IHFood A/S and
What's next in food processing inspection?

Tue Moerck
It’s about automation
256000 eggs/hour
14 ms per egg
32 image layers to process

14000 birds/hour
257 ms per bird
12 image layers to process

1500 fish/hour
2400 ms per fish
40 image layers to process

1200 pigs sides/hour
3000 ms per pigs side
3D point cloud to process
How do we run the business:

1) People first
2) Purpose and value creation
3) Flat structure
Founded in Copenhagen 2006
Image acquisition, multispectral- and hyperspectral-imaging
State of the art software development
- Food safety
- Animal welfare
- Sustainability
- Human health

We care
- Increased productivity
- More uptime
- Predictive maintenance
- Lower risk
- Lower waste
- Higher quality
- Higher earnings

Towards Industry 4.0
EggInspector - Egg inspection, grading and sorting
ClassifEYE - Quality inspection and grading of chicken
Chine Bone Saw - Automatic removal of pork chine bone
Salmon Gut Inspector – Grading, sorting and quality control
600+ systems spread over more than 60 countries

We take care
What’s next in food inspection?

Automated veterinarian inspection?
”Computer vision system for automated poultry veterinary inspection”
• Health inspection is performed of whole chickens and of the eviscerated organs

• Every bird must be inspected by a veterinarian or qualified person and removed if it is not viable for human consumption
• One challenge is the line speed

• Line speed can be as high as 4 birds a second

Poultry veterinary inspection
Healthy liver vs. Changes on the liver surface

Liver stase vs. Necrotizing hepatitis
Uncertainties in the manual classification
Ascites
BugWatterso

Deep skin inflamation

Shallow skin inflamation

Emaciation (Abmagerung)