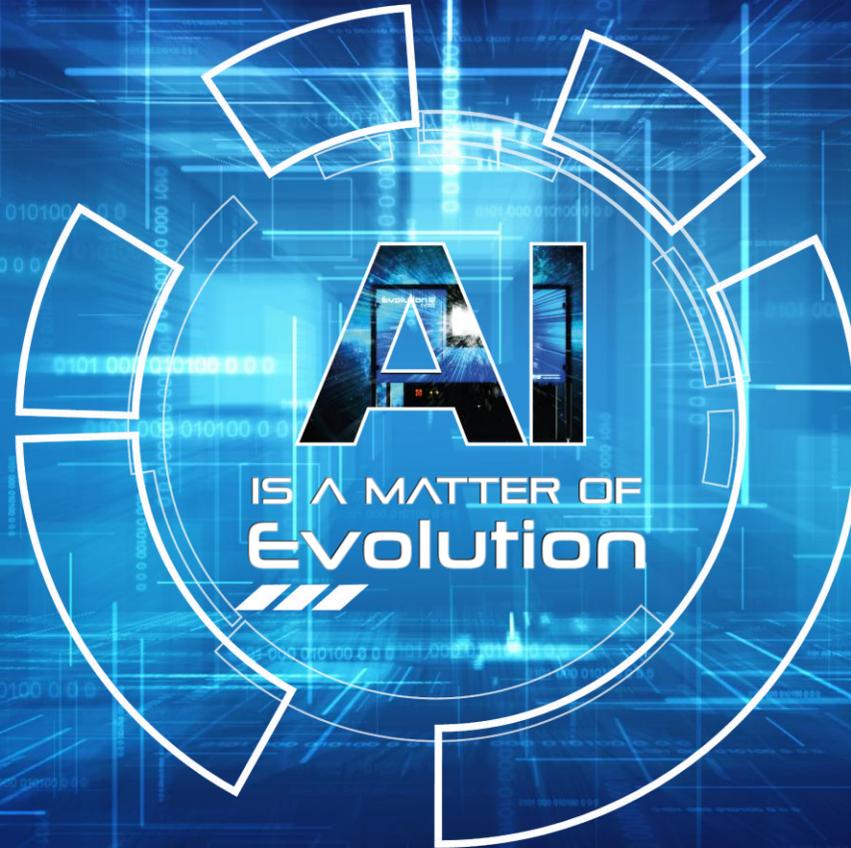


# How to make AI an Asset for Glass?



# AI transforms the concept of inspection





AI  
IS A MATTER OF  
Evolution

# Our 2 Strategic Pillars



**AI and  
Machine  
Learning**

