

SHIFT YOUR STRATEGY

GLASS PROCESSING AUTOMATION

GPAD

March 5-6, 2024
Nashville
glass.org



Addressing labor shortages
and optimizing edging quality
and production through robotics.



Johnathan Paredes | Bovone

GLASS EDGING CHALLENGES

WHAT

What are second level
glass processing
companies looking for
to take their **production**
to the **next level**?

- 1. Enhance product automation**
Lower the operator-machine interaction through the use of robot handling
- 2. Lower production costs**
Less downtime and constant quality leads to more production in the same time
- 3. Raise flexibility**
Having machines capable of changing quickly to different processes broadens the market offer and so the possible clients
- 4. Lower production risks**
If the operator-machine interaction is lower, the chance of injuries for the operator and also the chance of breaking the glass is lower

ROBOTS VS OTHERS

HOW

How can we take the **production process** to the next level with what the **machinery market** currently offers?

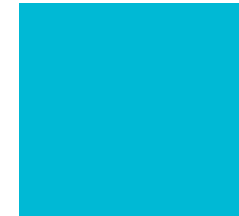
PRODUCTIVITY

FLEXIBILITY

DOUBLE EDGERS

CNC EDGERS

ROBOTIC SYSTEM



EDGE PROCESSING MEETS AUTOMATION

ROBOTIC SYSTEMS

The challenge is not only to make robots dialogue with edgers, but also upgrade the latter to make them autonomous and able to respond as an integrated system to the needs of the industry.

The result is an automated system as a whole: robots automatically manage the slabs and the edgers enhance new performances to make the system really autonomous.

HIGHER WORKING SPEEDS

LIMITED OPERATOR INTERACTION

AUTOMATIC WHEEL WEAR COMPENSATION

FULL INTEGRATION WITH OTHER MACHINES

SYSTEM MODULARITY

FULLY AUTOMATIC EDGERS

EDGING AUTOMATION

In order to be really autonomous, apart from the loading and off loading process, also the edgers need to be automatic, limiting the intervention of the operator during the process.

- 1. Automatic wheel wear recovery**
The edger automatically raises the motor recovering the wear of the wheel, maintaining a constant edge quality output
- 2. Automatic wheel setup**
The machine will automatically calibrate and setup the new wheel after replacement, limiting the downtime to a just a few minutes
- 3. Wheel wear alert**
The machine will automatically alert the operator once a wheel will have reached its usage limit
- 4. Recipe and setup input**
The operator will be able to save many different setups and recipes according to the type of glass, in order to recall it when necessary

FULL SYSTEM INTEGRATION

ONE AND ONLY PARTNER

Our system is completely developed in house at engineering, assembly, mechanical, electrical and software level, meaning we control the whole process and have the expertise in-house

- 1. Full quality control**
The production process and integration is under one roof from start to finish, meaning a complete quality control over every aspect
- 2. In-house testing**
The system is fully assembled and tested in house both mechanically and software
- 3. Fast service**
Being able to rely on one supplier only, service is much easier and straight forward
- 4. Structured product development**
Not having to rely on third parties for any technology, our product development is quicker to adapt to the needs of the client

CASE STUDY | INCREASING PRODUCTION OUTPUT

“

I have been **extremely impressed** with the performance of the Bovone BRS robotic polishing system. The machine has **effectively doubled our output without increasing our labor** and has made the entire operation safer. I would say I would buy it again without question but that would be a lie ...I always have questions.

”

BOUGHT 2° ROBOTIC LINE IN 2023



Rob Carlson
Head of Engineering

Tristar Glass

CASE STUDY | SAFER WORKING ENVIRONMENT

“

[...] In 2019 we were in the market for two new polishers, and it was only logical that we engaged Bovone for this purchase. They presented to us their **Bovone Robotic System**, and we immediately knew **this was the direction in which we needed to head**. It could handle our current demand, but also **had enough throughput to handle our projected growth**. We have been operational with that system for four years and **have seen an increase in productivity, less man hours, and safer working conditions**. [...] After the profound success we had with our first BRS [...] **we contacted Bovone for a second line that was commissioned late last year**. We at UPG could not be happier with our decision and would recommend it to anyone in the fabrication industry.

