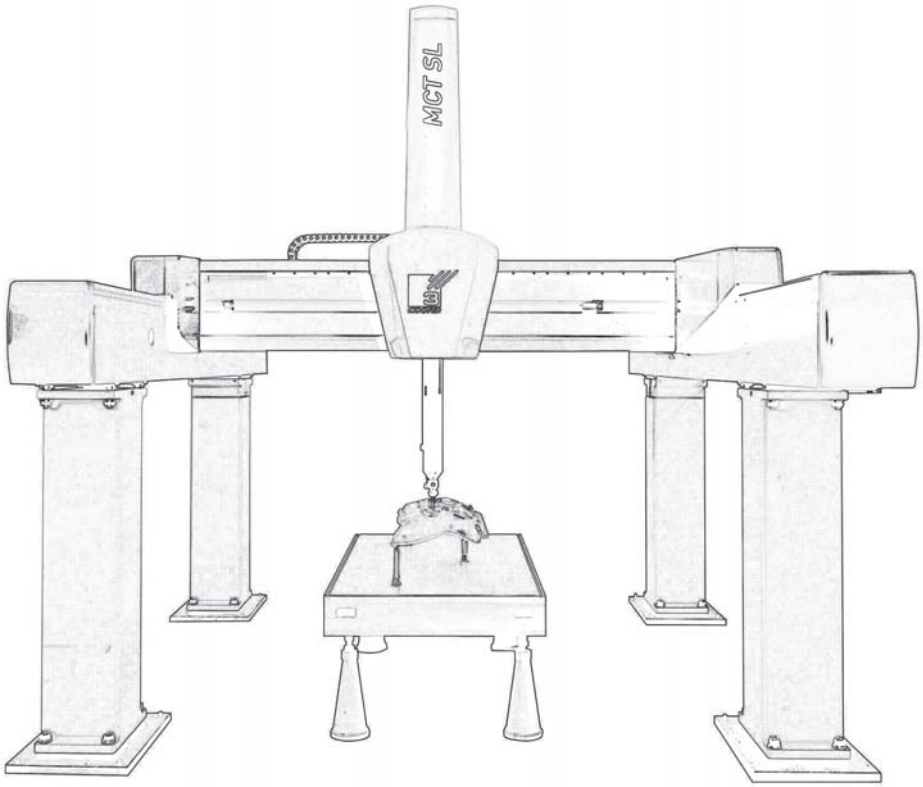
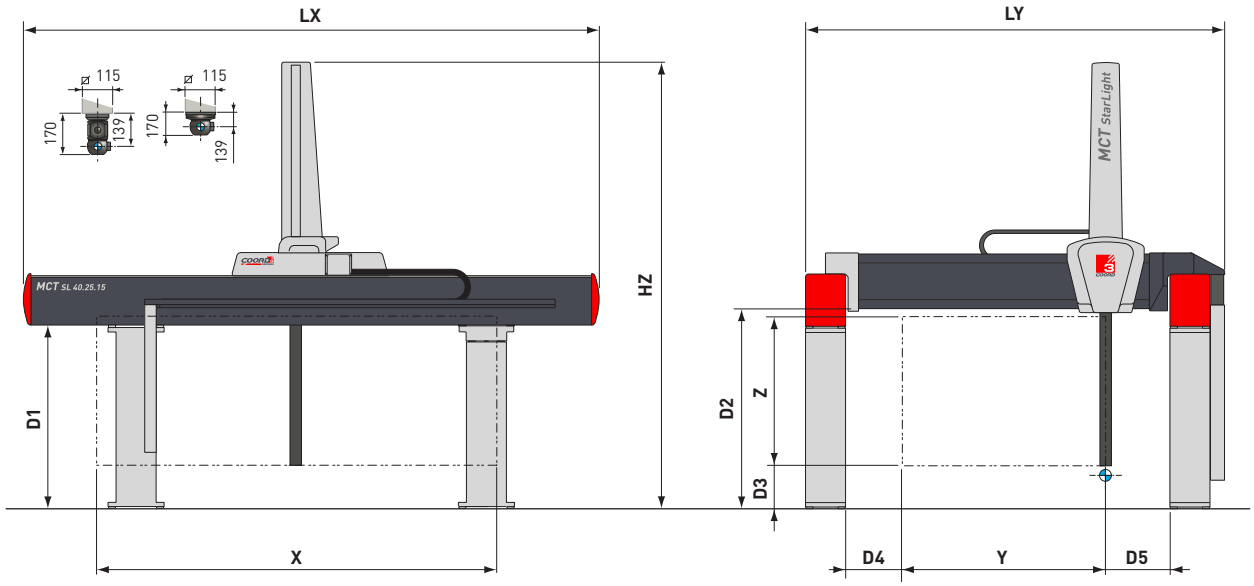
MCT
StarLight
Plus

