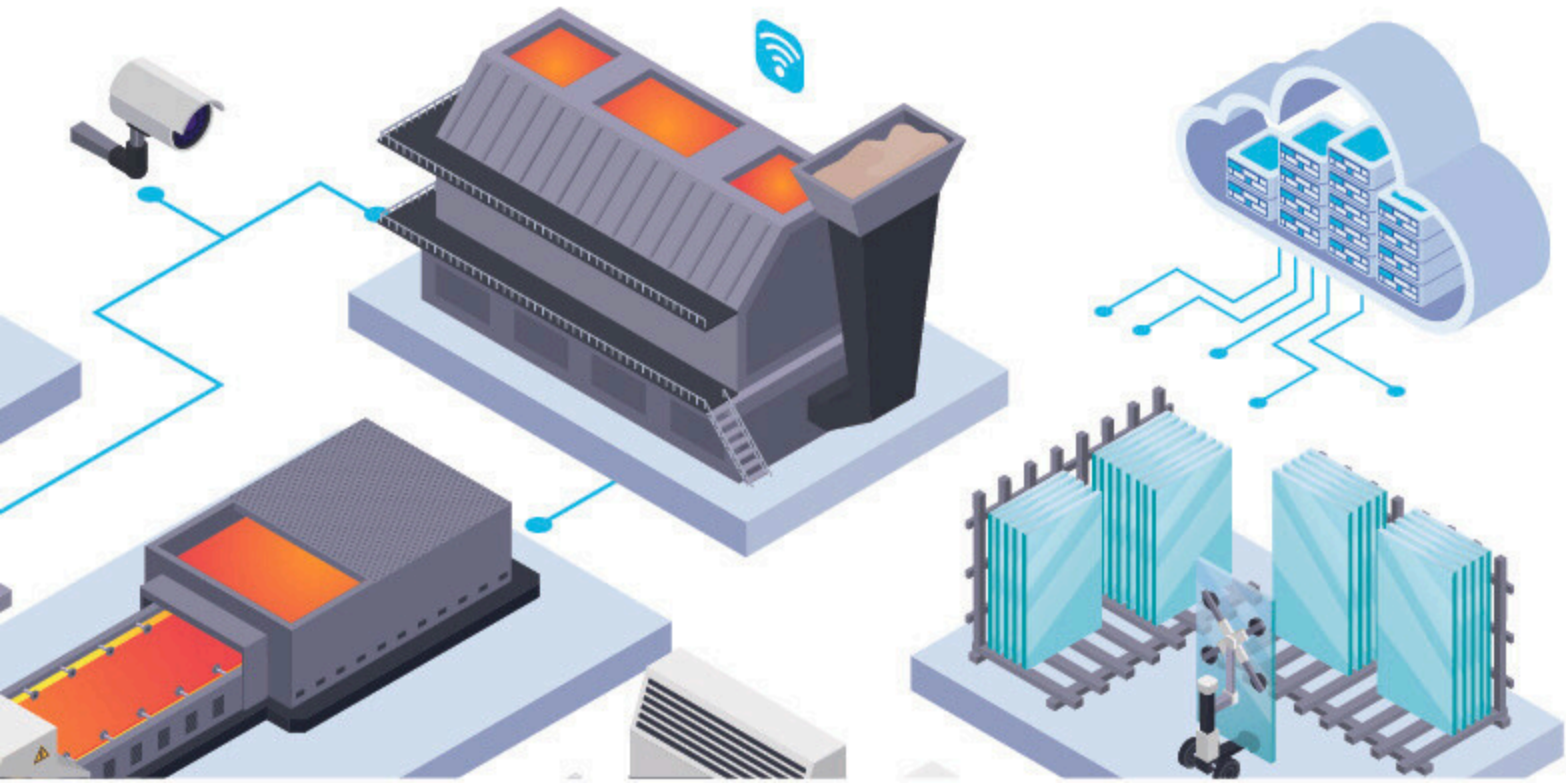




# FROM THE PLANT TO THE CLOUD

## GLASS INDUSTRY



# GLASS PRODUCTION



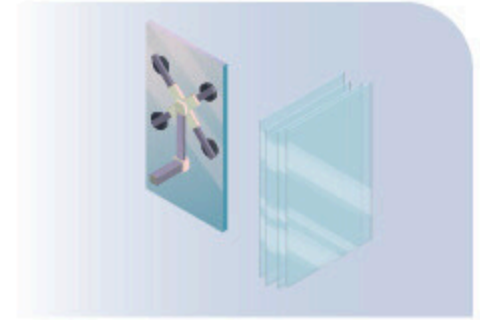
Solutions for production of:



Hollow  
glass



Glass for  
special purposes



Flat  
glass

**Tailor-made  
sensors for:**

Temperature  
Pressure  
Conductivity  
Energy

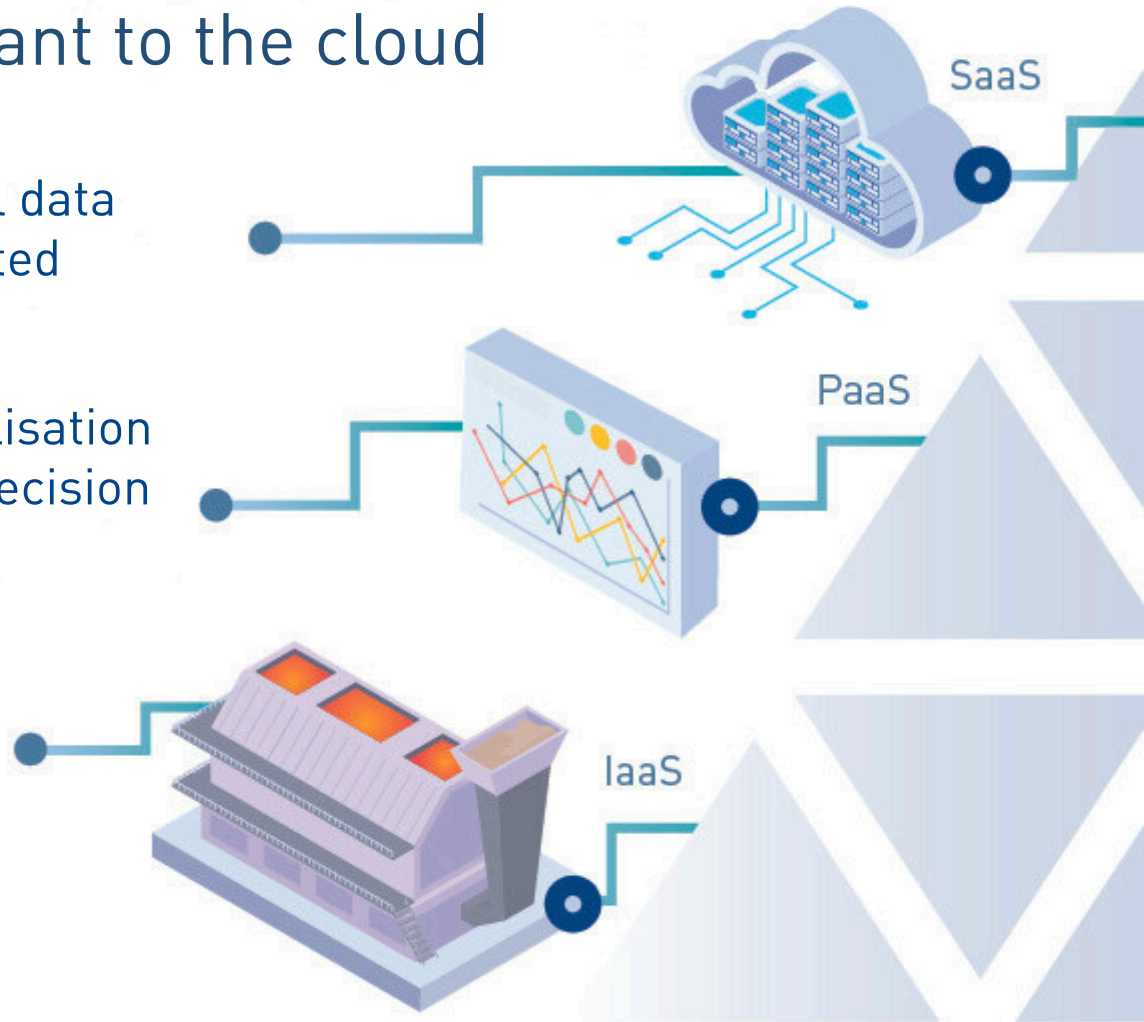
Flow  
Humidity  
Glass level  
Oxygen

# GLASS PRODUCTION



## From the plant to the cloud

- Your historical data always protected
- Intuitive visualisation for accurate decision making
- Customised sensors



# DATA: Wherever you need it

✦ 1 Need, 2 solutions

## JUMO CLOUD



- Automatic update
- 99% availability
- Backup and protection

\*JUMO server

VS

## JUMO smartWARE-SCADA



- Software update service
- Availability
- Backup & security by customer

\*Server by customer

# DATA: Visualisation

in glass production

# Connections

OPC UA / DA  
PROFINET / PROFIBUS  
Modbus TCP / RTU  
Beckhoff ADS.NET  
IEC 60870-104  
IEC 61850  
M-Bus  
KNX  
MQTT 3.11  
REST API  
SQL-, CSV-Import

- 1- Record or trend
- 2- Signal legend
- 3- Online visualisation
- 4- Process template
- 5- Location on map



# DATA: Display

Specific sensors for measuring in direct contact with glass

Customised  
manufacture:

- Material
- Diameter

Sensor versions  
up to 1,600 °C

The protection tip can be  
made of:

- Stabilised platinum
- PtRh 10%.
- Customised to measure  
glass temperature by  
contact.

