



VULQ1 Multibeam Laser marking systems

The fastest permanent marking solution in the market



Florent THIBAULT - QiOVA
EPIC OTM Improving pharma processes



QiOVA in a nutshell



Incit'financement
Auvergne-Rhône-Alpes



2011

Founded, pioneering multibeam laser technology application to material processing

2021

Raised 1,3M€ to boost deployment of multibeam solutions into the market

2022

Award Winner – Laser system for industrial production engineering

2022

Eurostars project laureate « BrandGuard » (500k€)
To market novel high security marking system

2023

France 2030 laureate
Individual project (800k€)
Smart laser tools for the industry of the future

2024

Serie A 2,25M€
Industrial group leading round

Releasing VULQ1 Module Gen1

First OEM beam shaping module in the market

2015



Releasing VULQ1 Module Gen2

2022



Horizon Europe project « OPeraTIC » (500k€)

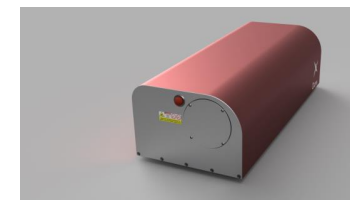
To develop high throughput laser surface texturation

2022



VULQ1 Multibeam laser
Standard offering

2023



Strategic partnership with Neyret Group – focus on multibeam solutions for Luxe segment

2023



Innovative laser solutions for a better manufacturing

Since 2011, QiOVA is a pioneer of **multibeam laser solutions** for **late-stage personalization** of industrial goods

Surface treatment



Sustainable decoration, functionalisation

Sectors :
High end beverages, cosmetics, automotive

Internal product traceability (B2B)



Track&Trace, anticounterfeiting

Sectors:
Pharmaceuticals, medical, electronics, beverages

External product traceability (B2C)



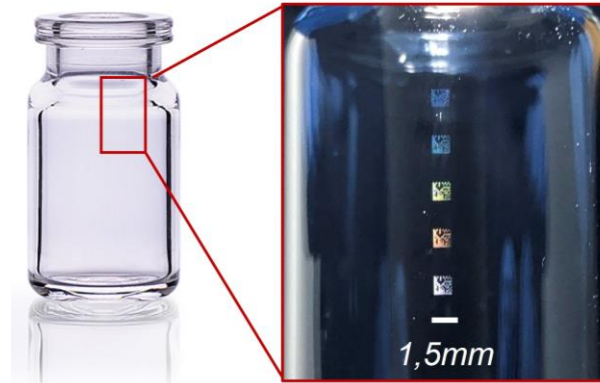
Digital marketing, Digital Product Passport

Sectors:
Luxury goods, durable consumer goods, electronics

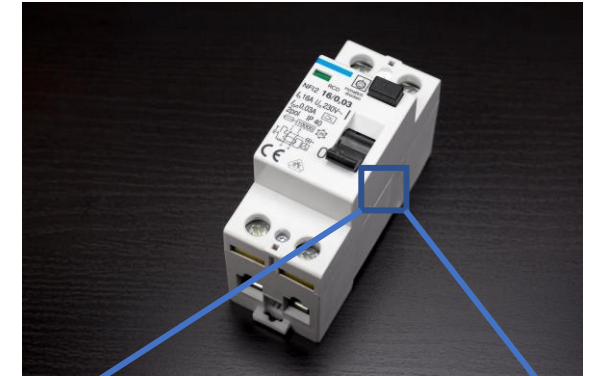
Industrial applications



Sustainable glass decoration
New design possibilities,
permanent, no addings
5x faster than standard laser



Serialization of pharma glass packages
Permanent, seamless
integration in-line
72 000 parts / hour

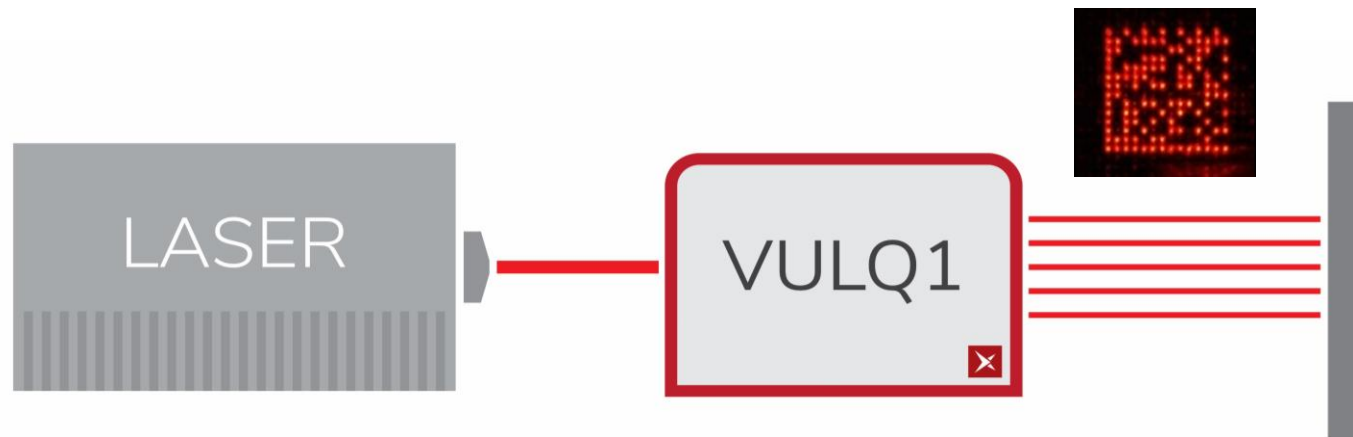


Serialization of polymer fuse breaker
4x faster than current UV
laser marking
14 400 parts/hour