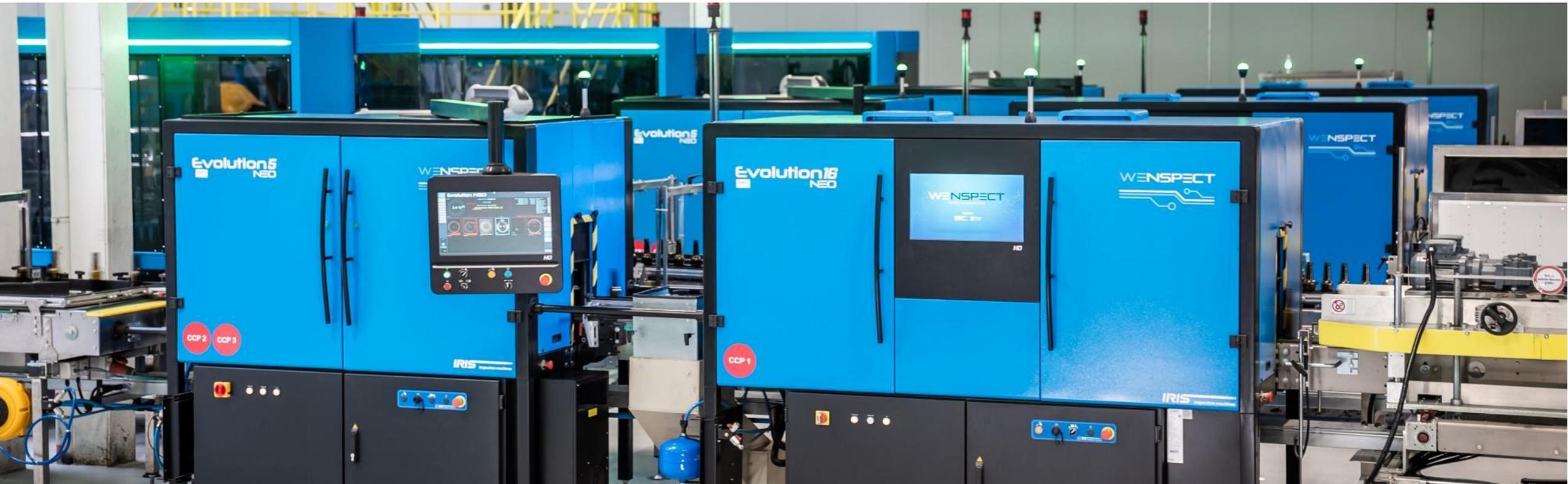
**Real  
Time  
Monitoring**

# What if your inspection machines...



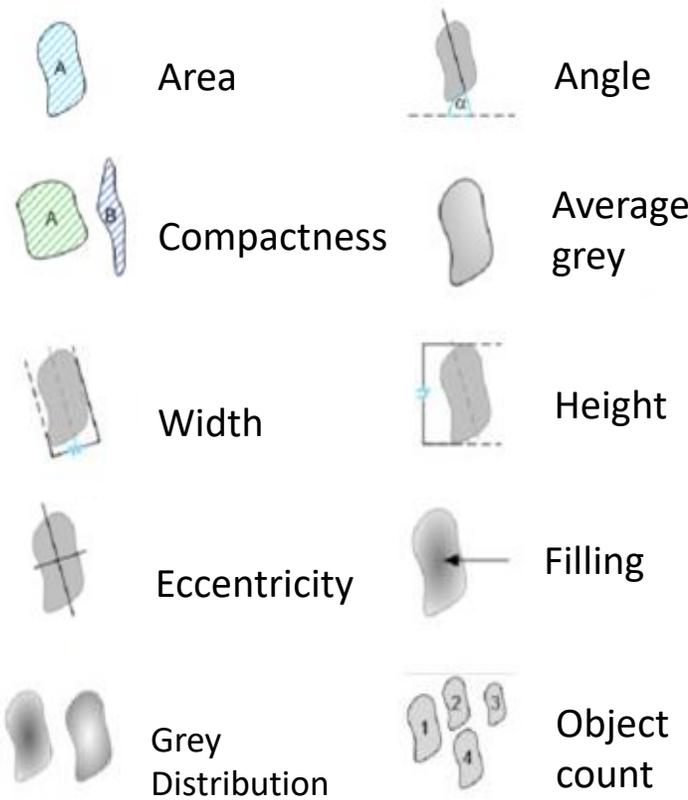
Could behave like  
your most experienced  
quality manager,  
24h/7?

