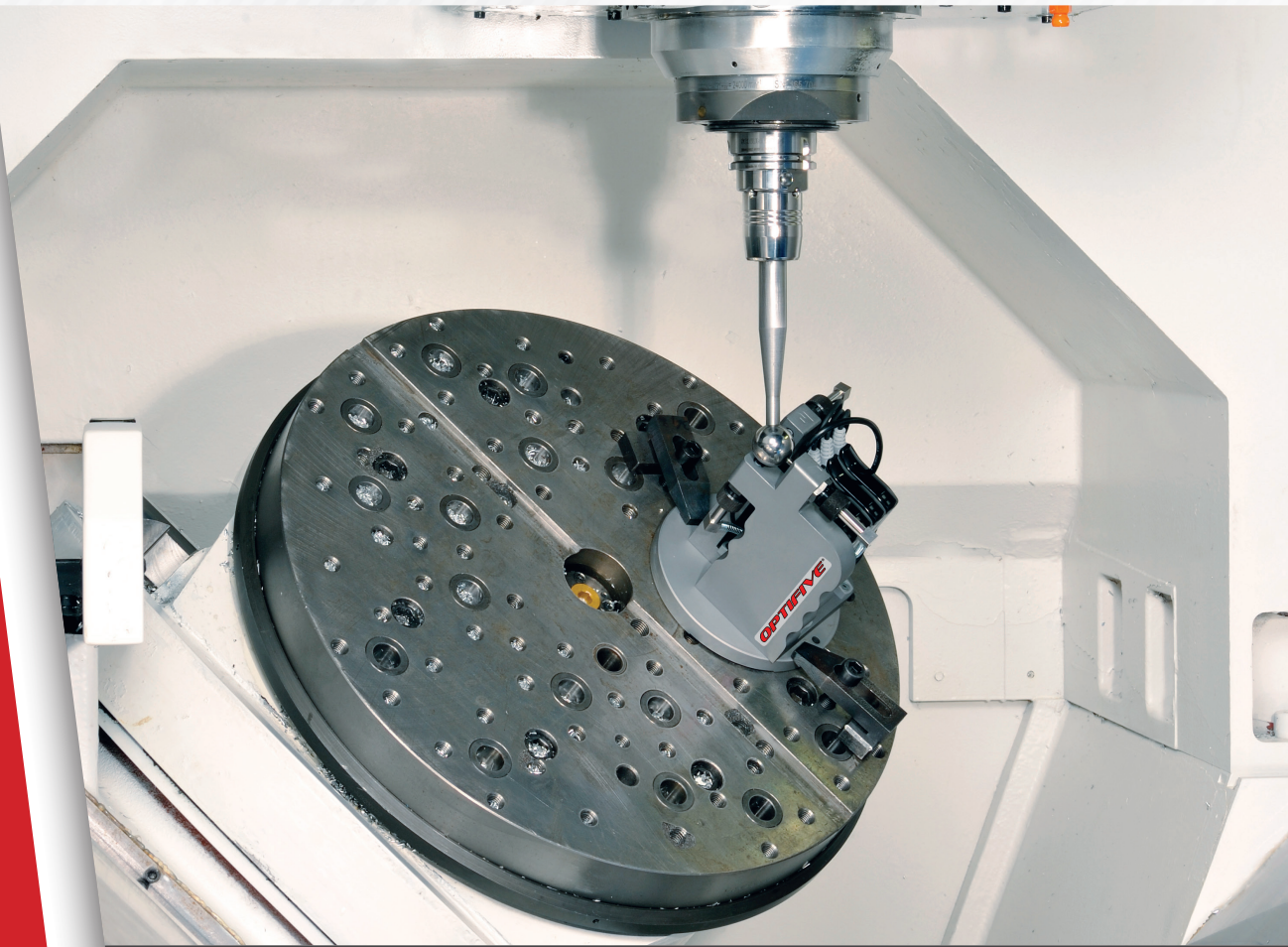




OPTIFIVE[®]

THE LEADING TOOL



EASY ADJUSTMENT OF YOUR 5-AXIS MACHINES

www.optifive.com



■ Measuring and adjustment of 5-axis machine tools

OPTIFIVE® comprises:

