

4.5.4 SF

SHOP-FLOOR MEASURING MACHINE



STROKES, DIMENSIONS, AND WEIGHTS

Models	Overall Dimensions* mm (in)			Measuring Envelope mm (in)			Work Capacity mm (in)				Weight kg (lbs)	
	X	Y	Z	X	Y	Z	X (upper)	X (lower)	Y	Z	Max. Part	CMM
Without touchscreen	833 (32.8)	1325 (52.2)	2020 (79.5)	355 (14)	514 (20.2)	353 (13.9)	529 (20.8)	608 (24)	1100 (43.3)	458 (18)	160 (350)	628 (1386)
With touchscreen	1105 (43.5)	1556 (61.2)										

NOTE: ISO 10360-2 test with maximum part weight performed as an option upon request only.

PERFORMANCE SPECIFICATIONS

According to ISO 10360-2:2009:

$$E_{0,MPE}: 3.1 + 0.05 * \Delta T + (3.0 + 0.2 * \Delta T) * L / 1000$$

$$E_{100,MPE}: 3.1 + 0.05 * \Delta T + (3.0 + 0.2 * \Delta T) * L / 1000$$

$$R_{0,MPL}: 3.1$$

According to ASME B89.4.1b-2001:

$$R: 2.0$$

$$A_v[L]: 6.4 + 0.3 * \sqrt[3]{T} [300]$$

where,

- ΔT is the departure of ambient room temperature from 20°C (68°F) in °C;
- $E_{0,100,MPE}$ is size measurement error in μm , where L is variable length in mm;
- $R_{0,MP}$ L is repeatability in μm ;
- $A_v[L]$ is volumetric accuracy in μm , where L is ball bar length in mm.

Accuracy performance specifications valid under the following thermal conditions:

- Ambient Temperature: 15-40°C;
- Maximum temporal variation: 2°C/h and 10°C/d;
- Maximum spatial variation: 1°C/m horizontal and vertical.

Probing configurations used for performance tests:

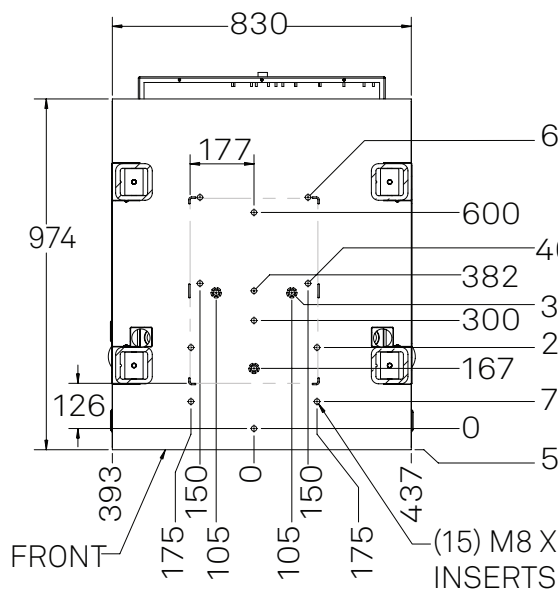
- HP-T, HH-MI: 3mm tip, 30 mm stylus length;
- HP-TM, TP20: standard force module, 3mm tip diameter, 10mm stylus length.

Installation site vibration must be less than 2 μm maximum horizontal and vertical amplitude over 5-50Hz to ensure stated performance levels.

