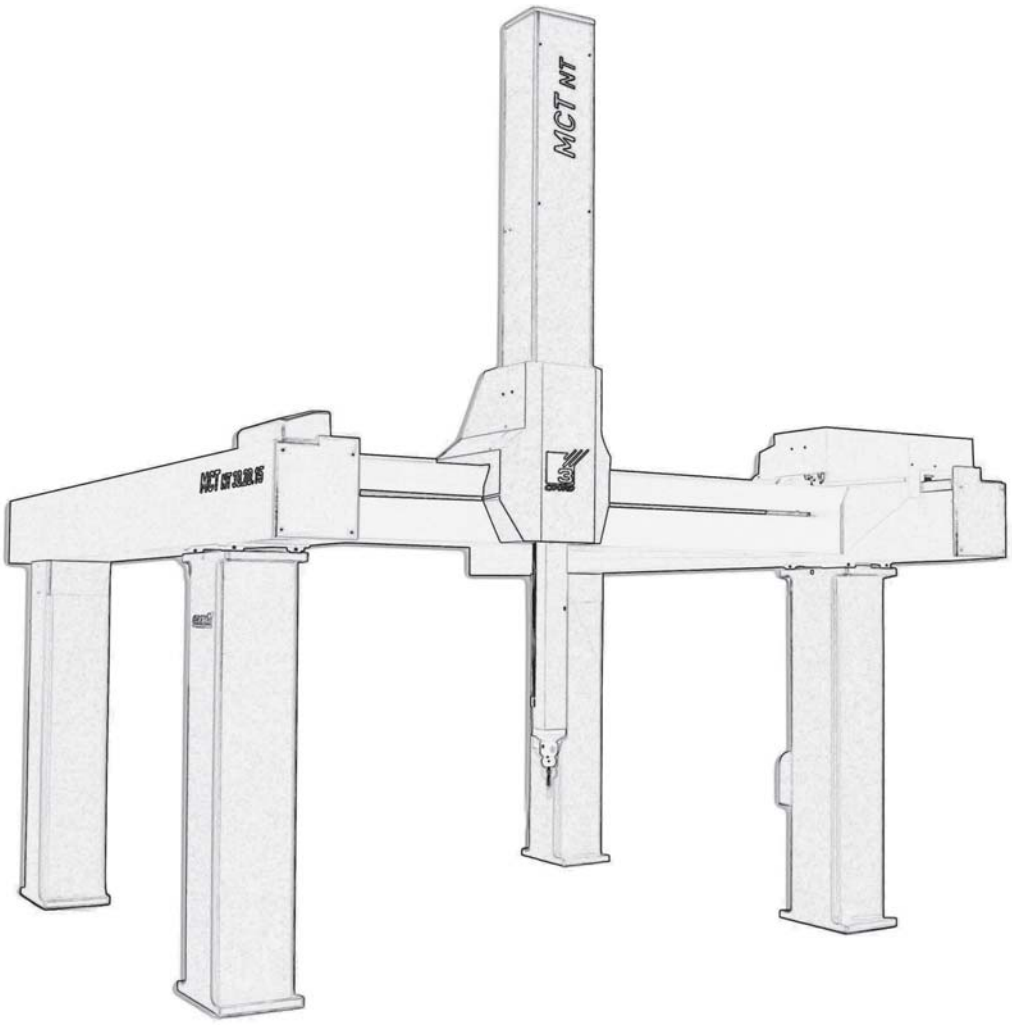
MCT
NT
NT Light

CNC GANTRY COORDINATE MEASURING MACHINE



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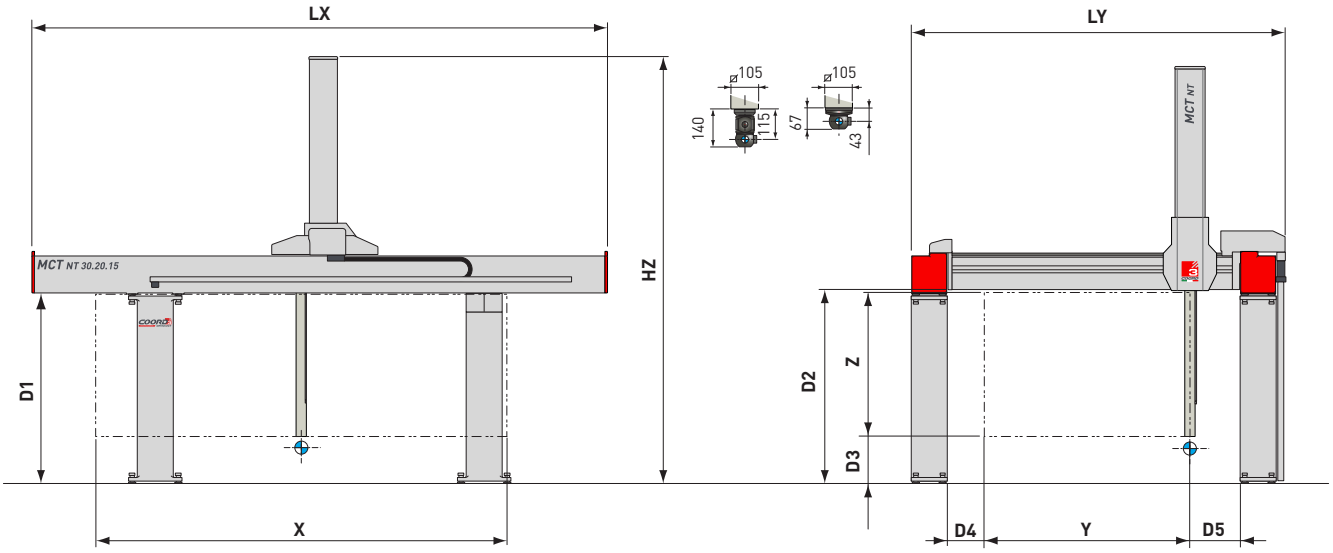


PERFORMANCE

Models	Maximum Permissible Error ISO 10360-2 / 10360-4 MPE [µm] , L [mm], t [sec]						Max. 3D Positioning Speed	Max. 3D Acceleration
	PH10M/MQ-TP2/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}		
	[µm]		[µm]		[µm]		[mm/s]	[mm/s²]
xx.20.10	4,8 + 4,0 L/1000	4,8	4,5 + 4,0 L/1000	4,5	4,3 + 4,0 L/1000	4,3 6,0/100	500	1200
xx.20.15	5,5 + 5,0 L/1000	5,5	5,0 + 5,0 L/1000	5,0	5,0 + 5,0 L/1000	5,0 9,0/100	500	1200
xx.25.15	6,5 + 6,5 L/1000	6,5	6,0 + 6,5 L/1000	6,0	6,0 + 6,5 L/1000	6,0 11,0/100	500	1200
xx.25.18	8,0 + 8,0 L/1000	8,0	7,5 + 8,0 L/1000	7,5	7,5 + 8,0 L/1000	7,5 13,0/100	500	1000

Performance data are only valid if the following specifications are met:
- PH10M/PH10MQ/TP20/TP200: Tip diameter Ø4 mm x Stylus length 20 mm
- PH10MQ/SP25: SM1, Tasterdurchmesser Ø5 mm x 50 mm
- L = measuring length in mm
- Ambient temperature:
T: 18 ÷ 22 °C; Max. Gradients: 1,0 °C/h - 2,0 °C/24h - 0,5 °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