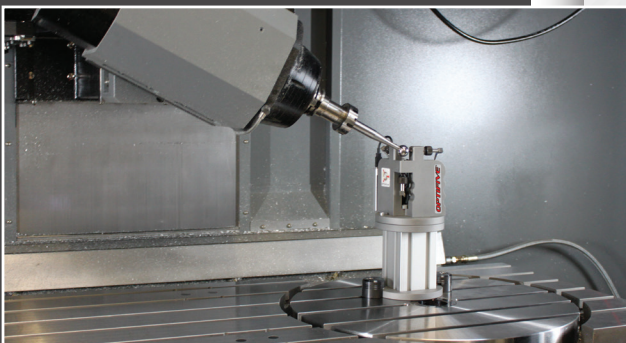
- a calibration sphere
- a measuring plate with 3 digital touch probes
- a Bluetooth® enabled touch-screen interface



Twist kinematic



Titling kinematic



Mixed kinematic

Calibration sphere



Measuring plate



Bluetooth® touch-screen interface



- **SIMPLE:**
intuitive setup
- **FAST:**
adjustment takes less than 30 minutes
- **ACCURATE:**
measuring tool independent of the machine
- **FLEXIBLE:**
all types of kinematics
and all types of numerical controller

With the OPTIFIVE® software, you can configure the type of machine kinematics and the travel of circular axes.

The software generates the axis control program to be loaded in the numerical controller.

Data acquisition is automatic, and new pivot point parameters are calculated. These parameters are then modified in the numerical controller.

It is simple to use. The OPTIFIVE® system can be used by machine operators for preventive purposes, or before each machining operation on high added value parts.



- REDUCES CHECKING TIME
- MEASURES THE PIVOT POINT
- CALCULATES NEW VALUES
- MEASURES THE ACCURACY OF THE MACHINE

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Choisissez la cinématique qui correspond le plus à votre machine.
Appuyer sur l'image qui vous semble la plus appropriée pour continuer.

Sur la tête
 Mixte
 Sur la table

Configuring the machine's kinematics

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L g e n d e
 Axe X
 Axe Y
 Axe Z

Précision de la machine
 Précision X: (+) 0,967 mm (-) -0,283 mm
 Précision Y: (+) 1,058 mm (-) -0,155 mm
 Précision Z: (+) 0,267 mm (-) -0,300 mm

| Axe X | Axe Y | Axe Z | C | A |
|--------|-------|-------|-----|-----|
| -0.003 | 0.032 | 0.033 | 0 | 0 |
| 0.967 | 0.347 | 0.146 | -90 | -90 |
| 0.685 | 0.305 | 0.267 | -90 | -60 |
| 0.241 | 0.190 | 0.019 | -90 | -30 |
| -0.141 | 0.031 | 0.009 | 90 | 0 |

Graph showing measurements of the machine's initial state

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Rectifications (µm)

FiveAxLinkOffset(0) FiveAxToolLengthApp(0)

FiveAxLinkOffset(1) FiveAxToolLengthApp(1)

FiveAxLinkOffset(2) FiveAxToolLengthApp(2)

Fiabilité de la rectification: 100%

Vous trouvez ici les valeurs des deux vecteurs de décalage additifs.
ATTENTION! Ces valeurs sont à ajouter aux valeurs présentes dans les paramètres associés.

Calculation of the changes to be made at the pivot point

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L g e n d e
 Axe X
 Axe Y
 Axe Z

Précision de la machine
 Précision X: (+) 0,007 mm (-) -0,001 mm
 Précision Y: (+) 0,003 mm (-) -0,005 mm
 Précision Z: (+) 0,007 mm (-) -0,003 mm

| Axe X | Axe Y | Axe Z | B | C |
|-------|--------|-------|---|----|
| 0.007 | -0.002 | 0.003 | 0 | 0 |
| 0.004 | 0.003 | 0.001 | 0 | 0 |
| 0.002 | 0.003 | 0.002 | 0 | 30 |
| 0.001 | 0.002 | 0.002 | 0 | 60 |
| 0.001 | -0.001 | 0.001 | 0 | 90 |

Checking the validity of the new values



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