



MANUFACTURING SME AND CHALLENGE

Bouma SA is a Paris Region based precision engineering family SME created in 1969 with 20 employees. In almost 50 years of sustainable activity the company has been able to adapt to changing markets and technology evolution. High reputation has allowed to serve top tier customer in aeronautics (UTC-Goodrich, Safran) and health instrumentation (GE).

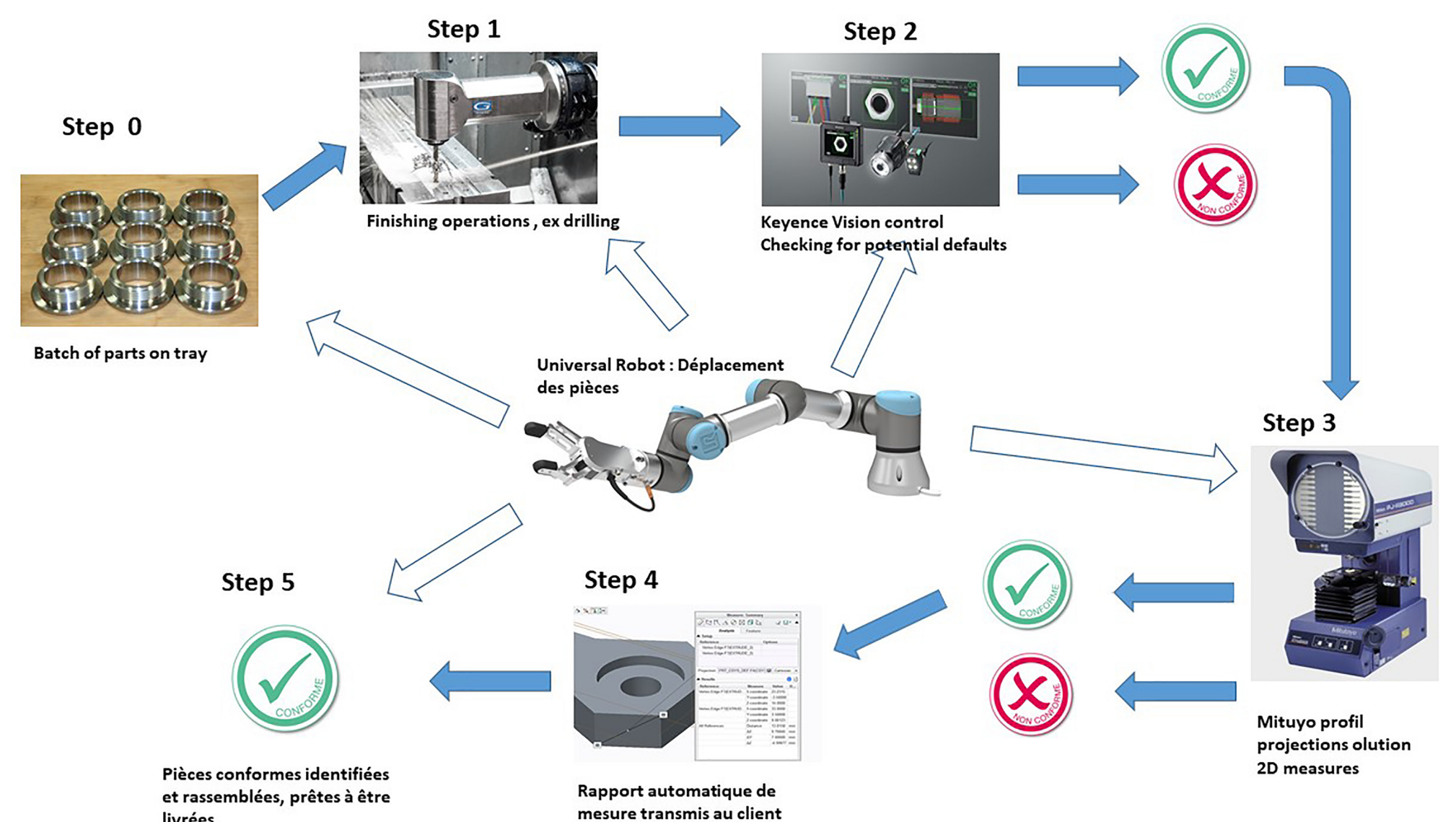
Challenge:

- Increasing demand from customer of data in the integrated aeronautics (AIRBUS) subcontractors' ecosystem
- Need to improve Outgoing QC process, provide more data, transfer to Tier+1 customer in a digitized standard format
 - ✓ Implementation of Robotic Arm to increase Outgoing QC productivity
 - ✓ Implementation of new Metrology equipment
 - ✓ Generate digital QC reports for Customer

SOLUTION: ARCHITECTURE AND COMPONENTS

Main inputs from MIDIH:

- Major move from fully manual QC process to semi automatic process allowing digitalization of QC data for each batch.
- Standardization of QC report format
- Prepare for future requirements of ecosystem data governance initiatives :
 - ✓ International Data Space
 - ✓ BOOST Aerospace standard (inside AIRBUS ecosystem)



BENEFITS AND LESSON LEARNT

Digitalization of QC operation:

- ✓ Implemented with success



Standardization of QC data :

- ✓ Still need maturation
- ✓ Major frameworks (Boost Aerospace, IDSA) still need adoption

OUTLOOK

Immediate Roi: Total Investment being 130 K€ payback is a little over 3 years without the 60k€ subsidies and a little over 2 years including the 60k€ subsidies

Sustainable and Increased quality: Very strict specifications in aeronautics imply to reject the full batch of parts if one part is out of spec. Automatization will make these tasks less operator dependent for a more constant quality level

Competitive advantage in manufacturing data driven Customer relationship. companies ready to comply with this Manufacturing 4.0 trend will land a competitive advantage in the aeronautics ecosystem