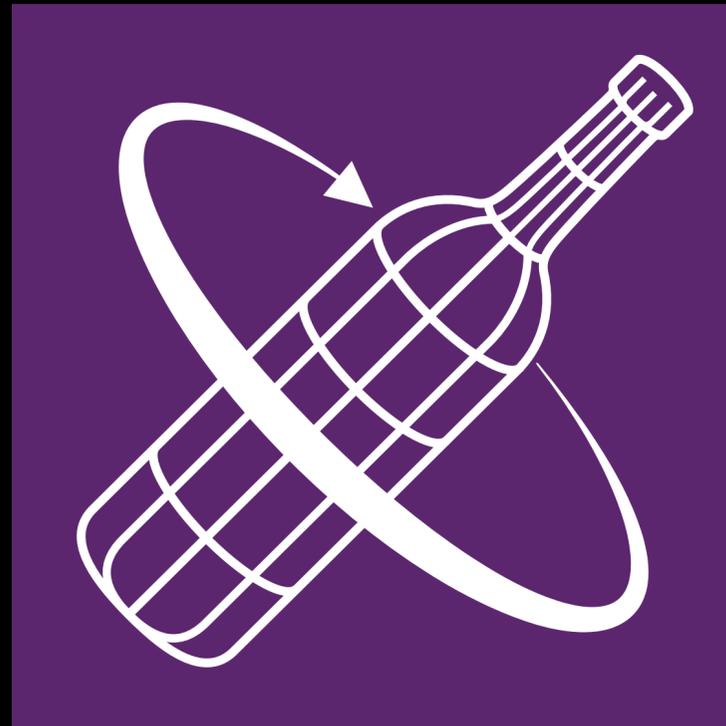


tiamma



**Xlab**

The Revolutionary 3D Sampling Solution

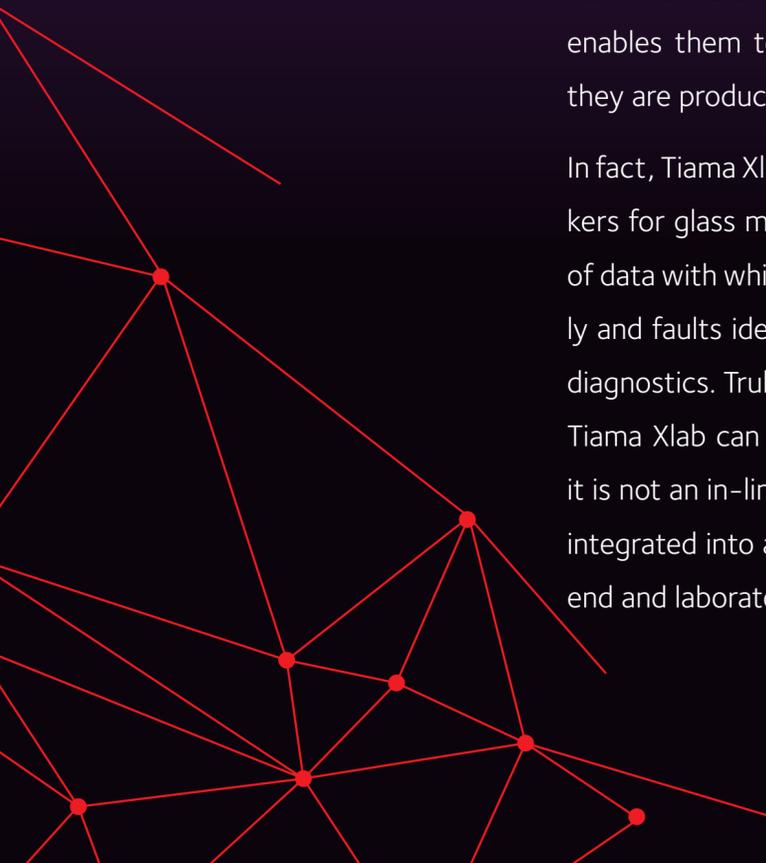


## Turning virtual reality into reality.

---

At Tiama we are convinced that data drives productivity. To us this means more than scratching the surface when it comes to disseminating information. With Tiama Xlab, our vision is to provide glass makers with a tool which enables them to know everything about the container they are producing.

In fact, Tiama Xlab is the solution designed with glass makers for glass makers: automatically generating a wealth of data with which tolerances can be defined more exactly and faults identified quickly resulting in more efficient diagnostics. Truly production-oriented and user-friendly, Tiama Xlab can be operated by any operators and since it is not an in-line system it has the flexibility to be easily integrated into any existing process, at the hot end, cold end and laboratory.