CNC GANTRY COORDINATE MEASURING MACHINE



MCT StarLight



PERFORMANCE

Models	PH10M/MQ-TP2/TP20/TP200			PH10M/MQ-Metris Laser probe					Max. 3D Positioning Speed	Max. 3D Acceleration
	Maximum Permissible Error		ASME B89.4.1	Metris Test						
				LC15	LC50	LC60D	XC50	XC50-LS		
	[1] MPE_E	[2] MPE_P		1ó						
	[µm]		[µm]	[µm]					[mm/s]	[mm/s²]
xx.15.13	5,0 + 6,0 L/1000	5,0	16,0	8,0	15,0	15,0	15,0	20,0	600	1000
xx.20.13	5,0 + 6,0 L/1000	5,0	19,0	8,0	15,0	15,0	15,0	20,0	600	1000
xx.20.15	6,0 + 6,0 L/1000	6,0	22,0	8,0	15,0	15,0	15,0	20,0	600	1000
xx.25.15	6,0 + 7,0 L/1000	6,0	23,0	8,0	15,0	15,0	15,0	20,0	530	800
xx.25.18	7,0 + 8,0 L/1000	7,0	26,0	8,0	15,0	15,0	15,0	20,0	530	800
xx.25.20	8,0 + 9,0 L/1000	8,0	28,0	8,0	15,0	15,0	15,0	20,0	530	800

Performance data are only valid if the following specifications are met:
- Dual Scale/Read configuration
- PH10M/PH10MQ/TP20/TP200: Tip diameter Ø4 mm x Stylus length 20 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

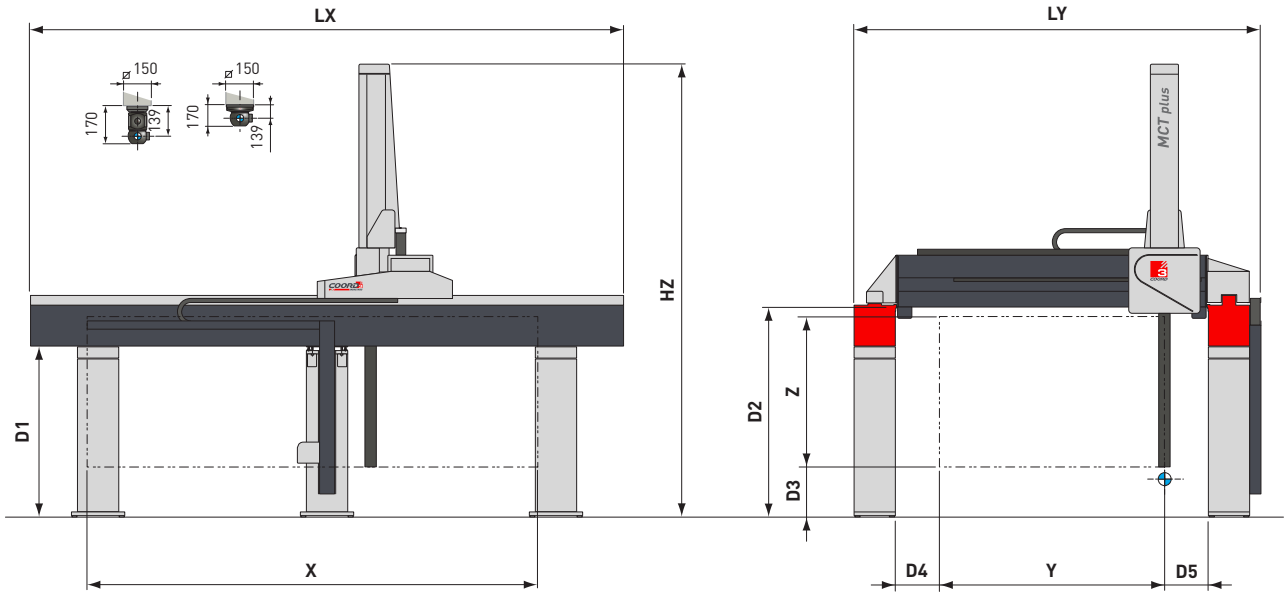
[1] According to ISO 10360-2, Error of indication of a CMM for size measurement
[2] According to ISO 10360-2, Probing Error