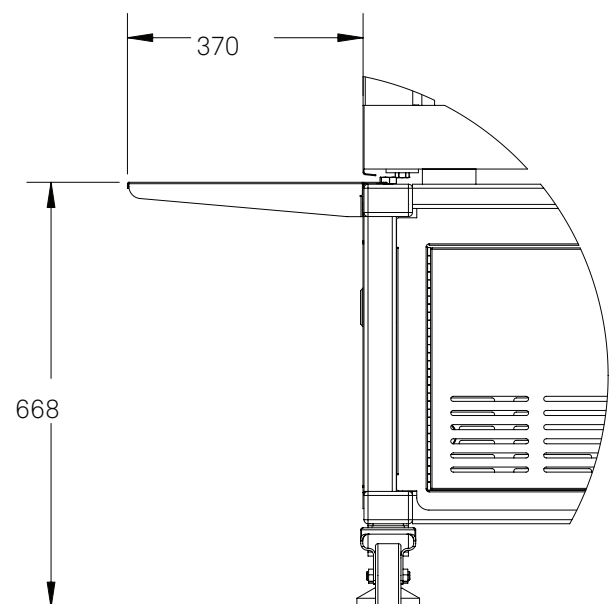
DYNAMICS

	Maximum 3D Speed (mm/s)	Maximum 3D Acceleration (mm/s²)
4.5.4 SF	433	1732

DIMENSIONAL DATA - DETAIL

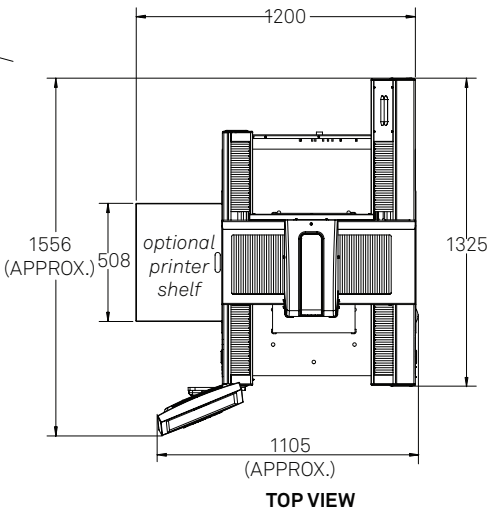
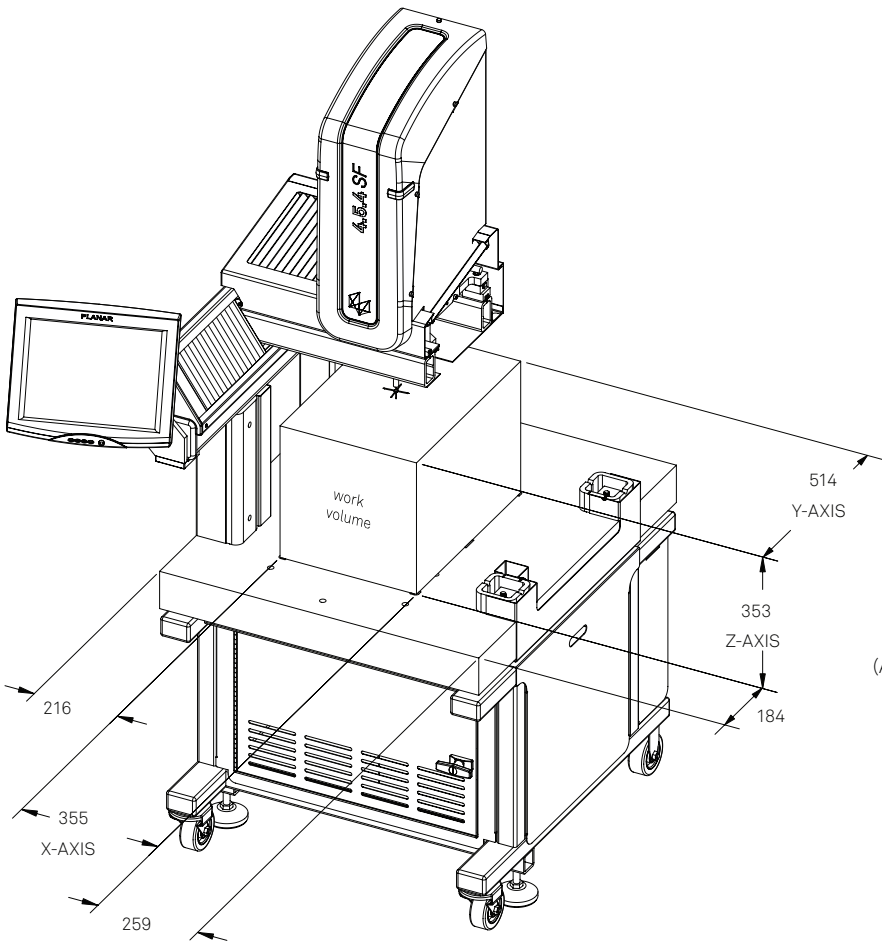


