

CMM JUPITER

PERFORMANCE

Environment conditions	Models	Single Arm						Double Arm						Max. 3D Pos. Speed	Max. 3D Accel.
		PH10M/T-TP20			PHS2-TP20			PH10M/T-TP20		PHS2-TP20					
		MPE _{E0150} ⁽¹⁾	MPL ₉₀ ⁽²⁾	MPE(PFTU) ⁽³⁾	MPE _{E0150} ⁽¹⁾	MPL ₉₀ ⁽²⁾	MPE(PFTU) ⁽³⁾	MPE _{E0150} ⁽¹⁾	MPL ₉₀ ⁽²⁾	MPE _{E0150} ⁽¹⁾	MPL ₉₀ ⁽²⁾	MPE _{E0150} ⁽¹⁾	MPL ₉₀ ⁽²⁾		
		[µm]	[µm]	[µm]	[µm]	[µm]	[µm]	[µm]	[µm]	[µm]	[µm]	[µm]	[µm]	[mm/s]	[mm/s ²]
T ₁ 18÷22°C	xx.16.20	14 + 18 L/1000 ≤ 55	12	14	19 + 18 L/1000 ≤ 60	18	21	28 + 20 L/1000 ≤ 70	24	38 + 20 L/1000 ≤ 80	36	580	1500		
	xx.18.20	15 + 20 L/1000 ≤ 60	13	15	20 + 20 L/1000 ≤ 60	19	22	30 + 22 L/1000 ≤ 75	30	40 + 22 L/1000 ≤ 85	38	580	1500		
	xx.16.25	15 + 20 L/1000 ≤ 60	13	15	20 + 20 L/1000 ≤ 60	19	22	30 + 22 L/1000 ≤ 75	30	40 + 22 L/1000 ≤ 85	38	580	1500		
	xx.18.25	18 + 22 L/1000 ≤ 70	16	18	23 + 22 L/1000 ≤ 75	22	25	36 + 25 L/1000 ≤ 90	32	46 + 25 L/1000 ≤ 100	44	580	1500		
	xx.16.30	18 + 22 L/1000 ≤ 70	16	18	23 + 22 L/1000 ≤ 75	22	25	36 + 25 L/1000 ≤ 90	32	46 + 25 L/1000 ≤ 100	44	580	1000		
	xx.18.30	20 + 25 L/1000 ≤ 80	18	20	28 + 27 L/1000 ≤ 80	24	27	40 + 30 L/1000 ≤ 105	36	50 + 30 L/1000 ≤ 115	48	580	1000		
T ₂ 16÷26°C	xx.16.20	17 + 24 L/1000 ≤ 70	15	17	22 + 24 L/1000 ≤ 75	21	24	34 + 27 L/1000 ≤ 90	30	44 + 27 L/1000 ≤ 100	42	580	1500		
	xx.18.20	18 + 26 L/1000 ≤ 75	16	18	23 + 26 L/1000 ≤ 80	22	25	35 + 31 L/1000 ≤ 95	32	46 + 31 L/1000 ≤ 105	44	580	1500		
	xx.16.25	18 + 26 L/1000 ≤ 75	16	18	23 + 26 L/1000 ≤ 80	22	25	35 + 31 L/1000 ≤ 95	32	46 + 31 L/1000 ≤ 105	44	580	1500		
	xx.18.25	21 + 28 L/1000 ≤ 85	19	21	26 + 28 L/1000 ≤ 90	25	28	42 + 33 L/1000 ≤ 110	38	52 + 33 L/1000 ≤ 120	50	580	1500		
	xx.16.30	21 + 28 L/1000 ≤ 85	19	21	26 + 28 L/1000 ≤ 90	25	28	42 + 33 L/1000 ≤ 110	38	52 + 33 L/1000 ≤ 120	50	580	1000		
	xx.18.30	23 + 31 L/1000 ≤ 90	21	23	28 + 31 L/1000 ≤ 95	27	30	46 + 36 L/1000 ≤ 120	42	56 + 36 L/1000 ≤ 130	54	580	1000		

⁽¹⁾ Maximum Permissible Error of Length measurement according to UNI EN ISO 10360-2:2010

⁽²⁾ Maximum Permissible Limit of Repeatability range according to UNI EN ISO 10360-2:2010

⁽³⁾ Maximum Permissible Single Stylus Form Error according to UNI EN ISO 10360-5:2010