# Intelligent machine as connected sensor



# 2018 : NEO Intelligence

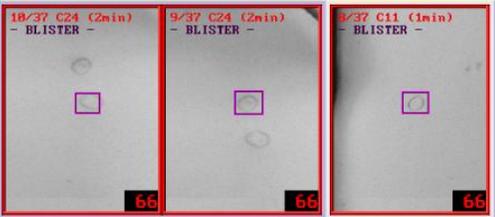
## Defects classification by machine



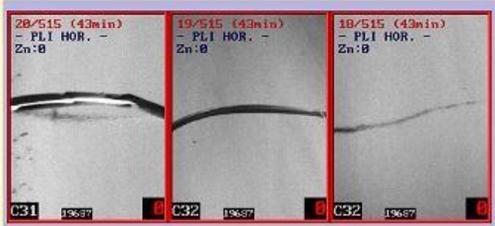
# 2018 : Evolution NEO

## Defects classification by machine

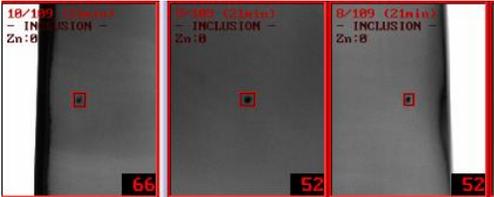
Blisters



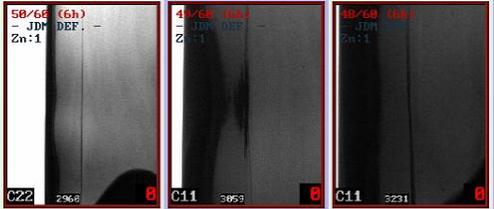
Horizontal defects



Stones

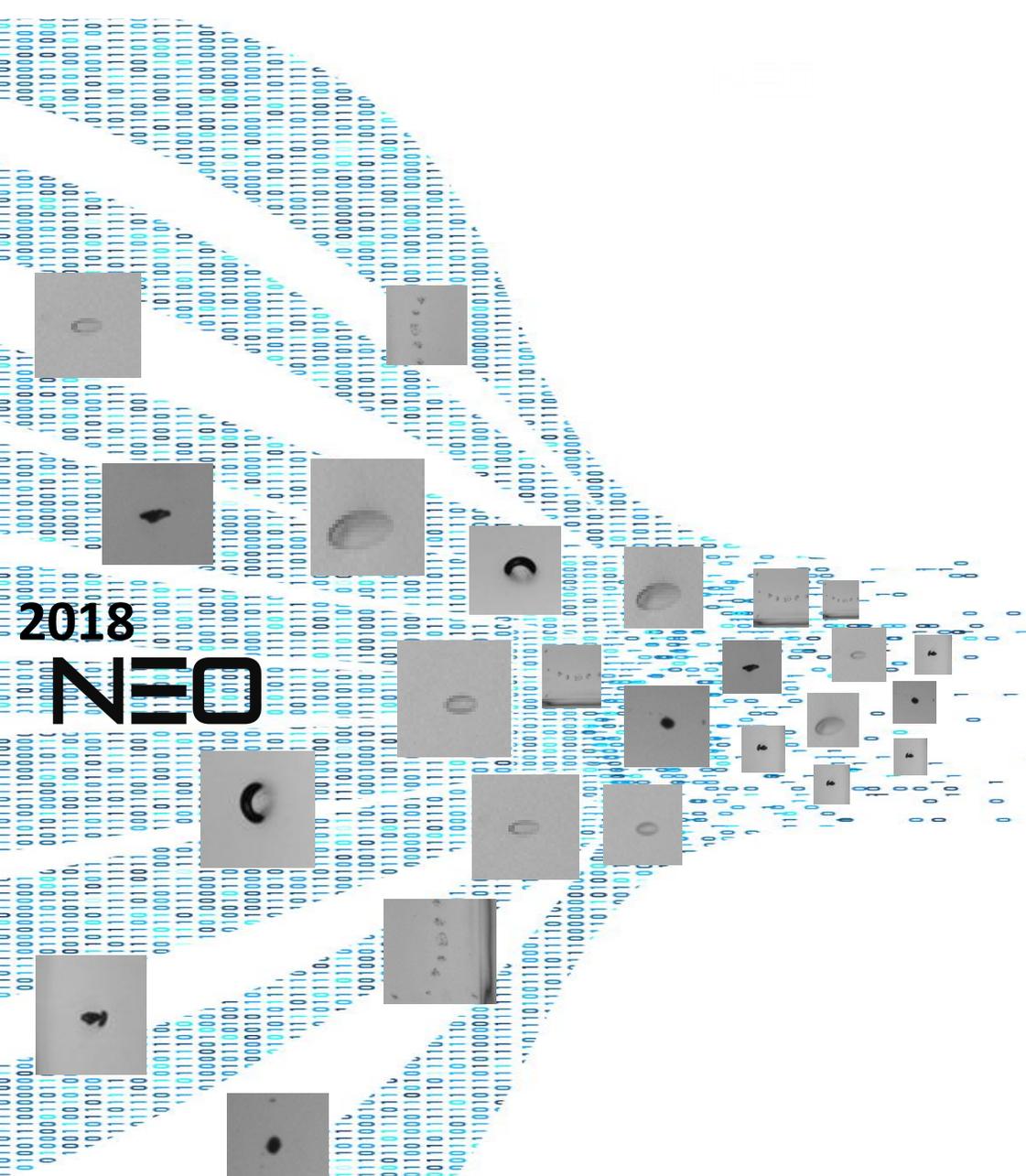


Vertical defects



Classification done by the NEO intelligence

2024 : NEO AI



NEO AI

ALLOWS ACURATE & DETAILED ANALYSIS



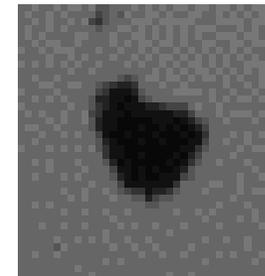