Types of thermocouples:  
K, S, R, B, N



Sensors and service  
**100%** customised





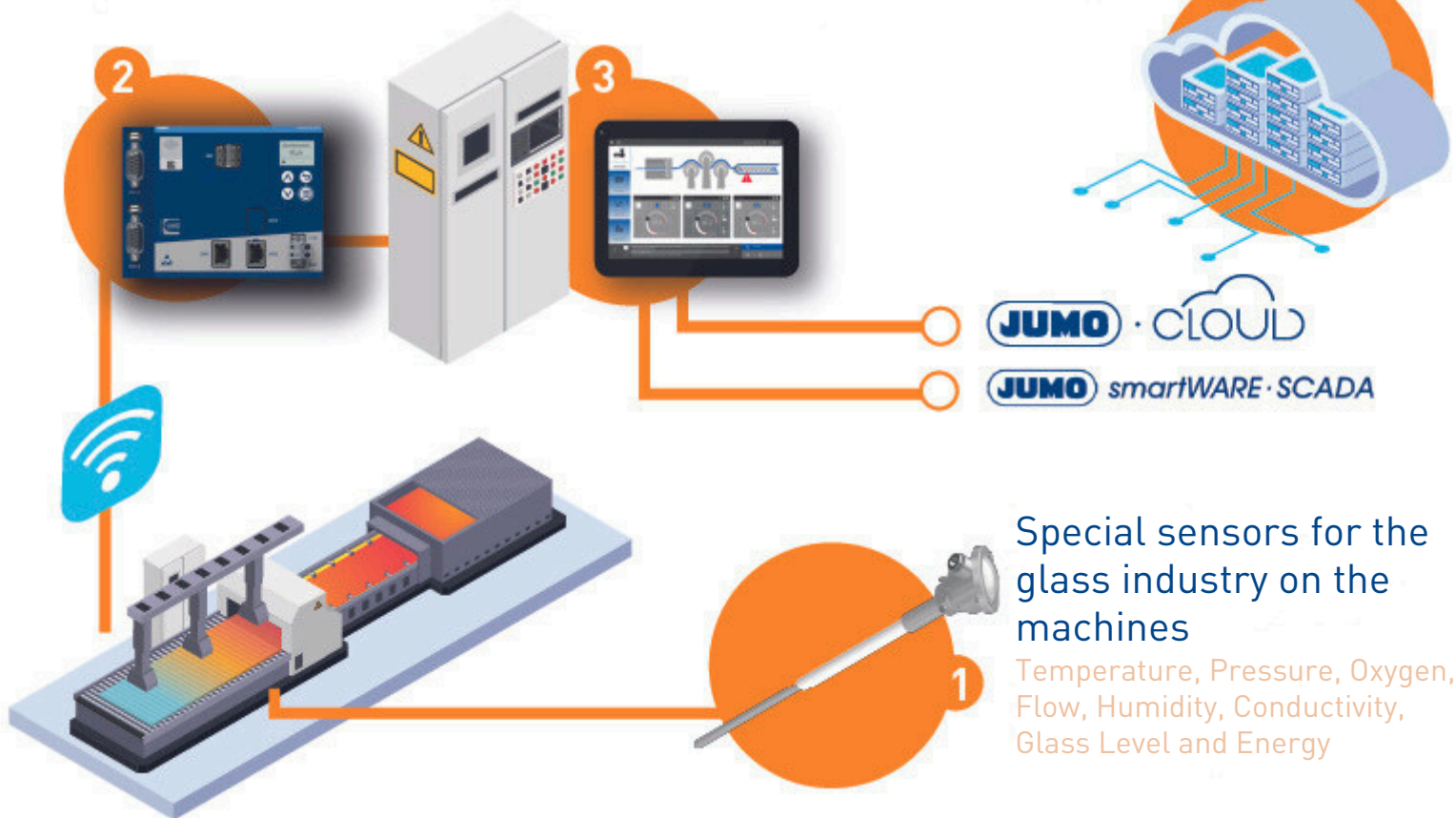
# APPLICATION: GLASS



Automation  
equipment

Interface (HMI)  
Human Machine  
Interface

Data storage and  
management



# COMPLETE SOLUTION



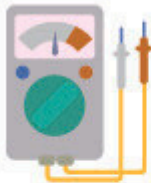
Installation and/or  
supply of electrical  
cabinets



Control  
engineering



Electrical  
installation  
service



Field calibration  
and adjustment  
service



Start-up

Fully  
**personalised**  
service





# MORE INFORMATION...



Complete brochure



Want to know more?

Write to us and we will  
send you the complete  
manual on:

**“The glass industry”**

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