STROKES, DIMENSIONS, WEIGHTS

Models	Measuring Strokes			Overall Dimensions [3]			Daylights					n° Pillars	Weights	
	X	Y	Z	LX	LY	HZ	D1	D2	D3	D4	D5		Max. Part Weight	Machine Weight
	[mm]			[mm]			[mm]						[kg]	
30.15.13	3000	1500	1300	4750	3654	4287	1842	2012	632	567	642	2 + 2	10000	5600
40.20.13	4000	2000	1300	5750	4154	4287	1842	2012	632	567	642	2 + 2	10000	6400
30.20.15	3000	2000	1500	4750	4154	4487	1842	2012	432	567	642	2 + 2	10000	5600
40.20.15	4000	2000	1500	5750	4154	4487	1842	2012	432	567	642	2 + 2	10000	6400
50.20.15	5000	2000	1500	6750	4154	4487	1842	2012	432	567	642	3 + 3	10000	7900
30.25.15	3000	2500	1500	4750	4654	4487	1842	2012	432	567	642	2 + 2	10000	5700
40.25.15	4000	2500	1500	5750	4654	4487	1842	2012	432	567	642	2 + 2	10000	6500
50.25.15	5000	2500	1500	6750	4654	4487	1842	2012	432	567	642	3 + 3	10000	8000
60.25.15	6000	2500	1500	7750	4654	4487	1842	2012	432	567	642	3 + 3	10000	8800
40.25.18	4000	2500	1800	5750	4654	4987	2042	2212	332	567	642	2 + 2	10000	6500
50.25.18	5000	2500	1800	6750	4654	4987	2042	2212	332	567	642	3 + 3	10000	8000
60.25.18	6000	2500	1800	7750	4654	4987	2042	2212	332	567	642	3 + 3	10000	8800
40.25.20	4000	2500	2000	5750	4654	5387	2242	2412	332	567	642	2 + 2	10000	6500
50.25.20	5000	2500	2000	6750	4654	5387	2242	2412	332	567	642	3 + 3	10000	8000
60.25.20	6000	2500	2000	7750	4654	5387	2242	2412	332	567	642	3 + 3	10000	8800

For detailed dimensions refers to the installation drawings.
[3] Table (900 x 700 mm) and control cabinet (600 x 600 x 1096 mm) not included

MCT Plus



PERFORMANCE

Models	PH10M/MQ-TP2/TP20/TP200			PH10M/MQ-Metris Laser probe					Max. 3D Positioning Speed	Max. 3D Acceleration
	Maximum Permissible Error ISO 10360-2		ASME B89.4.1	Metris Test						
				LC15	LC50	LC60D	XC50	XC50-LS		
	[1] MPE_E	[2] MPE_P		1ó						
	[µm]		[µm]	[µm]					[mm/s]	[mm/s²]
xx.25.20	7,0 + 8,0 L/1000	7,0	22,0	8,0	15,0	15,0	15,0	20,0	530	800
xx.30.20	8,0 + 9,0 L/1000	8,0	25,0	8,0	15,0	15,0	15,0	20,0	530	800
xx.30.25	9,0 + 10,0 L/1000	9,0	28,0	8,0	15,0	15,0	15,0	20,0	530	800
xx.35.25	12,0 + 12,0 L/1000	12,0	36,0	8,0	15,0	15,0	15,0	20,0	530	800

