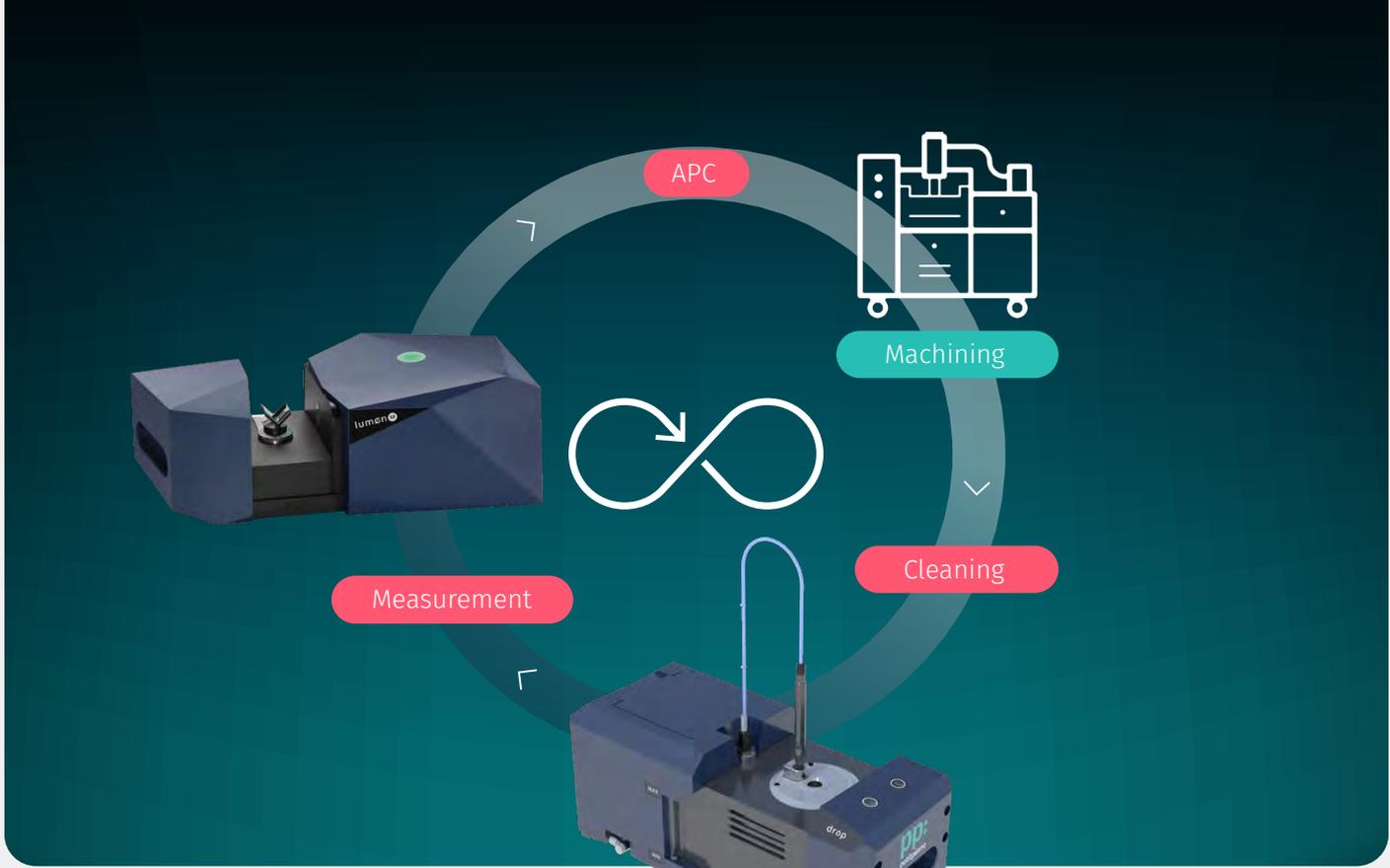


pp:  
petitpierre

• lumøen

PRODUCTION  
CONTROL 4.0





# Make your production autonomous



## Increase productivity

Optimize your production cycles and reduce your costs



## Faster setup

Fast inspection allows for adjustment of the first parts



## Drastically reduce scrap

Anticipate defects and adjust your production parameters in real time



