# COORD3 KRONOS NT LARGE BRIDGE TYPE CNC CMM MACHINE

Category: Coordinate Measuring Machine (CMM)

GENERAL FEATURES
The KRONOS series is also available in NT version, equipped with the innovative Silicon Carbide spindle for even higher metrological performance.

FEATURES AND BENEFITS
- Aluminum alloy moving carriage structure with integrated granite top
- Generously sized Z spindle made of light aluminum alloy or Silicon Carbide (NT)
- Mixed rack-and-pinion and hysteresis-free clutch drive system for smooth and repeatable movement
- Measurement system with high-resolution linear transducers (0.1 µm)
- Multi-sensor automatic temperature compensation system, with part temperature probe

## PERFORMANCE

| Models | Maximum Permissible Error ISO 10360-2 / ISO 10360-4 MPE [µm], L [mm], t [sec] | | | | | | | | | | | | | | | Max. 3D Pos. Speed | Max. 3D Accel. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $T_1$: 18÷22 °C | | | | | | | | | $T_2$: 16÷26 °C | | | | | | | |
| | PH10M-TP20 | | PH10MQ-TP200 | | PH10MQ-SP25 | | | PH10M-TP20 | | PH10MQ-TP200 | | PH10MQ-SP25 | | | | | |
| | [1] $MPE_E$ | [2] $MPE_P$ | [1] $MPE_E$ | [2] $MPE_P$ | [1] $MPE_E$ | [2] $MPE_P$ | [3] $MPE_{THP}$ | [1] $MPE_E$ | [2] $MPE_P$ | [1] $MPE_E$ | [2] $MPE_P$ | [1] $MPE_E$ | [2] $MPE_P$ | [3] $MPE_{THP}$ | | | |
| | [µm] | | [µm] | | [µm] | | | [µm] | | [µm] | | [µm] | | | | [mm/s] | [mm/s²] |
| xx.13.10 | 3,0 + L/285 | 3,0 | 2,8 + L/285 | 2,8 | 2,5 + L/285 | 2,5 | 5,0/120 | 3,7 + L/143 | 3,7 | 3,5 + L/143 | 3,5 | 3,3 + L/143 | 3,3 | 6,5/120 | | 700 | 1300 |
| xx.15.13 | 3,5 + L/285 | 3,5 | 3,3 + L/285 | 3,3 | 3,2 + L/285 | 3,2 | 6,5/120 | 5,0 + L/143 | 5,0 | 4,5 + L/143 | 4,5 | 4,0 + L/143 | 4,0 | 8,0/120 | | 700 | 950 |
| 30.15.13 | 3,5 + L/285 | 3,5 | 3,3 + L/285 | 3,3 | 3,2 + L/285 | 3,2 | 6,5/120 | 5,0 + L/133 | 5,0 | 4,5 + L/133 | 4,5 | 4,0 + L/133 | 4,0 | 8,0/120 | | 700 | 950 |

*Performance data are only valid if the following specifications are met:*
*- PH10M/PH10MQ/TP20/TP200: Tip diameter Ø4 mm x Stylus length 10 mm*
*- PH10MQ/SP25: SM1, Stylus Ø5 mm x 50 mm*
*- L = measuring length in mm*
*- Ambient temperature:*
*$T_1$: 18 ÷ 22 °C; Max. Gradients: 1,0 °C/h - 2,0 °C/24h - 0,5 °C/m*
*$T_2$: 16 ÷ 26°C; Max. Gradients: 1,0 °C/h - 5,0 °C/24h - 1,0 °C/m*

*[1] According to ISO 10360-2, Error of indication of a CMM for size measurement*
*[2] According to ISO 10360-2, Probing Error*
*[3] Scanning probing error according to ISO 10360-4 applicable to the SP25/SP80 probes only*

## PERFORMANCE

| Models | Maximum Permissible Error ISO 10360-2 / ISO 10360-4 MPE [µm], L [mm], t [sec] | | | | | | | | | | | | | | | Max. 3D Pos. Speed | Max. 3D Accel. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | $T_1$: 18÷22 °C | | | | | | | | | $T_2$: 16÷26 °C | | | | | | | |
| | PH10M-TP20 | | PH10MQ-TP200 | | PH10MQ-SP25 | | | PH10M-TP20 | | PH10MQ-TP200 | | PH10MQ-SP25 | | | | | |
| | [1] $MPE_E$ | [2] $MPE_P$ | [1] $MPE_E$ | [2] $MPE_P$ | [1] $MPE_E$ | [2] $MPE_P$ | [3] $MPE_{THP}$ | [1] $MPE_E$ | [2] $MPE_P$ | [1] $MPE_E$ | [2] $MPE_P$ | [1] $MPE_E$ | [2] $MPE_P$ | [3] $MPE_{THP}$ | | | |
| | [µm] | | [µm] | | [µm] | | | [µm] | | [µm] | | [µm] | | | | [mm/s] | [mm/s²] |
| xx.20.15 | 4,0 + L/250 | 4,0 | 3,8 + L/250 | 3,8 | 3,6 + L/250 | 3,6 | 7,5/120 | 6,5 + L/133 | 6,5 | 5,5 + L/133 | 5,5 | 5,2 + L/133 | 5,2 | 10,0/120 | | 500 | 800 |

*Performance data are only valid if the following specifications are met:*
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*- PH10MQ/SP25: SM1, Stylus Ø5 mm x 50 mm.*
*- L = measuring length in mm*
*- Ambient temperature:*
*$T_1$: 18 ÷ 22 °C; Max. Gradients: 1,0 °C/h - 2,0 °C/24h - 0,5 °C/m*
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*[1] According to ISO 10360-2, Error of indication of a CMM for size measurement*
*[2] According to ISO 10360-2, Probing Error*
*[3] Scanning probing error according to ISO 10360-4 applicable to the SP25/SP80 probes only*