”



Mike Cully

President & Owner

United Plate Glass

CASE STUDY | REDUCING LEAD TIMES

“

The BRS has been a complete game changer for our origination since it was purchased in 2017, **increasing our output in the edging department by over 30%** while automating what was previously a very labor intensive process. This system has allowed us to **dramatically reduce our lead times** across the board, [...]

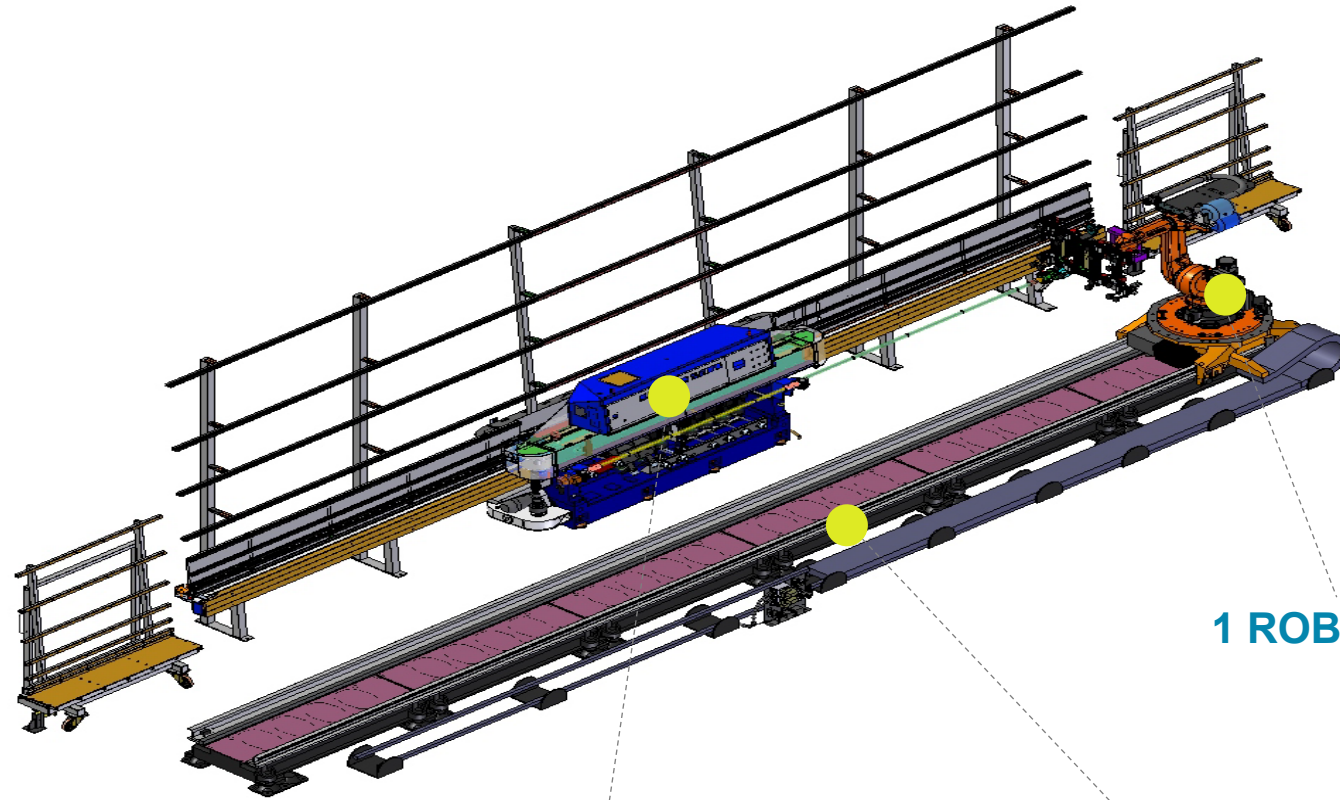
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Shane Merryman
President & CEA