## Quality Improvement

Ensure consistent quality that meets your specifications



## Simplify your quality control

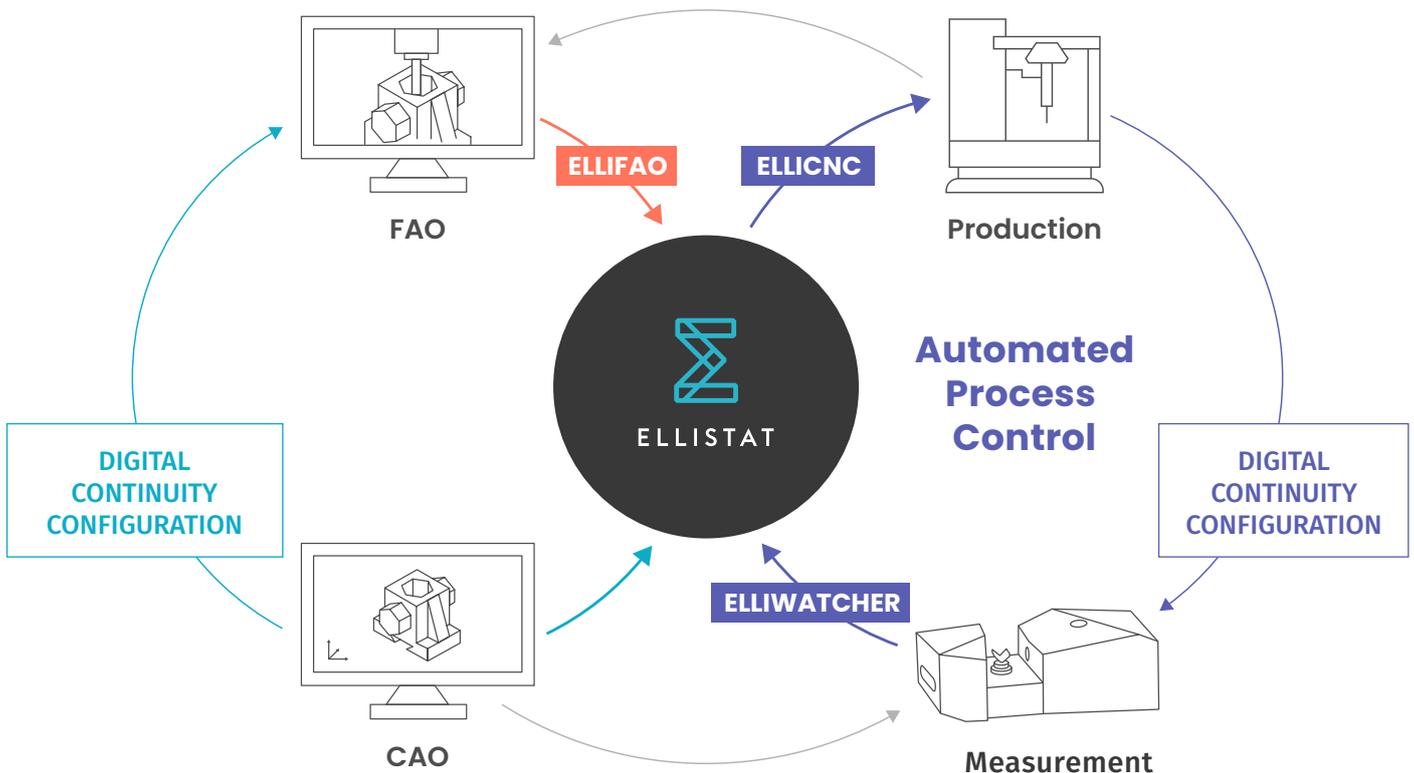
Automate your measurement and analysis processes

# 1 Machine park networking

lumen allows you to measure your shafts, gears, screws, gauges, pinions, spirals, moving parts, connectors, and many other components to ensure production is focused on your most critical dimensions.

