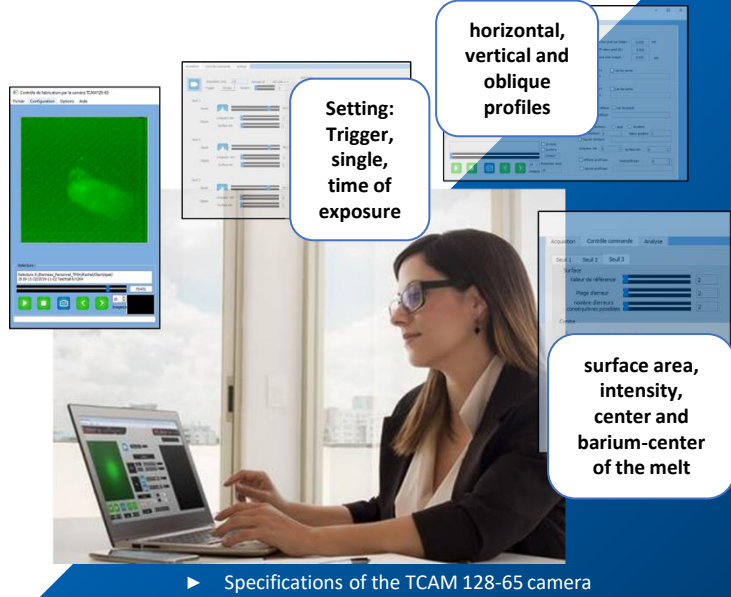
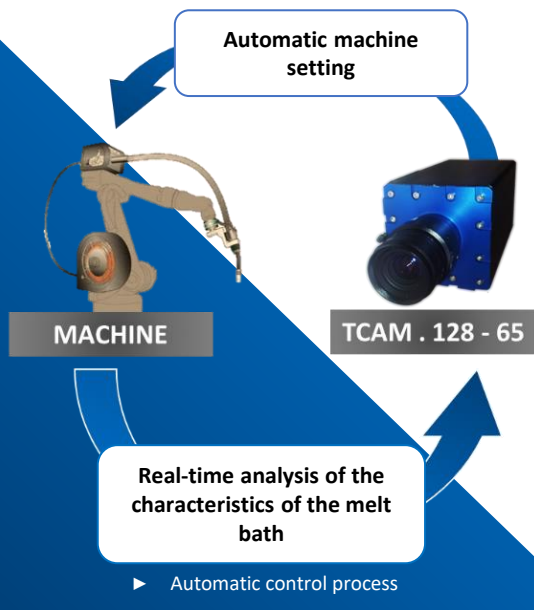


## REAL-TIME PROCESS CONTROL CAMERA FOR WELDING AND ADDITIVE MANUFACTURE.

### The TCAM128-65<sup>©</sup>

TPSH has developed within the context of the FALAFEL project and after 5 years of R&D, a SMART infrared camera, TCAM 128-65©, allowing real-time control of the physical parameters of the melt for :

- ▶ YAG - TIG - MIG - MAG - LASER - FSW welding,
- ▶ LM and DMD additive manufacturing

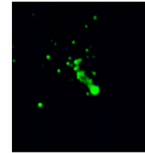


### SPECIFICATIONS

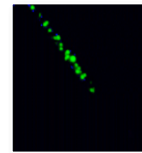
- ▶ Real-time control of the machine on the camera measurement data (feed, power, distance)
- ▶ Integrated processor capable of real-time analysis of the bath condition by 200 Hz image processing
- ▶ Image synchronization with machine parameters



**Optimal conditions**



**Wrong power / speed ratio**



**Poor focus**

### advantages

- ▶ Real time NDT,
- ▶ Strong reduction of post-processing control of the workpiece and uncontrollable areas with conventional NDT methods,
- ▶ X-ray control or localized tomography at the end of manufacture,
- ▶ Turnkey system easy to integrate into a machine,
- ▶ In-process control of the production process,

### benefits

- ▶ REAL-TIME MANUFACTURING ANALYSIS
- ▶ INDEPENDENT CONTROL SOLUTION
- ▶ QUICK AND EASY TO USE
- ▶ CUSTOMIZABLE HMI



# SOLUTION FOR FACTORY 4.0 | 5.0 INNOVANTIVE TECHNOLOGIES

# TPSH

GATE INNOV GROUP

For nearly 30 years, we have been working on technology developments by automating the controls of large industrial companies to increase their productivity and improve the quality of deliverables. Our objective is to assist the operator in the visual control phases using robotics/cobotics and automatic control. Our systems allow us to reduce exported non-quality, participate in the reduction of MSD (Musculoskeletal Disorder) related to painful and repetitive manual tasks and ensure the traceability of the results in all transparency.

