simulate the plant of the future: from the microscopic to the macroscopic scal

Catherine Sanjeu c.sanjeu@armelio.com with Armélio, Dare to face the future !

Our Team

We are a group of engineers, computer scientists, mathematicians & physicists



the successive steps for the virtual construction of the process and the plant Our customer's input data



Plant surfaces Regulatory requirements



Design, raw material Manufacturing process (T°, duration,...) Final properties (HV, Rm, lifetime,...)

Our know-how : deliver the digital twin of the process and the virtual factory











Step 2 : the microscopic scale of physicochemical simulation (mm)







Step 3 : simulation study on a scale of 1 of the means of production (cm)

>The production objectives are known

Operating Efficiency : 85% ; Opening time : 24/7, MTBF of each machine : 500 h, Total production of parts per year : 95 000



Step 3 : simulation study on a scale of 1 of the means of production (cm)

The quality objectives are known homogeneous temperature on all parts, air velocity field, …



Stpe 4 : verification of the production capacity (m)

The model takes into account production failures and contingencies The workshop surfaces are optimized



CRÉATIVITÉ INDUSTRIELLE

Step 5 : The process is automated (m)

All the times of the operations are precisely defined (storage, handling, drying,...)





You can send all your question to

factoryboost@armelio.com

