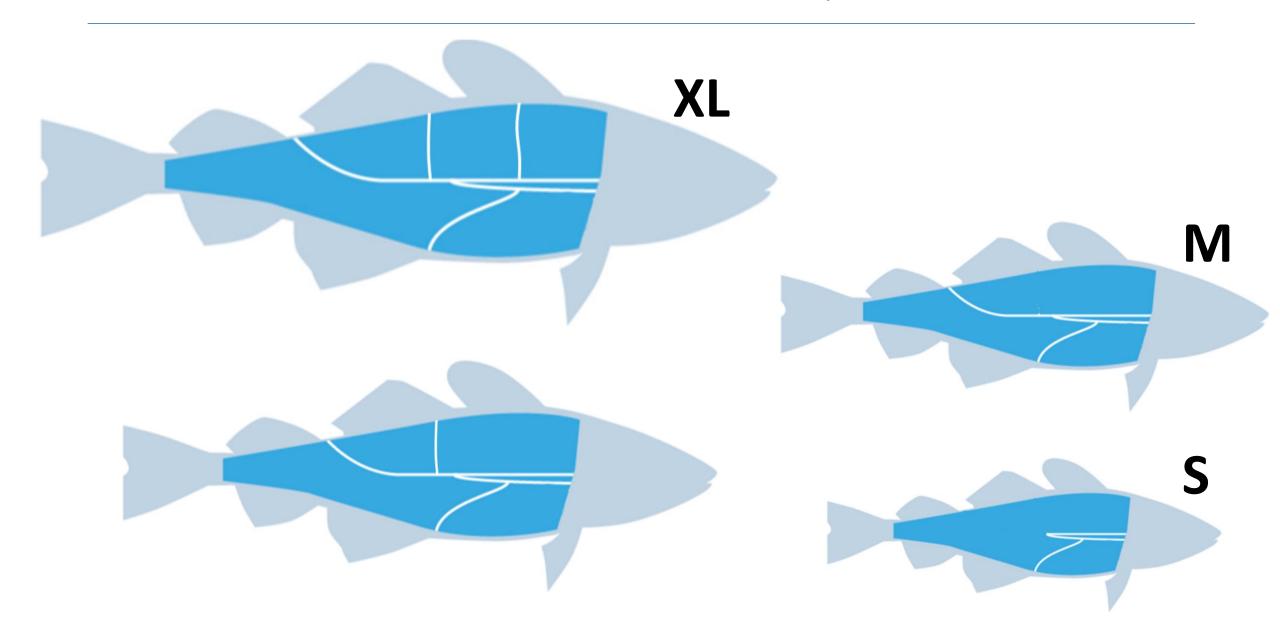
https://vimeo.com/valka/whitefish



# Endless possibility's



# What is practical onboard?





### Valka cutter onboard vessels























# ??????





### Valka cutter onboard vessels









### Experience so far?

- It has been proven that the system works in martime environment
  - In 2018 the machines were used to produce 3.758.024 fillets to boneless products onboard these three boats. In terms of raw material it was 5.500-6.000 tons of round fish, mostly cod.
  - Volume was not equally distributed between boats.
- All critical components are working well
- Some unexpected mechanical issues
- Rather complex equipment means
  - 4 shifts
  - Not all boats have continuous production
- High price of H/G cod is challenging
- Market response have been good but the prices should be higher
- Quota conversion factors play a critical role in the economics



 Onboard produced fillet products are better than products from thawed cod

• Best fish in the world deserves high premium price

- Find the correct product mix
- Continuous production
- Focus on marketing
- Don't forget about the saithe



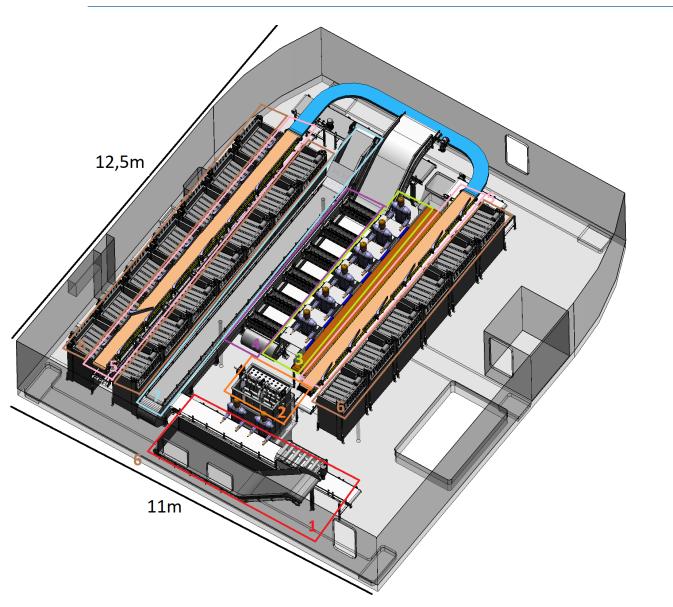
### Other onboard projects



New trawlers (complete factory deck)