After machining is completed, the part is cleaned with drop and then measured using lumen, handled with an air gripper. The corrections are then sent to the machining machine via a quality software system to adjust the setup or production process.

We support you in setting up the control system for your machine park, with one lumen being able to control multiple turning machines via Ellistat, for example.



# 2 lumøn

lumøn is a state-of-the-art optical instrument for the instant measurement of microcomponents. Its compact size of 40x15cm and ease of use are designed to help you control your production and support quality control.

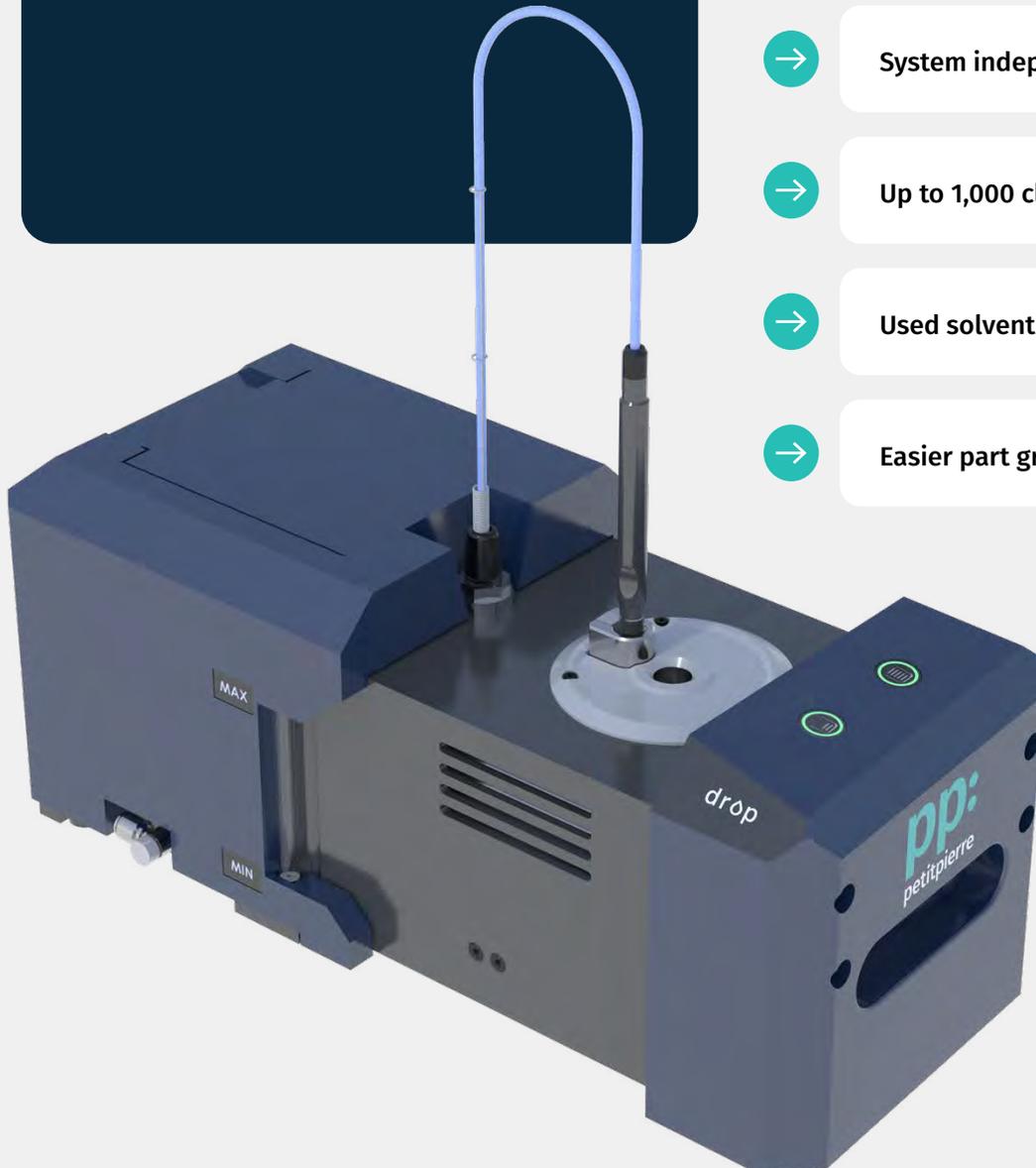
## Our advantages:

- Robustness in the workshop environment
- Automatic part recognition, control via DXF
- Accuracy up to +/-0.6  $\mu\text{m}$  - Repeatability up to 0.3  $\mu\text{m}$
- Field size up to 16.8 x 12.6mm
- Two measuring positions for flat and revolved parts
- Instant and stress-free part positioning
- Interchangeable fixtures, networking programs
- Intelligent monitoring of the cleanliness of the measurement area
- Measurement monitoring via periodic inspection of a certified gauge



# 3 drop

In combination with our unitary cleaning system, Drop, production monitoring is optimized in near real-time. This device, as compact as a Lumen, ensures the transition from the machining machine output (oil, chips) to optical measurement (clean environment) by cleaning the part and the air probe at each cycle.



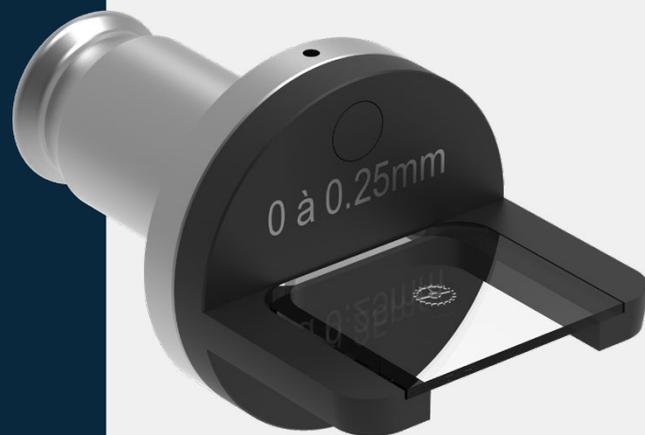
## Our advantages:

- Programmable cycles with part cleaning and drying
- Repeatable cleaning with solvent always clean
- Reduced use and interaction with the solvent
- Parts ready for optical measurement in the workshop: clean and dry
- System independent of the air network
- Up to 1,000 cleaning cycles
- Used solvent recovery
- Easier part gripping with air stylus

ATEX certified

# 4 Fixtures

The simplicity of the lumen is based on a telecentric optical system with a fixed focal length. Our fixtures are pre-adjusted at the factory and require no alignment. You simply place the part on the appropriate fixture to start the measurement. Changing fixtures is quick, and the lumen can be easily positioned horizontally for rotary parts or vertically for flat parts, making the device versatile for many applications.