Consolidated Glass

SINGLE ROBOT ON TRACK

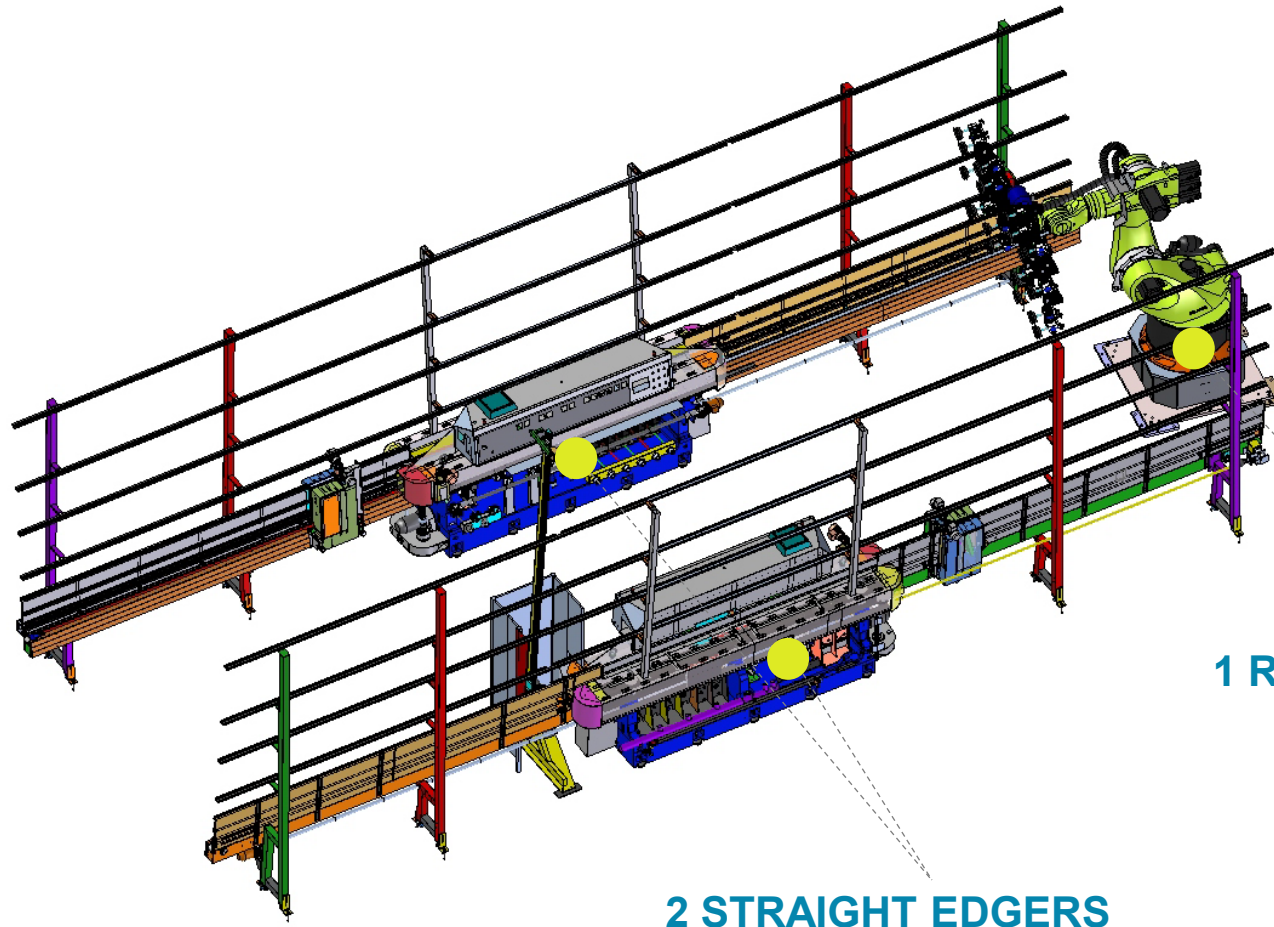


1 ROBOT WITH GRIPPER

1 TRACK

1 STRAIGHT EDGER

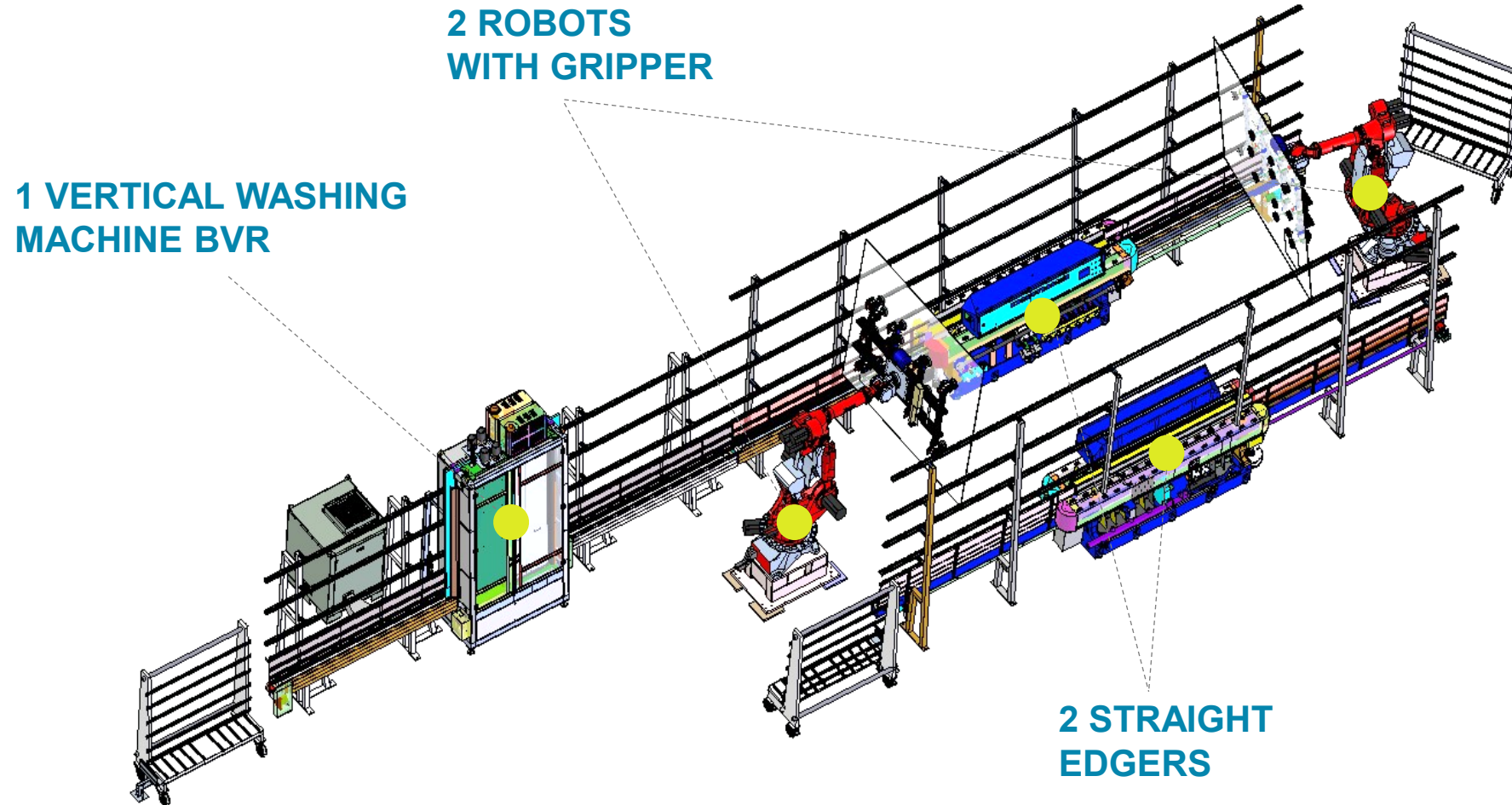
ONE ROBOT WITH TWO EDGERS



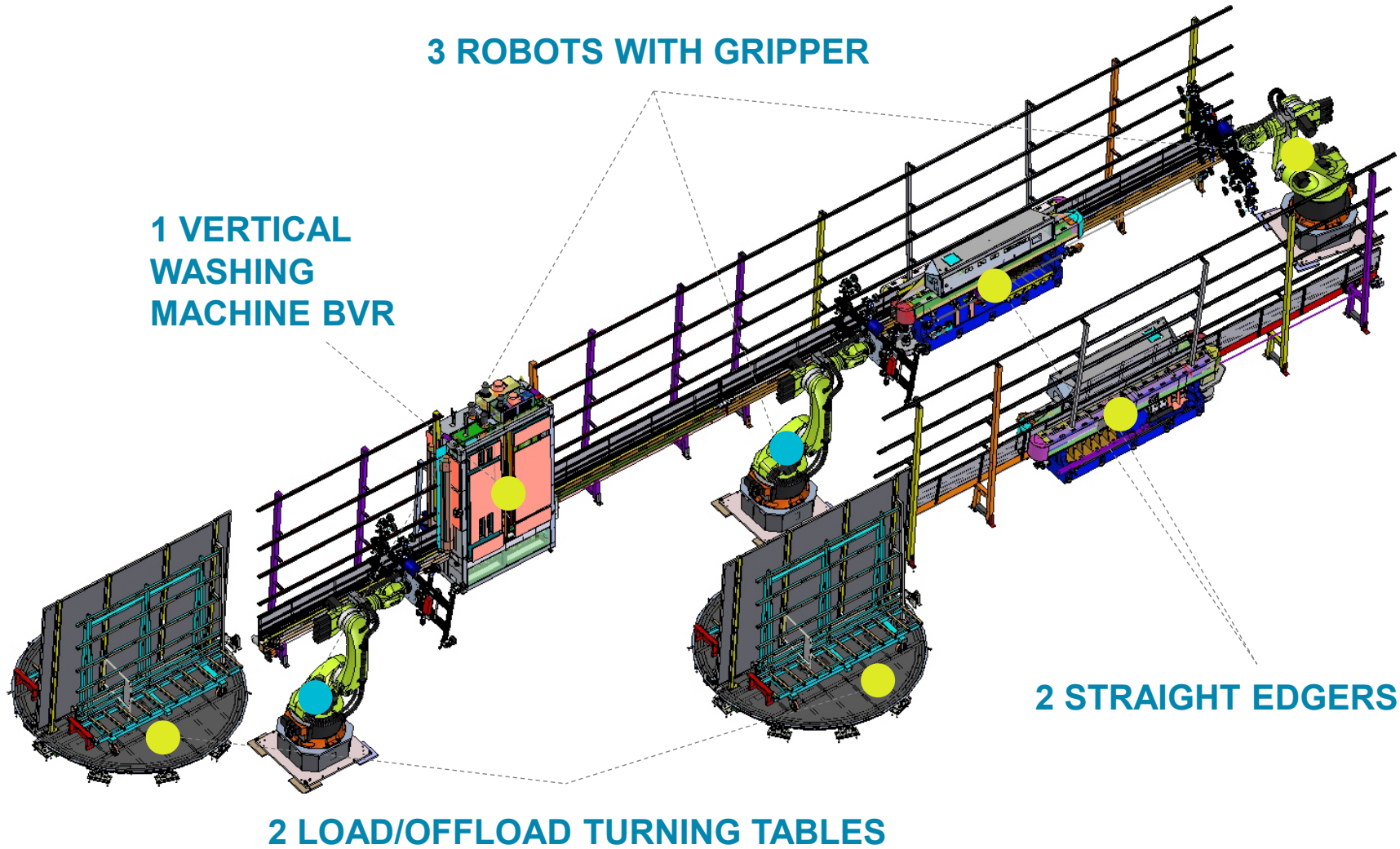
1 ROBOT WITH GRIPPER

2 STRAIGHT EDGERS

TWO ROBOT WITH TWO EDGERS



THREE ROBOT, TWO EDGERS AND WASHER



1954 | 2024 **70**
YEARS
YOUNGER

WITH A NEW LOGO

Celebrating **our first 70 years** in business, we treated ourselves to a Corporate Brand Identity reshape. Forever young even in marketing and in the management of our communication and image.



WHO IS BOVONE

WHO WE ARE

Bovone is one of the global leading suppliers of processing machines and lines for the flat glass and stone industry.