T₁: 18 ÷ 22 °C; Max. Gradients: 1,0 °C/h - 2,0 °C/24h - 1,0 °C/m

T₂: 16 ÷ 26 °C; Max. Gradients: 1,0 °C/h - 5,0 °C/24h - 1,0 °C/m

L= measuring length (mm)

STRUCTURE

CNC Coordinate Measuring Machine, Horizontal Arm type with indipendent slideway

Guideways:

X Axis: linear guideways

Y-Z Axes: micromachined anodized light alloy extrusion

Drive Method:

X Axis: rack & pinion system

Y-Z Axis: zero hysteresis friction drive

Motion Control:

DC servomotor on all axes

Sliding System:

X Axis: Recirculating ball bearing

Y-Z Axes: Air bearings

Thermal Compensation:

Multi-sensors temperature compensation system

for part and scale (Optional)

Measuring System:

Linear scales, System Resolution: 0,1 µm.

OPTION

Steel worktable

Training c/o Coord 3 Center or Agents

Installation by Coord 3 or Agents

PC & Printer

Multi-wire cable

Safety laser scanner

POWER SUPPLY

Power supply voltage:

230 V ± 10%; 50 Hz ± 2% single phase

115 V ± 10%; 60 Hz ± 2% single phase

AIR SUPPLY

Air Consumption:

Max 150 NI/min

Minimum Air Supply:

6 Bar

Air quality:

Max. oil concentration:
5 mg/m³ (ISO 8573 - class 4)

Max. particle size of contaminants:
40 µm (ISO 8573 - class 5)

Max. contaminants concentration:
10 mg/m³ (ISO 8573 - class 5)

Max dew point:
10 °C (ISO 8573 - class 6)

ENVIRONMENT

Temperature Range T₁ for Metrological Specification:

Ambient 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/s² from 1 to 10 Hz

15 mm/s² from 10 to 20 Hz

50 mm/s² from 20 to 100 Hz

PROBING SYSTEM

Manual Probe Head:

MIH, MH20, MH20i

Motorized Probe Head:

PH10T, PH10M, PH10MQ, PHS-2

Point-to-point Trigger Probe:

TP20

Laser Probe:

SLK25

Stylus and Probe Changer:

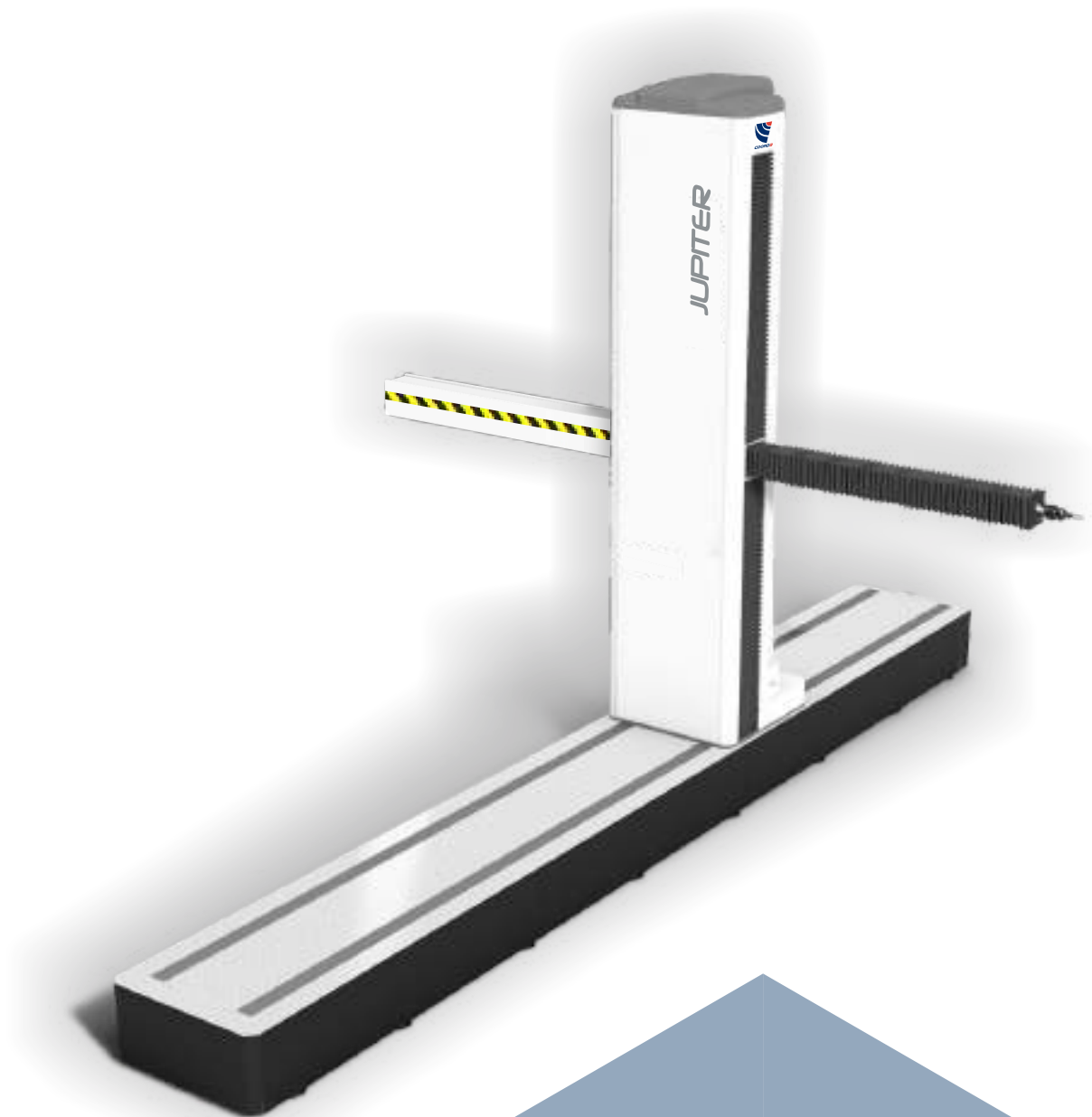
Fully automated stylus and probe changers