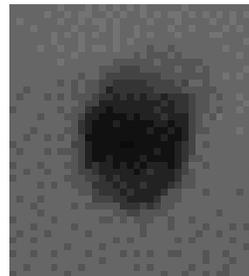
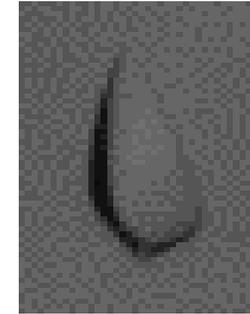
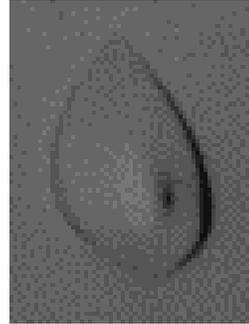
# How does AI in inspection work?

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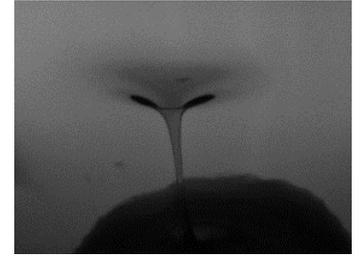
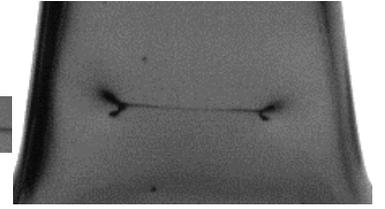
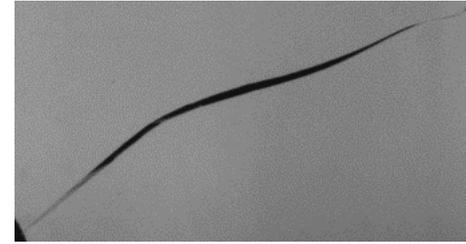
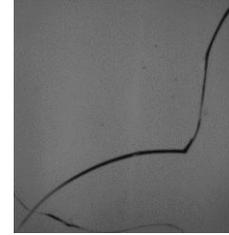
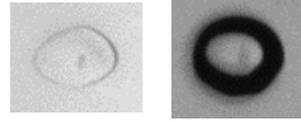
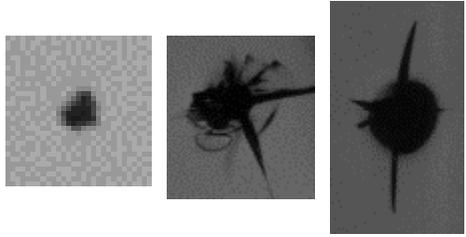
EVOLUTION NEO AI

# AI based machine

AI closely mimics expert human judgment



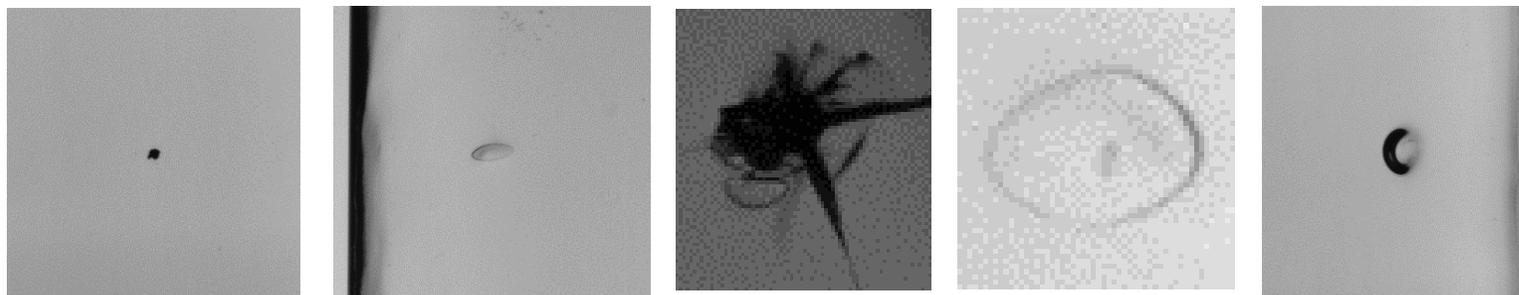
# NEO AI "speaks glass"