WHAT WE DO

The company designs, develops and manufactures machines for glass **edging**, **beveling** and **washing**, as well as complete **laminating** and **silvering lines** for glass

BOVONE IN NUMBER

YOUR
WORLDWIDE
LOCAL
SOLUTION
PROVIDER

58
ROBOTS
WORKING

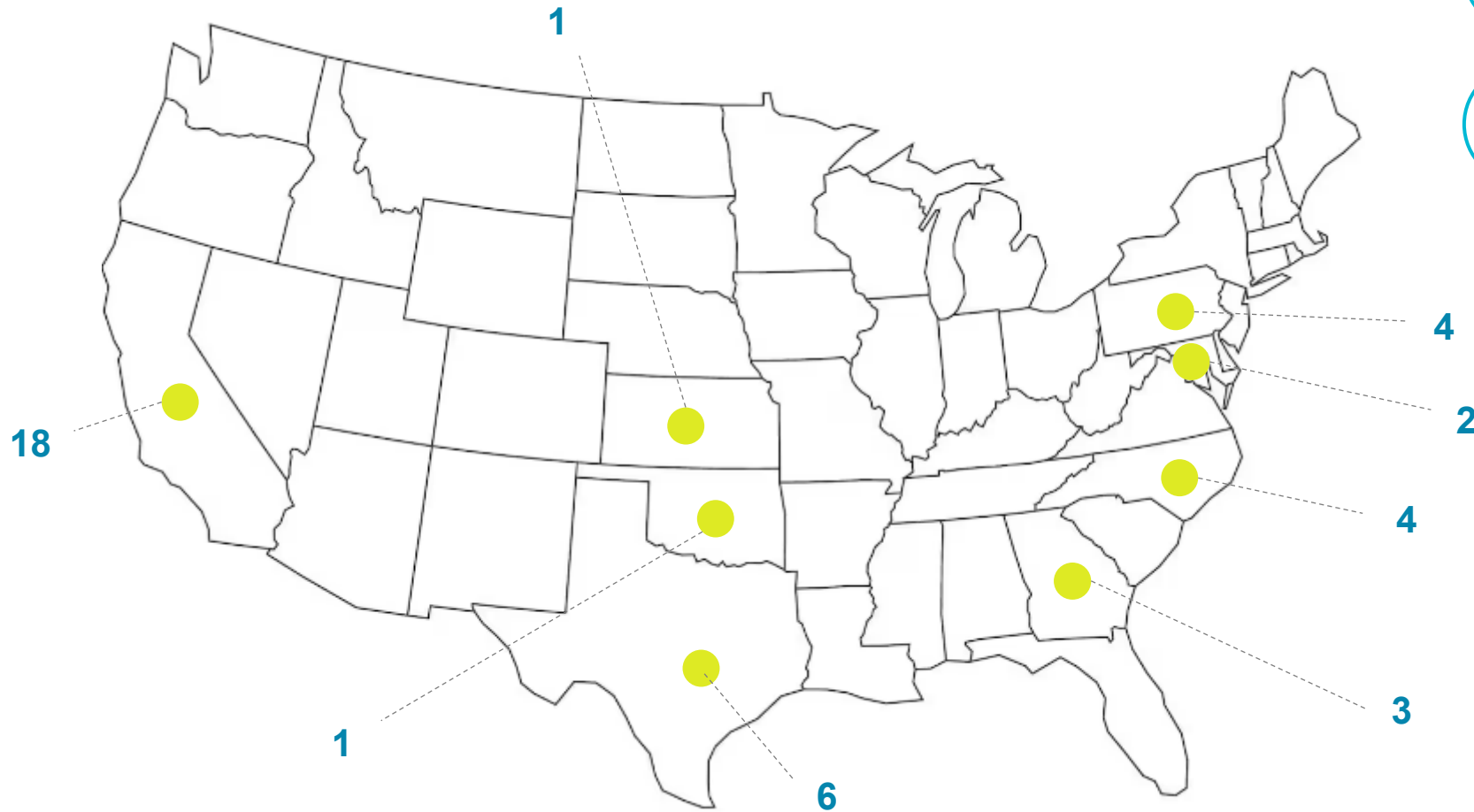
130
EMPLOYEES
WORLDWIDE

135
MIRRORING
LINES

150
LAMINATING
LINES

4500
MACHINES
RUNNING

OUR ROBOTS IN USA



39 OVERALL ROBOTS

1° ROBOT SOLD IN USA 2015

See you at

VITRUM 2025

Fiera Milano Rho, 16th-19th September 2025

Solutions

Dealers
Staff
Manufacturers
Glaziers
Suppliers

Vision

Innovation
Trend
Technologies
Best practice
Networking



THANK YOU

for your attention



BOVONE
MADE IN EXCELLENCE