Is it empty?  
**No. It is full of information.**

Tiama Xlab is the system that makes more data more readily available.



It is said that true beauty  
comes from within.

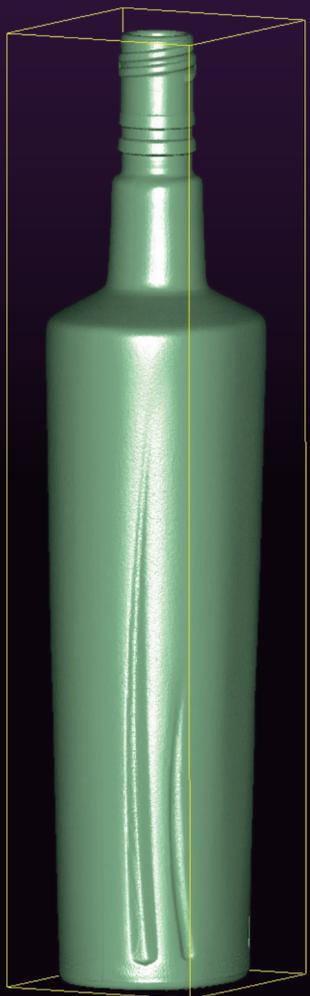
---

With that in mind the Tiama R&D Team took its inspiration from several state of the art technologies and decided that the only way to really “see inside” the container was to generate a three-dimensional scan but then they went beyond that. The result: a non-contact (and therefore non-destructive) external and internal measurement system.

Tiama Xlab generates a full 3D image composed of millions of facets that can be freely rotated. This means that you can quite literally see right into the container since the 3D model can be “dissected” from all sides and at all points. Volume, capacity, vacuity, diameters and angles can be measured as well as thickness fully mapped. Engraving and embossing can also be analysed and, what’s more, the inspection of practically all container types and shapes is possible.



Exploring inspection  
in more depth than  
ever before.



## Where other solutions reach their limits, the Tiamo Xlab potential begins

---

Think of Tiamo Xlab as a full laboratory taskforce in one machine to automate complicated quality control operations. This means that it can replace many existing systems. It's a smart solution that provides far more data than ever before: a mine of information to help glass makers optimise their quality control from the first containers produced to ongoing routine checks and individual control, or to validate new container models from the start.

While current technology automates basic inspection, Tiamo Xlab is a new generation system that supports the quality and production personnel with their most complicated operations and, while their expertise in diagnostics and countermeasures remains important, it greatly reduces human error.



Seeing the container like never before – and working with it.

# Why Tiama Xlab?

---

On the surface it may seem that current monitoring and inspection systems cover the entire spectrum but Tiama Xlab goes way beyond these limits because it

- is production and quality-oriented, flexible and user-friendly
- allows for non-contact & non-destructive 3D measurement
- has no constraints in terms of container shape or colour
- is Smart Factory connected with automatic reporting and production recording
- eases job change ramp-up, countermeasures and new products validations thanks to comprehensive benchmarking
- features external and internal modelling and measurement
- also measures virtual volume, capacity, and vacuity
- facilitates fast identification of faulty areas, leading to rapid diagnostics
- aids global diagnostics through easy access to almost limitless measurements



Getting to the bottom  
of things for you.

## Contribution to process control and the YOUniverse

---

There is a fundamentally deeper level to Tiama Xlab. The data captured can be fed into the YOUniverse system which, in turn, will help your system run more effectively. Tiama Xlab features automatic reporting, advanced data analysis for statistical process control (SPC) that can be cross checked and will supplement data from existing hot and cold end systems. Production can be recorded, which means that current samples are saved and the 3D images of containers can be imported and exported. Tiama Xlab delivers detailed data for new container validation – also recorded for future reference. The result: increased productivity, higher quality and, what may even be more important, a positive effect on the environment thanks to more efficient production and the saving of resources.

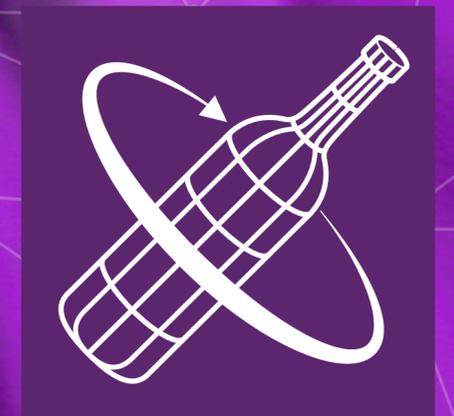


Real-time Process & Quality Controls

ZA des Plattes  
1 Chemin des Plattes  
69390 Vourles  
France

## Data – the deciding factor

tiama



Xlab