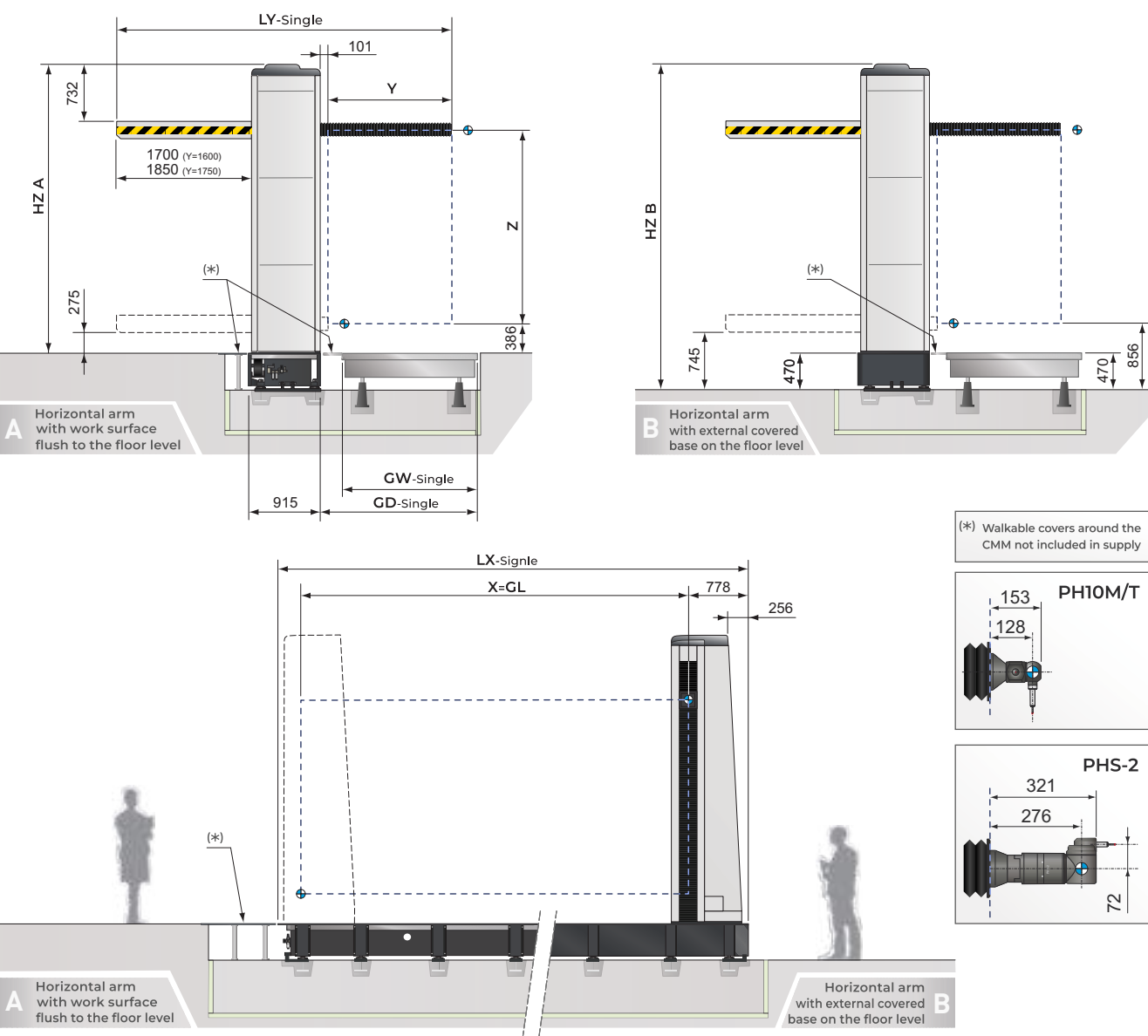
HORIZONTAL ARM

JUPITER

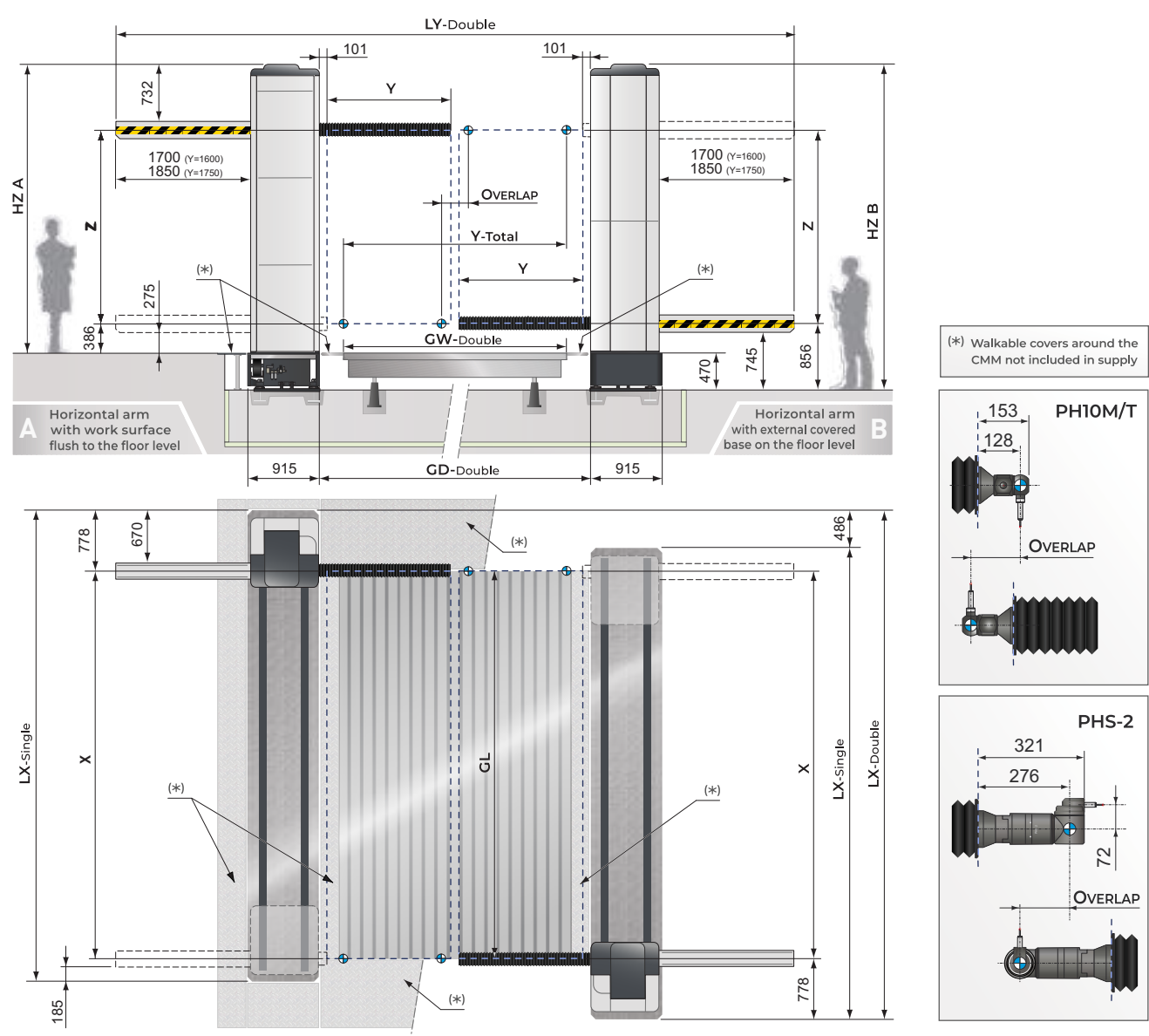
CNC COORDINATE MEASURING MACHINE



CMM HORIZONTAL ARM | JUPITER - Single Arm



CMM HORIZONTAL ARM | JUPITER - Double Arm



CMM JUPITER - Sngle Arm
STROKES, DIMENSIONS, WEIGHTS

Models	Measuring Strokes			Overall Dimensions ⁽¹⁾				Worktable (Optional) ⁽²⁾				Weights
	X	Y	Z	LX-Single	LY-Single	HZ		GL	GW-Single	GD-Single	Machine Weight ⁽¹⁾	
	[mm]			[mm]		ver. A	ver. B	Lenght	Width	PH10M/T		
30.16.20	3000	1600	2000	4070	4318	3227	3697	3000	1750	1906	2054	2215
40.16.20	4000	1600	2000	5070	4318	3227	3697	4000	1750	1906	2054	2655
40.16.25	4000	1600	2500	5070	4318	3727	4197	4000	1750	1906	2054	2725
50.16.25	5000	1600	2500	6070	4318	3727	4197	5000	1750	1906	2054	3165
50.18.25	5000	1750	2500	6070	4618	3727	4197	5000	1750	1981	2129	3215
60.16.25	6000	1600	2500	7070	4318	3727	4197	6000	1750	1906	2054	3605