Flat fixture



Vé fixture for revolution parts

## Our advantages:

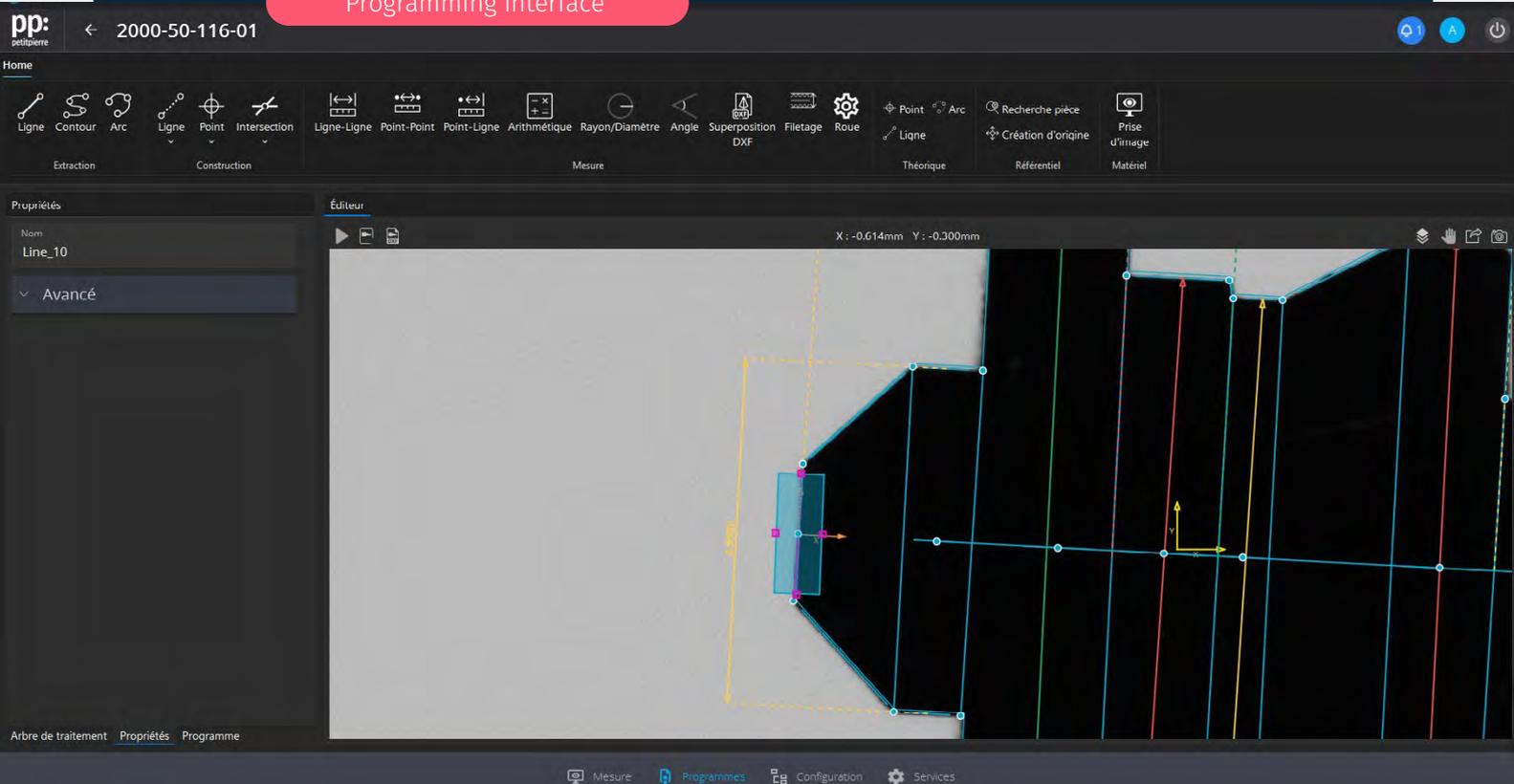
- Interchangeable fixtures
- Intuitive part positioning by gravity
- No adjustments
- Wide range of standard fixtures
- Specific developments for your most demanding parts
- Easy cleaning

# 5 Interfaces

## Programming page:

Thanks to a simplified programming interface, you can quickly program your part. Programs can be cloned, programmed offline, and exported to the network. The clean interface is user-friendly and highly intuitive.

Programming interface



## Nos avantages :



Intuitive programming



Automatic mode for thread and wheel



Fast programming time



DXF overlay



# 6 Benefits for your business thanks to a unique synergy



## Increased productivity

Optimize your production cycles and reduce your costs



## Digital Sovereignty

Your machines, your data, your network: everything is hosted on your premises



## Accelerated setup

Fast inspection allows for the adjustment of the first parts



## Precise measurement

lumen detects the slightest dimensional variations in your parts



## Drastically reduces scrap

Anticipate defects and adjust your production parameters in real time



## Measure quickly

lumen measures all external dimensions instantly



## Improved quality

Ensure consistent quality that meets your specifications



## Analyze in real time

Ellistat collects and analyzes measurement data to detect trends and anomalies



## Simplified quality control

Automate your measurement and analysis processes



## Automatically adjust

Corrections calculated by Ellistat are transmitted to the machine tool for automatic adjustment