# Valueable information for your MES

Traditional approach

1,2%  
of compact defects



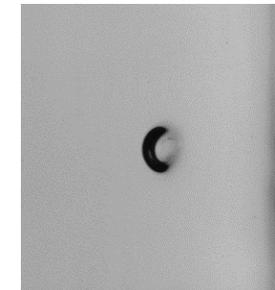
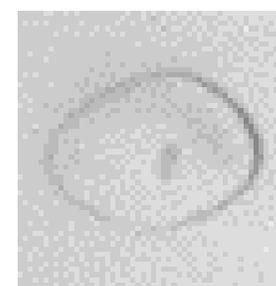
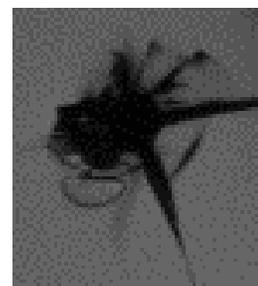
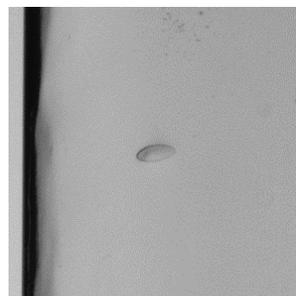
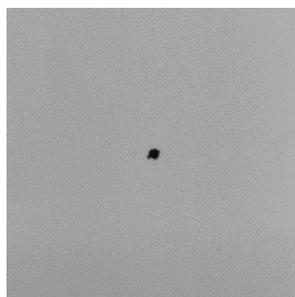
0,3%

0,12%

0,18%

0,45%

0,15%



# What if collective machine intelligence...



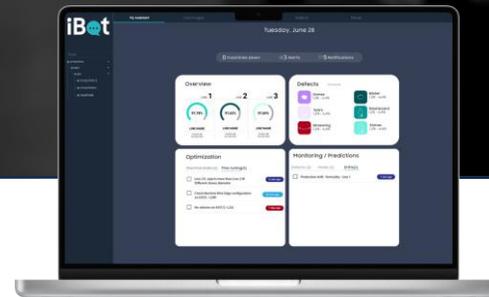
Could predict  
your future defects  
and help avoiding them?

PRODUCING  
SAFELY EFFICIENTLY  
QUICKLY  
SMARTLY

iBot

- ✓ To increase the pack-to-melt ratio
- ✓ To prevent defects, not just detect them

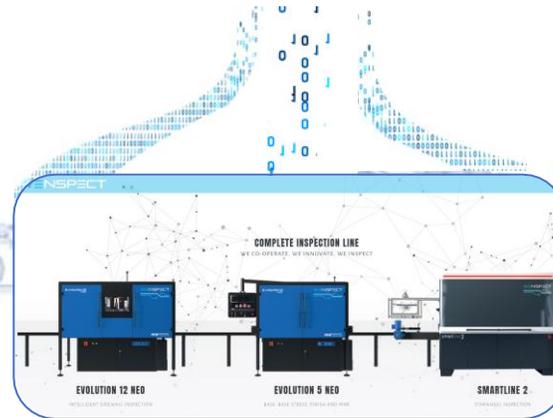
« Iris Boosts your Operator's Talents »