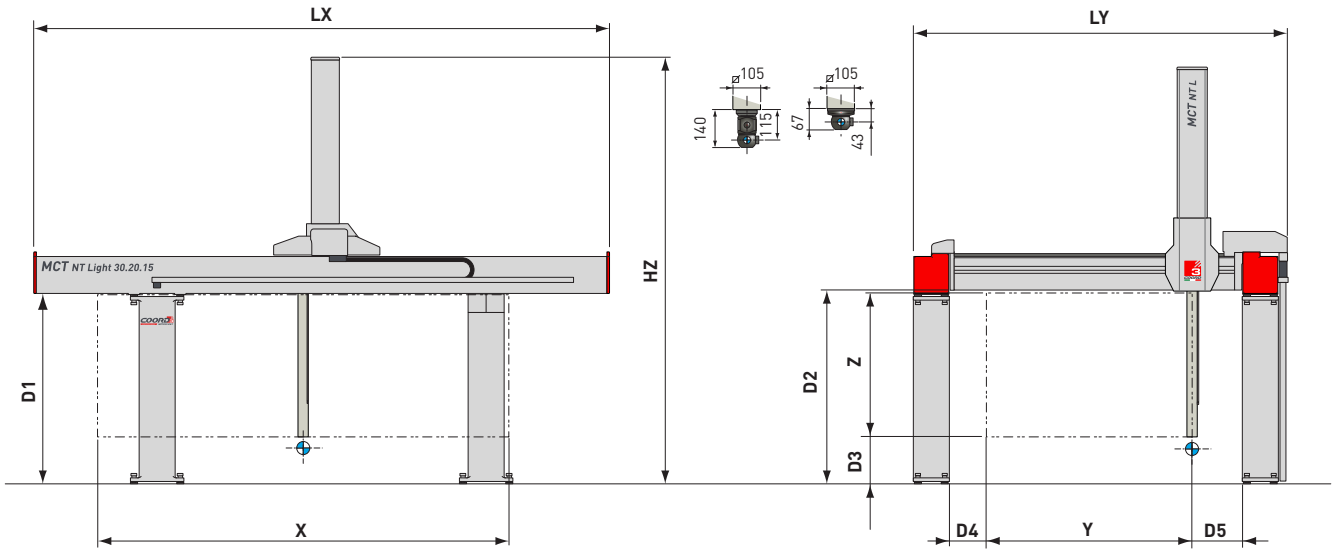
STROKES, DIMENSIONS, WEIGHTS

Models	Measuring Strokes			Overall Dimensions [4]			Daylights					n° Pillars	Weights	
	X	Y	Z	LX	LY	HZ	D1	D2	D3	D4	D5		Max. Part Weight	Machine Weight
	[mm]			[mm]			[mm]						[kg]	
30.20.10	3000	2000	1000	4600	3690	3683	1852	1887	837	360	490	2 + 2	8000	3600
40.20.10	4000	2000	1000	5600	3690	3683	1852	1887	837	360	490	2 + 2	8000	4100
30.20.15	3000	2000	1500	4600	3690	4183	1852	1887	337	360	490	2 + 2	8000	3600
40.20.15	4000	2000	1500	5600	3690	4183	1852	1887	337	360	490	2 + 2	8000	4100
50.20.15	5000	2000	1500	6600	3690	4183	1852	1887	337	360	490	2 + 2	10000	4600
40.25.15	4000	2500	1500	5600	4190	4183	1852	1887	337	360	490	2 + 2	8000	4200
50.25.15	5000	2500	1500	6600	4190	4183	1852	1887	337	360	490	2 + 2	10000	4700
60.25.15	6000	2500	1500	7600	4190	4183	1852	1887	337	360	490	3 + 3	10000	5200
40.25.18	4000	2500	1800	5600	4190	4783	2152	2187	337	360	490	2 + 2	8000	4300
50.25.18	5000	2500	1800	6600	4190	4783	2152	2187	337	360	490	2 + 2	10000	4800
60.25.18	6000	2500	1800	7600	4190	4783	2152	2187	337	360	490	3 + 3	10000	5300