60.18.25	6000	1750	2500	7070	4618	3727	4197	6000	1750	1981	2129	3655
60.16.30	6000	1600	3000	7070	4318	4227	4697	6000	1750	1906	2054	3665
60.18.30	6000	1750	3000	7070	4618	4227	4697	6000	1750	1981	2129	3715
70.18.30	7000	1750	3000	8070	4618	4227	4697	7000	1750	1981	2129	4155

⁽¹⁾ CMM only. Operator table, work table, probe and Control cabinet not included.
⁽²⁾ The gap between GD and GW must be filled with two walkable covers - Not included in supply.

CMM JUPITER - Double Arm
STROKES, DIMENSIONS, WEIGHTS

Models	Measuring Strokes					Overall Dimensions ⁽¹⁾					Worktable (Optional) ⁽²⁾				Weights
	X	Y	Y Total	OVERLAP	Z	LX	LY-Double		HZ		GL	GW-Double	GD-Double		Machine Weight ⁽¹⁾
						Double	PH10M/T	PHS-2	ver. A	ver. B	Lenght	Width	PH10M/T	PHS-2	
						[mm]					[mm]				
30.16.20	3000	1600	3100	100	2000	4556	8791	9087	3227	3697	3000	3000/3500	3561	3857	4430
40.16.20	4000	1600	3100	100	2000	5556	8791	9087	3227	3697	4000	3000/3500	3561	3857	5310
40.16.25	4000	1600	3100	100	2500	5556	8791	9087	3727	4697	4000	3000/3500	3561	3857	5450
50.16.25	5000	1600	3100	100	2500	6556	8791	9087	3727	4697	5000	3000/3500	3561	3857	6330
50.18.25	5000	1750	3400	100	2500	6556	9291	9587	3727	4197	5000	3500/4000	3761	4057	6430
60.16.25	6000	1600	3100	100	2500	7556	8791	9087	3727	4197	6000	3000/3500	3561	3857	7210
60.18.25	6000	1750	3400	100	2500	7556	9291	9587	3727	4197	6000	3500/4000	3761	4057	7310
60.16.30	6000	1600	3100	100	3000	7556	8791	9087	4227	4697	6000	3000/3500	3561	3857	7330
60.18.30	6000	1750	3400	100	3000	7556	9291	9587	4227	4697	6000	3500/4000	3761	4057	7430
70.18.30	7000	1750	3400	100	3000	8556	9291	9587	4227	4697	7000	3500/4000	3761	4057	8310

⁽¹⁾ CMM only. Operator table, work table, probe and Control cabinet not included.
⁽²⁾ The gap between GD and GW must be filled with two walkable covers - Not included in supply.