# Collective intelligence in action

# iBot

ai-based assistant



Hot End

Cold End

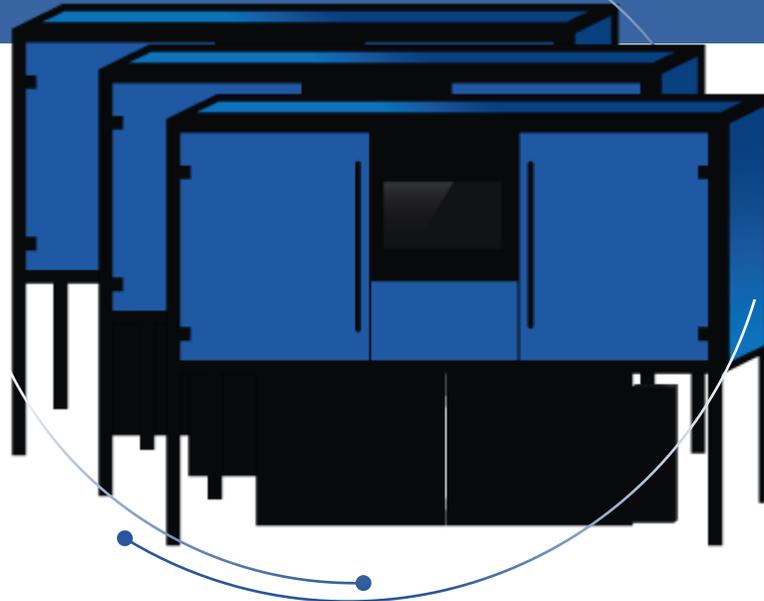
Quality Department



**Analyse your  
production  
&  
Optimise the  
inspection**

**Monitor your  
past rejects  
&  
Secure the  
quality**

**Alerts to  
atypical  
behaviour of  
machine fleet**



VERTICALITY VALUES

MES

ARTICLE SETTINGS

MACHINES SETTINGS

COUNTERS

IMAGES

MACHINE STATUS

BODY MEASUREMENT

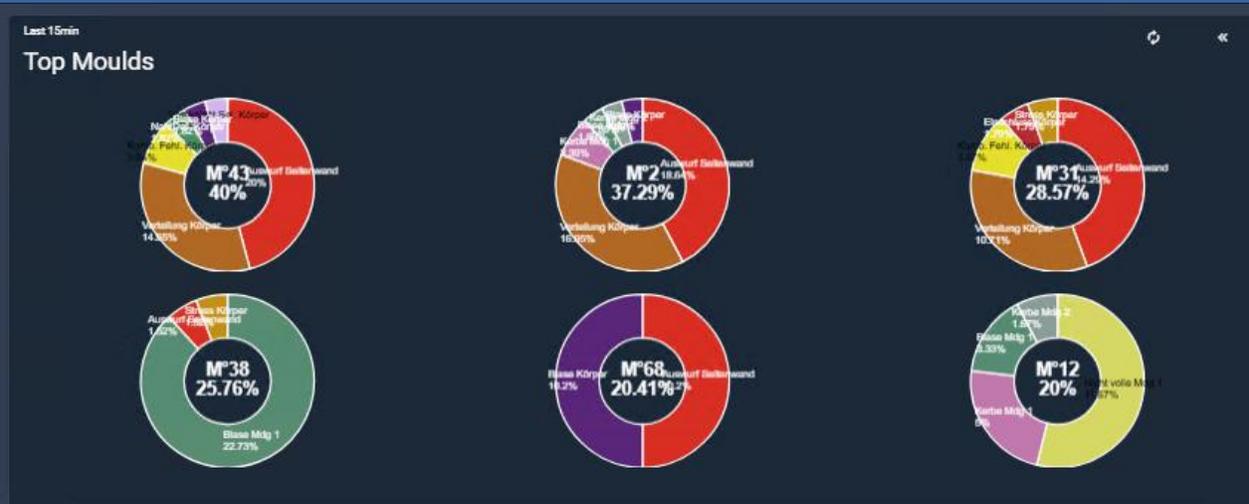
TOP DEFECTS

DEFECT CHARACTERISTICS

DEFECTS PER SECTION

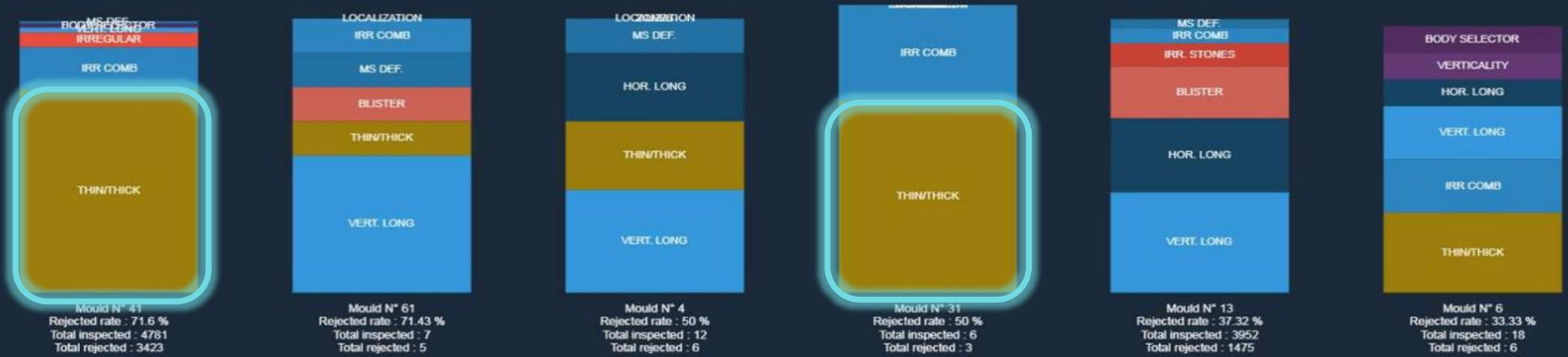


## Identification of early defect signals



Last 8h

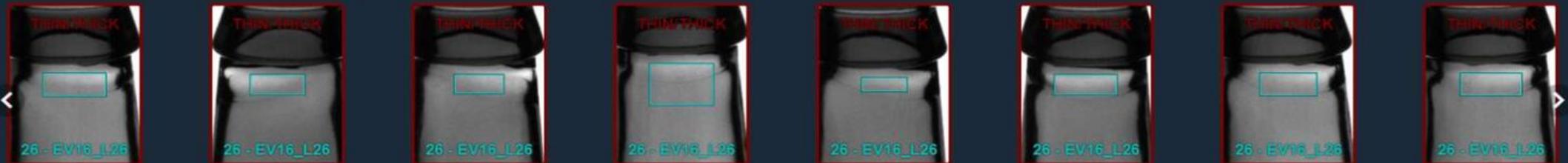
## Top molds



Defects

## Gallery

THIN/THICK 41 X



WANNE 1

IS Machine

- 11
    - EV16\_L11
    - EV5\_L11
  - 12
- v5.0

**iBot**  
ai-based assistant

WANNE 2

- IS Machine
  - 21
    - EV12\_L21
  - 22
