SOLUTIONS for an INNOVATIVE INDUSTRY

WEARE Group is focused on high technical detail parts and sub-assembly manufacturing.

We create innovative solutions built upon:
- High value added technology and services
- Multi-materials and multi technologies offers

We serve our customers through competitive solutions.

Let's build together the next success stories.
More than 27 plants & 4 PARKS (+2 future parks)

A global footprint through industrial parks implementation.

NORTH AMERICA
Long term - Park future

EUROPEAN Park
- France
- Spain
- Germany
- United Kingdom

INDIA
Park future
Short term

GULF Park
- Egypt
- Qatar
- Dubai

PACIFIC Park
- Singapore
- Malaysia

HUB North
Japan:
- Tokyo
- Nagoya
- Vietnam
- Thailand

HUB South
- Singapore
- Malaysia

WeAre CHINA

North AFRICA Park
- WeAre Morocco
  - Tanger
  - Rabat
  - Casablanca
  - TUNISIA

WeAre Morocco

WeAre aerospace

Let’s build together the next success stories

* Opportunities in study
Technology

Turning

Milling

Additive

2019
WEARE Group (worldwide)

35%
11%
1%
53%

Milling
Turning
Sub assy
Additive

Let's build together the next success stories
ADDITIVE MANUFACTURING WORK FLOW

- MATERIALS
- DIGITALISATION
- SIMULATION
- TOPOLOGY
- Additive Manufacturing Prototyping, Serial production
- Post Process Analysis
- Mechanical TESTING
- Digital Thread & Security of data
- R&D support & Incubation program
The process of Optimization

- Original Part CAD
- CAE study of Original part
- Design space creation
- Load case application
- Optimization Process
- Optimization result Extraction
- Trade Off Studies
  - Validate the CAE result
  - Manufacturing process Compatibility
  - Cost effective design
  - Alternative material analysis
  - Create multiple alternative designs
- Push and play on GDE
- Optimization result
- Extraction
- Redesign of the extract
- Validation of the redesigned part
- Optimized Part CAD
- Comparison with Original part CAE
- Push and play on GDE

Generative Design Engineer

Trade Off Studies:
- Validate the CAE result
- Manufacturing process Compatibility
- Cost effective design
- Alternative material analysis
- Create multiple alternative designs
Case study Additive

Aerospace Sector

- Design to manufacturing
- Specific (in-house) process development
- Full product qualification

First flight on A380 MSN 1
In display at Bourget 2017
Case study Additive

Tooling Sector

Global:
22 Components
4,71 Kg
6 Weeks lead time

Let's build together the next success stories
Tooling Sector

Study summarize

Original Tool Assembly Analysis

Optimization & Design

Stress Validation

Prototype & Test Validation

Let's build together the next success stories
22 Components
4.71 Kg
6 Weeks

3 Components
1.59 Kg (-66%)
1 Weeks

Integration of Pressurized Air System
Automotive Sector

Case study Additive
CASE STUDY 2:
Topology optimization of a boring tool

In partnership with

Let's build together the next success stories
Case study Additive

Tooling Sector

Machine tool holder

Additively Optimized Cutting Tool

Aluminum Boring cutting tool
Automotive Sector

Case study Additive
Generative design for Mold manufacturing

Original Product

Augmented Optimized part

Additive Manufacturing Casting Mold with complex coolant circuits

Complex Coolant circuits for better thermal exchange

Let's build together the next success stories
New lattices structure R&D
Conclusion
How can Additive Manufacturing bring an additional value to Automotive Industry?

The enhanced production by combining Additive Manufacturing & Conventional Manufacturing

Courtesy: MIT