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CONTACT INFORMATION

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Equipment categories

Measurement & control / Machine-
tool / Software

EMCI

PRESENTATION / KNOW-HOW

EMCI has been recognised **for more than 18 years in the demanding field of machine tool diagnostics** from simpler to more complex machinery, fitted with the most commonly used digital controls (Fanuc, Heidenhain, Mazak, Num, Siemens, Power Automation, etc.).

EMCI is an acknowledged master of machining centres, 3 to 5-spindle mills, vertical and horizontal milling lathes, surface grinders and special numerically controlled machines.

Different types of action are carried out according to standardised procedures:

- Measurements, diagnostics and signatures using a ballbar gauge process
- Calibration by laser interferometer of linear and rotating spindles
- Laser interferometer measurements of:
 - Linear and circular spindle accuracy
 - Accuracy of master/slave spindle accuracy
 - Angular (pitch and yaw)
 - Straightness (long and short distance)
 - Dynamic
- Traditional geometry controls (square, rule, surface plate, electronic levels).

EMCI has two vehicles for attending site, equipped with a ballbar gauge and laser interferometer that can make any measurement, plus geometry control tools (square, rule, surface plate, electronic levels).

EMCI has developed the **Optifive measuring system** for measuring and calibrating 5-spindle machine tools. With three sensors linked to a touch screen interface, the Optifive software provides information on the machine's accuracy and calculates new pivot point parameters (RTCP, TRAORI, TCP, etc.). It reduces checking times and calculates new machine accurate measurements. It is compatible with the most commonly used numeric controls. It is quick, simple and effective in use.

MARKETED PRODUCTS

| | | | | | | |
|-----------------------------------|---|--|--|--|--|--|
| Metrology | 1 | | | | | |
| Measuring | 1 | | | | | |
| Precision instruments, electronic | 1 | | | | | |
| Other measuring instruments | 1 | | | | | |

BRANDS PORTFOLIO

1 OPTIFIVE



SYMOP
Membre de la FIM

A reference tool for optimising 5-spindle machine tools

EMCI



BALLBAR GAUGE MEASURING



PITCH MEASURING WITH LASER INTERFEROMETER



OPTIFIVE MEASURING



MEASURING ACCURACY WITH A LASER INTERFEROMETER



MOBILE CALIBRATION CENTRE



OPTIFIVE MEASURING

NEW AND KEY PRODUCTS

Optifive software configures the type of machine kinematic and the strokes of circular spindles. The software generates the movement programme for spindles and must be loaded into the numeric control.

Data acquisition occurs automatically; new pivot point parameters are calculated. Depending on the models, these parameters are then modified in the numerical controller.

Simple to use. The Optifive system can be used by the machine operator in a preventive way or prior to each machining operation on high added value parts.

MAIN CUSTOMERS

AERONAUTICS - MEDICAL - OPTICAL - MILITARY - SPACE



SYMOP
Membre de la FIM