Dimensions & weights refers to CMM without optional bellows cover

[4] Table (900 x 700 mm) and control cabinet (600 x 600 x 1096 mm) not included

MCT NT Light



PERFORMANCE

Models	Maximum Permissible Error ISO 10360-2 / 10360-4 MPE [µm] , L [mm], t [sec]						Max. 3D Positioning Speed	Max. 3D Acceleration
	PH10M/MQ-TP2/TP20		PH10MQ-TP200		PH10MQ-SP25			
	(1) MPE_E	(2) MPE_P	(1) MPE_E	(2) MPE_P	(1) MPE_E	(2) MPE_P		
	[µm]		[µm]		[µm]		[mm/s]	[mm/s²]
xx.20.10	6,0 + 6,0 L/1000	6,0	5,5 + 6,0 L/1000	5,5	5,5 + 6,0 L/1000	5,5	500	1200
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xx.25.15	10,0 + 10,0 L/1000	10,0	9,5 + 10,0 L/1000	9,5	9,5 + 10,0 L/1000	9,5	500	1200
xx.25.18	12,0 + 10,0 L/1000	12,0	11,5 + 10,0 L/1000	11,5	11,5 + 10,0 L/1000	11,5	500	1000

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- Ambient temperature:
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STROKES, DIMENSIONS, WEIGHTS

Models	Measuring Strokes			Overall Dimensions (4)			Daylights					n° Pillars	Weights	
	X	Y	Z	LX	LY	HZ	D1	D2	D3	D4	D5		Max. Part Weight	Machine Weight
	[mm]			[mm]			[mm]						[kg]	
30.20.10	3000	2000	1000	4600	3690	3683	1852	1887	837	360	490	2 + 2	8000	3600
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TECHNICAL CHARACTERISTICS

STRUCTURE

CNC Coordinate Measuring Machine, Gantry type architecture with mobile beam on micromachined anodized light alloy extrusion

Guideways:
X Axis: on stabilized welded steel beams
Y Axis: micromachined anodized light alloy extrusion
Z Axis: Silicon Carbide extrusion or micromachined anodized light alloy extrusion (NT Light)

Drive Method:
X Axis: rack & pinion system
Y Axis: zero hysteresis friction drive
Z Axis: zero hysteresis friction drive

Sliding System:
Air bearings on Y/Z axes, mixed air bearing and mechanical bearing on X axis

Motion Control:
DC servomotor on all axes

Thermal Compensation:
Multi-sensors temperature compensation systemfor part and scale (Optional)

Measuring System:
Linear scales, System Resolution: 0,1 µm.
Dual Scale/Reader on X axis (Optional on NT Light)

ENVIRONMENT

Temperature Range for Metrological Specification:
Temperature Range: 18 ÷ 22 °C
Max. gradient per hour:: 1,0 °C/h
Max. gradient per day: 2,0 °C/24h
Max. gradient in space: 1,0 °C/m

Operating Temperature:
15 ÷ 35 °C

Relative Humidity:
40 ÷ 80 % (non condensing)

Acceptable Vibrations:
(vibration acceleration between peaks)
30 mm/s^2 from 1 to 10 Hz
15 mm/s^2 from 10 to 20 Hz
50 mm/s^2 from 20 to 100 Hz

AIR SUPPLY

Air Consumption:
Max. 150 Nl/min

Minimum Air Supply:
5,5 Bar

PROBING SYSTEM

Manual Probe Head:
MIH, MH20, MH20i

Motorized Probe Head:
PH10T, PH10M, PH10MQ

Point-to-point Trigger Probe:
TP2, TP20, TP200

Analog Contact Probe:
SP25 (Optional)

Laser Probe:
Perceptron Laser Scanner

Stylus and Probe Changer:
Fully automated stylus and probe changers

POWER SUPPLY

230 V ± 10%; 50 Hz ± 2% (single phase)
115 V ±10%; 60 Hz ± 2% (single phase)

OPTION

Multi-wire cable
PC & Printer
Training c/o Coord3 Center or Agents
Installation by Coord3 or Agents

Distribuito da / Authorized Dealer / Vertrieben durch:

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