

THE VIRTUAL FACTORY & INDUSTRY 4.0



WHAT IS « INDUSTRY 4.0 » ?

Industry 4.0 means « **smart factories** », a new way of organising that better serves the customer through increased flexibility in production and the optimisation of resources. To be ready for this revolution, it's vital to have a complete and coherent 3D virtual product / process model, fully digitised and shared with all departments. The purpose of **Industry 4.0** is to provide a global overview of production, from processes to resources, without being limited solely to the product.

TYPES OF SERVICES

- Production line and work station design,
- Resource modelling (3D cinematic simulation),
- Validation of assembly methods, manual operations and mechanical and material-handling equipment,
- Robotics simulation (capability, accessibility, cycle time, interlock...),
- Validation of procedures, guaranteeing safety and ergonomics,
- 3D interactive documents on assembly processes.

OBJECTIVES

- Virtually design and validate manufacturing processes dynamically and in 3D,
- Simulate system changes, new products and the addition of new lines,
- Model the manufacturing processes, simulate modifications offline,
- Reduce the risk of production changes before implementation,
- Optimise industrial processes by simulating multiple production scenarios,
- Capitalise on the knowledge contained within the model and encourage discussion within the business.

SIMULATION SOFTWARE

- PROCESS SIMULATE (Siemens) for PLM TEAMCENTER,
- DELMIA et CATIA V5 (DASSAULT) for PLM ENOVIA.