    - EV5\_L22
    - EV12\_L22
  - 25
    - EV5\_L25
    - EV16\_L25
  - 26
    - EV16\_L26
    - EV5\_L26

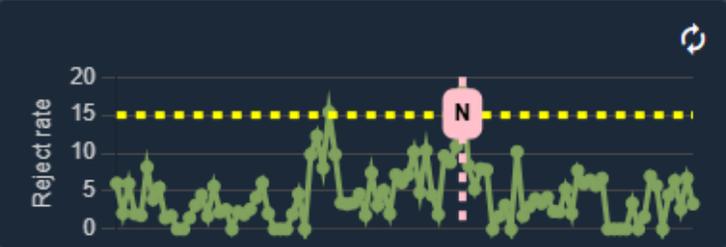
WANNE 1

- IS Machine
  - 11
    - EV16\_L11
    - EV5\_L11
  - 12

v5.0

EV5L11-3 Mould N° 42 2025-05-07 06:15

3.03%

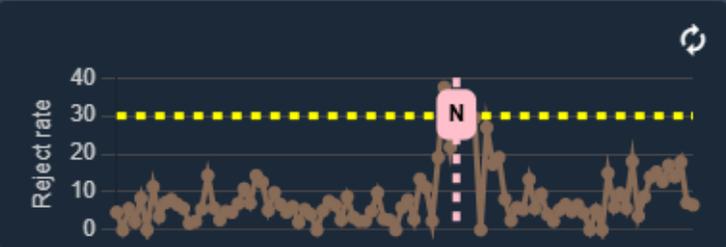


Reject rate

DETAILS

EV16L11-1 Mould N° 38 2025-05-07 06:00

0.77%



Reject rate

DETAILS

EV5L11-1 Mould N° 25 2025-05-07 05:15

0.91%



Reject rate

DETAILS

**ALERT!**

Be alerted before the defect impacts your PTM

This is **more than**  
an inspection machine



# Intelligent inspection at Ardagh Obernkirchen



NextGen  Furnace

**14** Evolution NEO  
+ iBot

**7** SmartLine 2

Beer production up to  
**350 BPM/leg**

# WENSPPECT

Together for complete lines

POWERED BY

**IRIS**<sup>™</sup>  
Inspection machines

**h** heye  
international



**Thank you**

Any questions ?