Our innovation: programmable multibeam laser processing



Standard laser processing
Sequential, like a pen on a sheet of paper



Programmable multibeam laser processing
Dynamically parallelized, like a digital mask approach

Faster
Finer
More efficient

An unique offer of products and expertise to deliver superior industrial solutions

Pre-sales service

Defining custom solution

- ✘ Feasibility studies
- ✘ Application development
- ✘ Pre-series



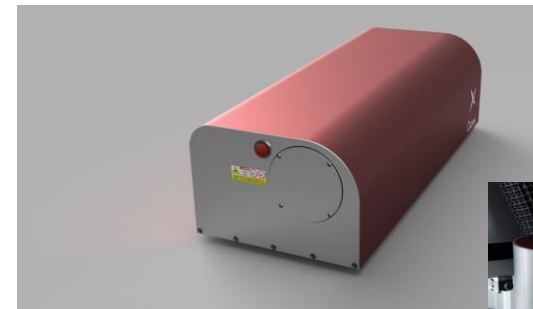
VULQ1 Multibeam OEM offer

Delivering higher performance

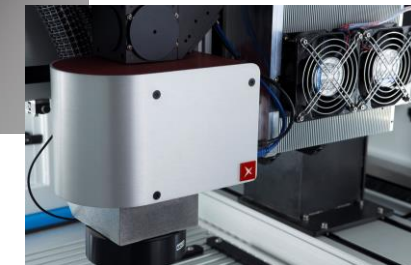
- ✘ Manufactured in our factory
- ✘ Standard and custom OEM systems
- ✘ Retrofit/integration in environment



OEM Module



OEM Laser marking systems



After-sales service

Maximizing uptime

- ✘ Maintenance
- ✘ Warranty extension
- ✘ Contracted services



Some customers and markets we serve



TISSEUR D'INNOVATION



Industry

Pharmaceutical
Biomedical

Luxury market

Aeronautics
Automotive



Pharmaceutical sector

On-the-fly serialization applications



Industrial use case: in-line serialization of insulin cartridge

Need and context

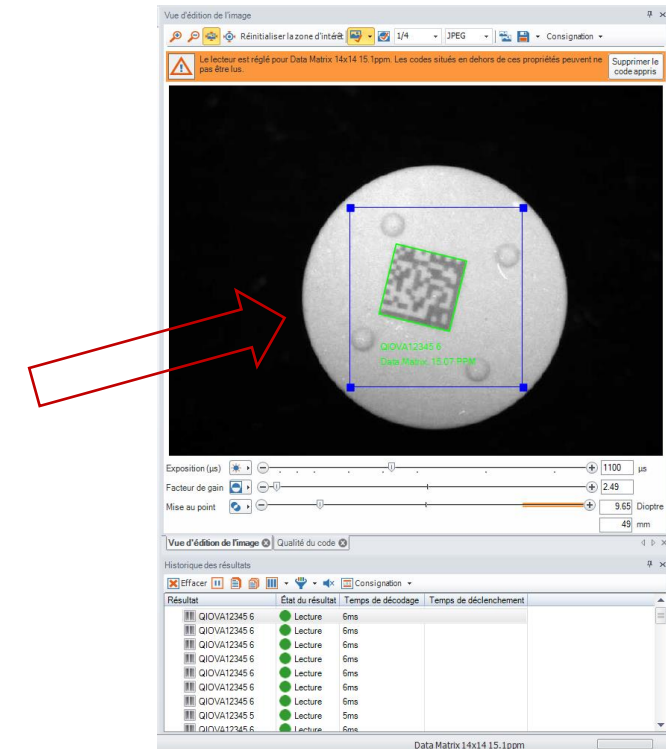
- Unitary identification of multi-purpose pharmaceutical containers
- Strong ramp-up in line capacity requested by market

Current solution

- In-line CO2 laser marking on the rubber plunger
- Quantity of encoded information limited by marking time, incompatible with individual product traceability

Advantages of VULQ1 vs. current solutions:

- **Simple integration : one laser pulse = one code marked**
- Data storage: DM 14x14 codes, i.e. 5x more data stored
- Serialization rate: tens of unique codes per second
- No debris: avoids unplanned line stoppages



Serialization of syringes with RNS end marking

MATERIAL:
• Polypropylene

DM14x14 GS1 code:
• 1mm

- Laser process:**
- PIXEL-STAMP
 - FS NIR laser



For Pharmaceuticals

- Marking in 30ms, robustly readable with industrial vision
- In-line integration possible with depth of focus 4mm
- Femtosecond laser favored to ensure homogeneous marking characteristics vs supplier/batch material composition difference

Individual traceability of medical glass packages

MATERIAL:

•Borosilicate glass

2D CODE TYPE:

•GS1: 10 digits, DM14x14

COST PER MARKING:

•0,2c€/marking



For Pharmaceutical market

- 20 unique codes per second for serialization
- Semi-invisible marking: no perturbation to in-line screening
- Direct cold marking, without micro-cracking, 2,5mm depth of focus

What can we do for you ?

Actively contribute to achieving your vision of a better manufacturing, using lasers

What can you do for us?

1- Talk about QiOVA and our solutions (preferably in a positive way)

2- Let us know at sales@qiova.fr
about high volume industrial marking projects
where the right technical solution is being debated

Thank you for your trust !

**If you have any questions, we
will be happy to answer them.**

QIOVA SAS

**828 rue Adrienne Bolland
ACTIPARC**

42160 Andr zieux-Bouth on, France

Tel: +33 (0)4 77 93 71 85

E-mail: info@qiova.fr