Performance data are only valid if the following specifications are met:
- Dual Scale/Read and Dual Drive configuration
- PH10M/PH10MQ/TP20/TP200: Tip diameter Ø4 mm x Stylus length 20 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

STROKES, DIMENSIONS, WEIGHTS

Modello	Measuring Strokes			Overall Dimensions [3]			Daylights					n° Pillars	Weights	
	X	Y	Z	LX	LY	HZ	D1	D2	D3	D4	D5		Max. Part Weight	Machine Weight
	[mm]			[mm]			[mm]						[kg]	
50.25.20	5000	2500	2000	6900	4920	6033	2277	2797	668	585	585	3 + 3	15000	11400
60.25.20	6000	2500	2000	7900	4920	6033	2277	2797	668	585	585	3 + 3	21000	12800
60.30.20	6000	3000	2000	7900	5420	6033	2277	2797	668	585	585	3 + 3	25000	12300
70.30.20	7000	3000	2000	8900	5420	6033	2277	2797	668	585	585	3 + 3	25000	13200
80.30.20	8000	3000	2000	9900	5420	6033	2277	2797	668	585	585	3 + 3	25000	14000
60.30.25	6000	3000	2500	7900	5420	6833	2577	3097	468	585	585	3 + 3	25000	12300
70.30.25	7000	3000	2500	8900	5420	6833	2577	3097	468	585	585	3 + 3	25000	13200
80.30.25	8000	3000	2500	9900	5420	6833	2577	3097	468	585	585	3 + 3	25000	14000
60.35.25	6000	3500	2500	7900	5920	6833	2577	3097	468	585	585	3 + 3	21000	12500
70.35.25	7000	3500	2500	8900	5920	6833	2577	3097	468	585	585	3 + 3	25000	13300
80.35.25	8000	3500	2500	9900	5920	6833	2577	3097	468	585	585	3 + 3	25000	14100

For detailed dimensions refers to the installation drawings
[3] Table (900 x 700 mm) and control cabinet (600 x 600 x 1096 mm) not included

TECHNICAL CHARACTERISTICS

STRUCTURE

CNC Coordinate Measuring Machine, Gantry type architecture
Guideways:
X Axis: guideways on stabilized welded steel beams
Y Axis: guideways on stabilized welded steel beam
Z Axis: micromachined anodized light alloy extrusion
Drive Method:
X Axis: rack & pinion system, Dual Drive system on both X beam on MCT Plus (optional for StarLight)
Y Axis: rack & pinion system
Z Axis: zero hysteresis friction drive
Sliding System:
Air bearings on all axes
Motion Control:
DC servomotor on all axes
Thermal Compensation:
Multi-sensors temperature compensation system for part and scale (Optional)
Measuring System:
Linear scales, System Resolution: 0,1 µm.
Dual Scale/Reader on X axis

PROBING SYSTEM

Manual Probe Head:
MIH, MH20, MH20i
Motorized Probe Head:
PH10, PH10M, PH10MQ
Point-to-point Trigger Probe:
TP2, TP20, TP200
Analog Contact Probe:
SP25 (Optional)
Laser Probe:
Metris LC/XC series (qualification sphere included)
Stylus and Probe Changer:
Fully automated stylus and probe changers

OPTION

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

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

Optional
- Metrology Room or CMM protection system

AIR SUPPLY

Air Consumption:
MCT StarLight: max. 300 Nl/min
MCT Plus: max. 450 Nl/min
Minimum Air Supply:
MCT StarLight: 6 Bar
MCT Plus: 6,5 Bar

POWER SUPPLY

Power Supply Voltage:
230 V ± 10%; 50 Hz ± 2% (single phase)
Maximum Power Consumption:
MCT StarLight: 16 A 1600 W
MCT Plus: 16 A 2000 W

(data for CC3 controller only)

Optional
- Voltage: 115 V ±10%; 60 Hz ±2% (single phase)

WARRANTY

12 months from the date of acceptance test or a maximum of 15 months from date of shipment

AZIENDA CON SISTEMA DI GESTIONE QUALITÀ CERTIFICATO DA DNV = ISO 9001 =

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