X & Z AXES NOT SHOWN FOR CLARITY

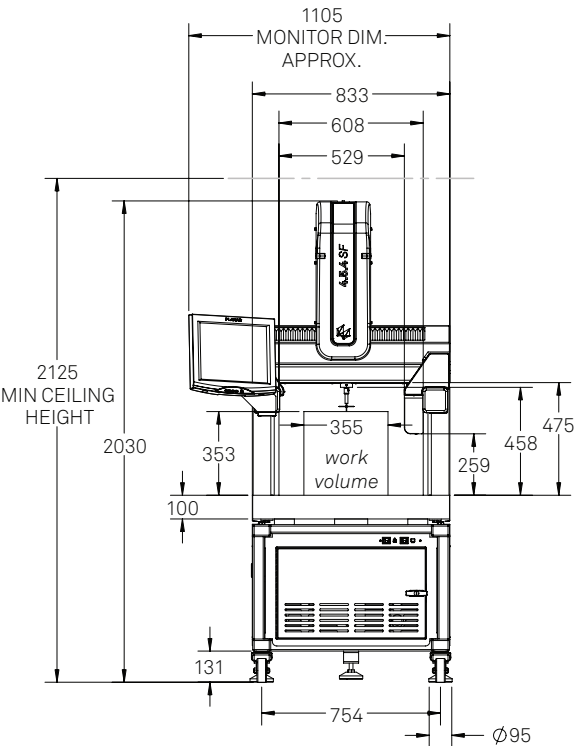
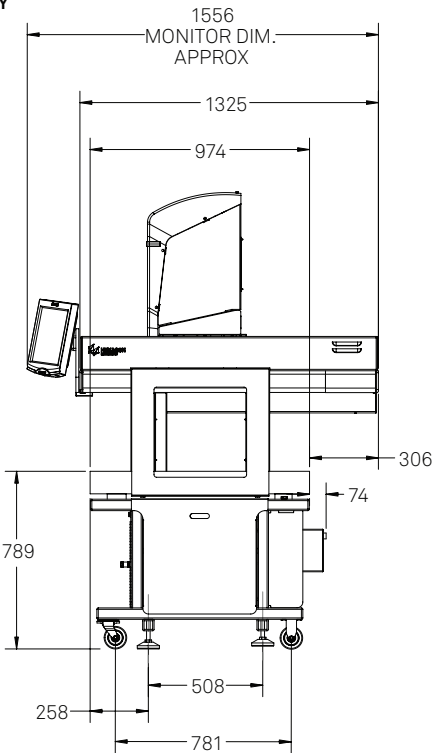


**PRINTER SHELF OPTION
(SHELF CAN BE MOUNTED
TO EITHER SIDE)**

DIMENSIONAL DATA - VIEWS (WITH TOUCHSCREEN)



