

Project idea/ Field of expertise:

Expand industrial facilities to gain confidence in process quality of composite parts

Organisation Name:

Université de Nantes

Adressed challenge(s)/ PPP(s):

Factory of the Future (FOF)

Adressed topic(s) in Work Programme:

DT-FOF-11-2020

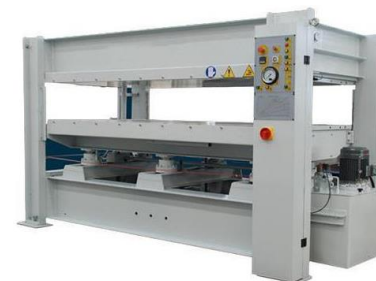
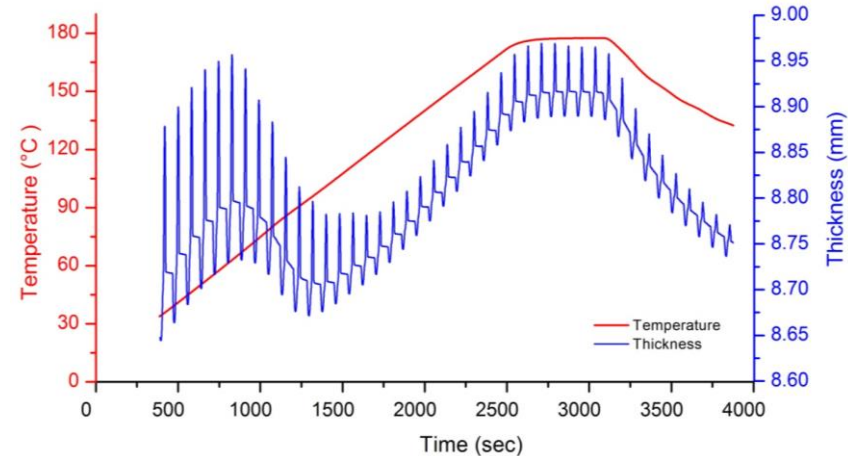
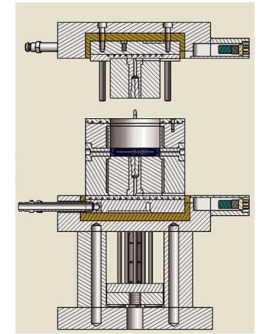
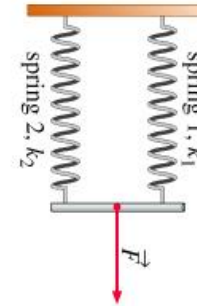
Quality control in smart manufacturing (IA).

Université de Nantes/France

- **Academic Ranking World Universities:** it stands out in material science engineering (top 300)
- **I-Site** (Initiative- Science - Innovation - Territories – Economy) label
- Excellence recognition for “industry of the future” topic
- Past experience in EU-funded projects : 36 funded H2020 projects, (incl. 11 coordinations):
 - [CompOLEDs](#) (H2020-MSCA-IF-2015)
 - [NDTonAIR](#) (H2020-MSCA-ITN-2016)
 - [X5gon](#) (ICT-19-2017 - Media and content convergence),
 - [TAPAS](#) (SFS-11b-2015 - Consolidating the environmental sustainability of European aquaculture),
 - [COROMA](#) (FOF-02-2016 - Machinery and robot systems in dynamic shop floor environments using novel embedded cognitive functions)
 - [RODEO](#) : (JTI-CS2-2016-CFP03-AIR-01-17 - Orbital Drilling of small (<10mm diameter) holes, standardly spaced with aluminium material in the stack)
- Relevant partnerships with AIRBUS GROUP, SOLVAY and SMEs
- 2 Labs involved in the development of the expertise (international recognition):

Our expertise in Composite Materials Processing

- Academic work basis (specific):
 - Achieved with top level companies in composite materials manufacturing,
 - 2 PhDs, 6 scientific publications (2008-2019),
 - Keywords : Cure kinetics, residual stresses, thermosets, thermoplastic.
- Expand industrial facilities capabilities to:
 - Feed big data,
 - Gain confidence in process quality,
 - Correct process setpoints in real time.
- Why ?
 - Expertise in data accuracy and precision,
 - Need to re-design industrial facilities in terms of actuators and sensors able to play new and expanded scores,
 - Ready for business case TRL 5-7.



Contact details



Contact person	Pascal CASARI
Organisation	Université de Nantes
Adress	IUT de ST-Nazaire – 58 rue Michel Ange 44600 SAINT-NAZAIRE - FRANCE
Phone	+33 272 648 762
E-mail	Pascal.Casari@univ-nantes.fr