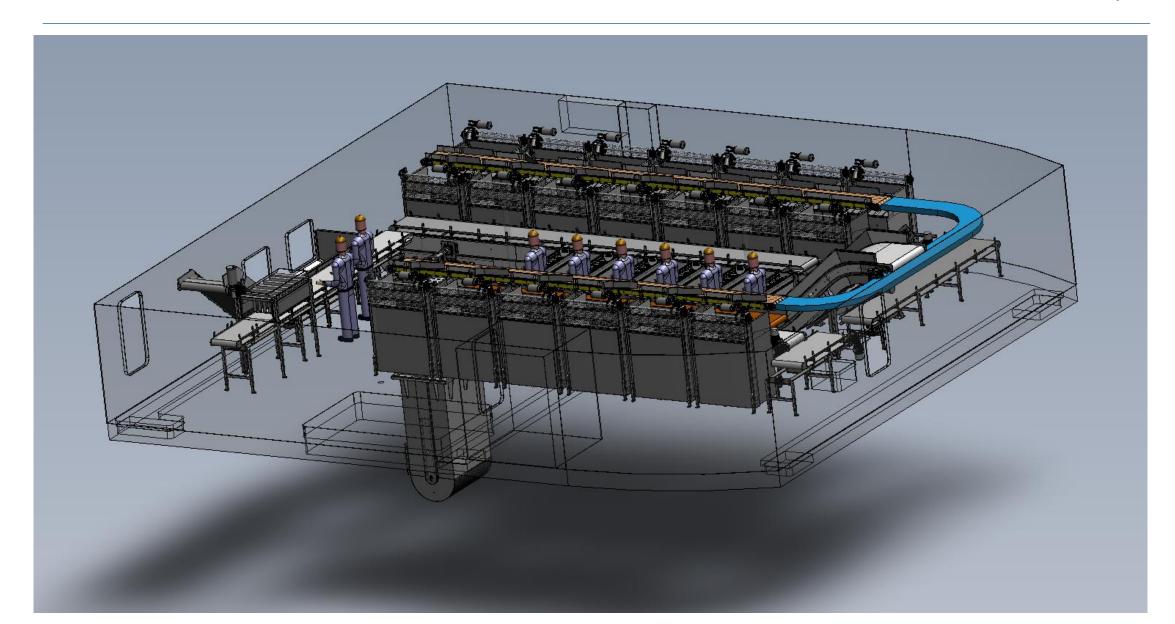






- 1. Delivery from chute + stunning.
- 2. Bleeding
- 3. Gutting
- 4. Visual inspection.
- 5. Grading
- 6. Chilling
- 7. Redfish (Sebastes) chilling.







#### **•BLEEDING:**

All catch can be bled in 45 minutes, each individual fish shoud be bled less than 30 minutes from being removed from trawl. Each fish is bled for a specific, customizable time (15 min optimal).

#### •SIZE AND SPECIES DETECTION:

Each fish is individually inspected by a camera and its species and size/weight is calculated.

#### •GRADING:

Fish is graded by size and species into a batch of 350kg. For example, 350kg of cod 2-4kg.

#### •CHILLING:

Each and every individual batch is chilled for a specified, calculated amount of time to reach core temperature of -1°C.

#### **•BATCH DELIVERY TO FISH HOLD:**

Fish is delivered in whole, pre-chilled batches down to fish hold. The 350kg of cod mentioned above are delivered as a 350kg batch, chilled to -1°C down to fish hold and into a tub. All logistics controlled by the system.

### •REDFISH/SEBASTES SIDE CHANNEL:

A special side channel for chilling hard-to-handle products that cannot be treated in the same manner as bottom fish. Redfish/Sebastes is also chilled and delivered to fish hold without interfering with other processes.