CUT-AWAY FOR CLARITY

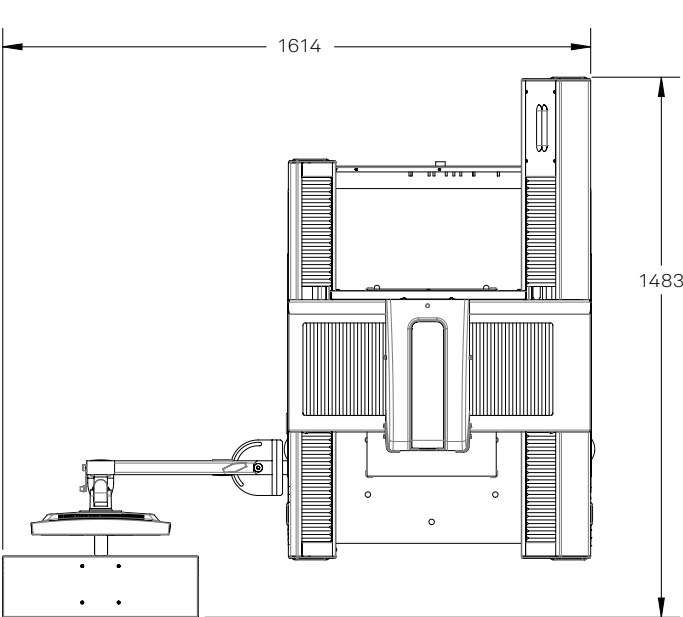


SIDE VIEW

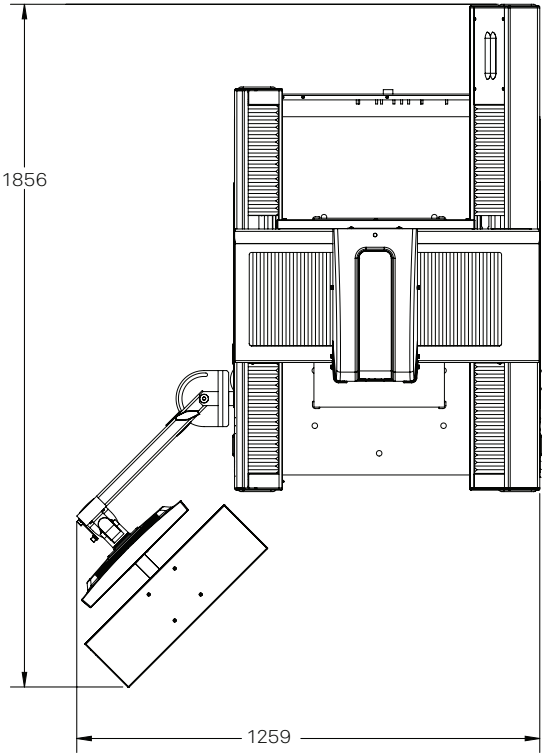
FRONT VIEW

DIMENSIONAL DATA - VIEWS (WITH TOUCHSCREEN)

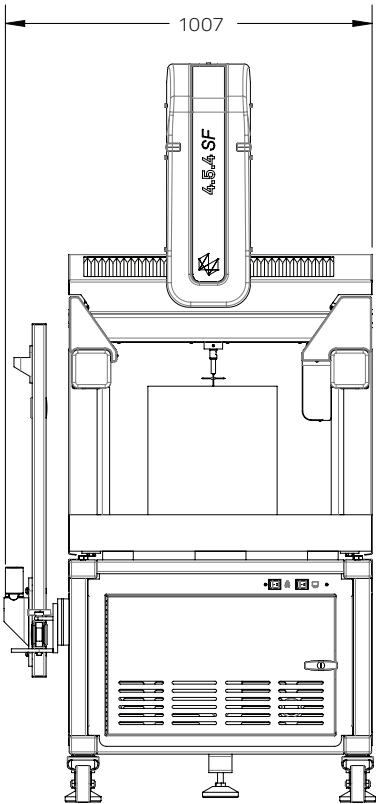
All other dimensions remain identical to the base model.



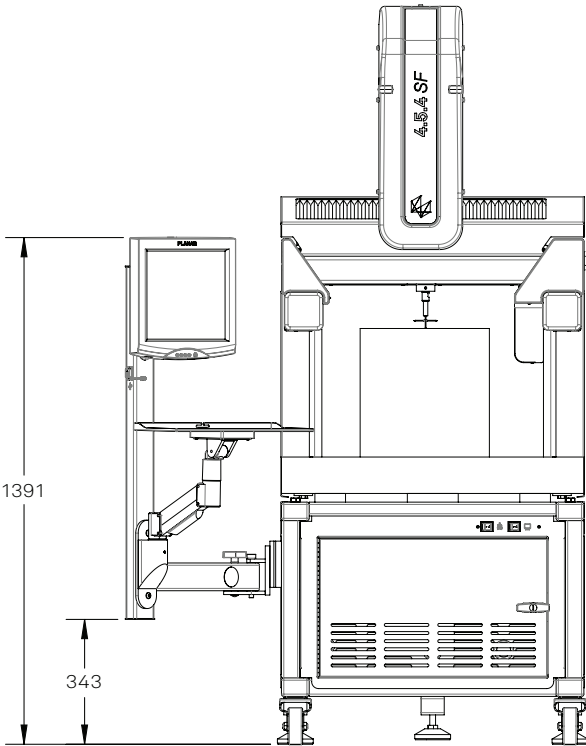
MAXIMUM WIDTH



OPERATING DIMENSIONS (TOP)



MINIMUM MOVING WIDTH



OPERATING DIMENSIONS (FRONT)



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COORDINATE MEASURING MACHINES



3D LASER SCANNING



SENSORS



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