

# MACHINING EXPERTISE

Benefit from our machining expertise and succeed your parts industrialization with our experience, support and recognized competences.

Our team, composed of machining experts (composite, metallic, complexe alloys...) developped high-performing and helpful methodologies and analysis tools for :

- The monitoring and optimization of machining processes
- Machining programming
- Support in machining investments
- Training

#### BOOST YOUR MACHINING PERFORMANCES

KX30 Machining Center Spindle: 24 000 RPM, 70kW

**High Speed Machining** 

All kinds of materials - metallic and composite

Instrumented spindle

## **OUR COMPETENCES**

- Vibration analysis (Static and Dynamic tap testing system).
- Selection of optimum cutting conditions depending of machine, tools, parts...
- Optimization of machining strategies.
- Qualification of tools.
- Suppliers benchmarking and ranking (tools geometry).
- Materials benchmarking and ranking.
- Order receipt (spindle and machining center).

#### **Measurement means**

- Sensors : Vibrations (inside/outside the spindle, bearing and motor temperature).
- Spindle power measurement.
- KISTLER «force» measuring platform.

## Implementation tools

- Shinkfit machine.
- Pre-setting machine
- Pre-rigging bench.
- Balancing machine.

#### Experts

- To support you in the machining phenomenon comprehension.
- To manage a global offer (redaction of validation program, testing, test report...) in-situ or on customers' site.

### Machining expertise tools

- **2TPRO** : Static and Dynamic tap testing system used to find the optimised rotating speed
- **EMMATOOLS** : System dedicated to acquire physic phenomenom during machine (strength, vibration, temperature ...)

We acquired these knowledge and competences of machining optimisation through regional and national development (ex: high speed machining program for aluminum and composites) as well as productivity missions for major contractors (Airbus, Safran, Beneteau, DCNS, Renault...)