

# **F SERIES™**

**Product Specification Document**  
**Revision 1808/1**

## **Document history :**

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### **Release version**

prerelease document

Changed cm to mm; corrected couple of typos

## **Notice**

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## **1 Introduction**

The F Series flatbed cutting tables are capable of cutting rigid materials as well as roll stock.

The cutting table base unit comes equipped with a drag knife tool module and an optical camera recognition system for accurate contour cutting of printed flexible or rigid substrate materials. A

laser pointer is also included for manual origin registration.

A variety of tools, modules and knives are also available, depending on different applications.

## **2 Different Models**

The F Series flatbed cutting tables are available in different sizes and different configurations.

Depending on the region, certain sizes and or configurations may not be available. Also branding may be different. In this section we refer to the basic model names F1612, F1330 and F2630. Where known, it is marked if a specification is configuration depended.

## **3 Feature List**

### **3.1 Hardware**

#### **3.1.1 Basic**

- Vacuum pack (pumps(s), sound absorber, selector and switching valve).
- Safety pack (4 pole laser beam system).
- Fixed module with camera and LED pointer.
- Multi tool holder carriage for up to three tools.
- Pneumatic board (optional for F1612).
- Drag knife module.

#### **3.1.2 Options**

- Base for safety poles.
- Conveyor system (only optional for F1612, mandatory for other models)
- Media clamps pack (is called pneumatic pack with the F1612 because it includes a pneumatic board also)
- Roll support
- Basket (F1612 only)
- Extension table (F1612 only)
- Roll up (F1612 only)
- Pump extension connections (not for F1612)

### 3.1.3 Modules

- Tangential module
- Routing module ( part of routing system)
- Rotary module

### 3.1.4 Tools

- Kiss Cutting Tool
- Cut Out Tools ( Heavy duty, single edge and double edge)
- V-Cut Tools (0°, 15°, 22.5°, 30° and 45°)
- Creasing Wheels (Ø25 8pt, 4pt and 2pt; Ø15 2pt and 1pt)
- Electronic Oscillating Tool (EOT)
- Pneumatic Oscillating Tool (POT)
- Universal pen holder tool (for pens Ø8 – Ø11).

## 3.2 Software

- Axis Control
  - Full Control over the cutting table
  - Windows Vista, Windows 7, Windows 8 or Windows 10
  - Connection by USB
  - Designed for touch screens for optimum interface for operator
  - Supplied with wireless controller

- SummaFlex (Pro)

The difference between SummaFlex and SummaFlex Pro is the camera support. This is necessary for print and cut jobs.

- Finishing software cut and print and cut jobs (PRO version only)
- Windows Vista, Windows 7, Windows 8 or Windows 10 (no home versions)
- Macro's to automate the workflow
- Barcode support for automatically retrieving correct cut data
- Sorting facilities to shorten the output time
- Camera recognition with all kind of compensations (contour cutting – PRO version only)
- Flexible data import for seamless integration into any workflow
- Interactive milling functions
- Embossing and engraving possibilities

## 4 Technical Specifications

### 4.1 Machine dimensions

	F1612		F1330		F2630	
	mm	inch	mm	inch	mm	inch
<b>Height</b>	1100	43.3	1220	48	1220	48
<b>Width</b>	2350	92.5	2140	84.3	3490	137.4
<b>Width with safety beams</b>	4400	173.2	3890	153.1	5230	206
<b>Depth</b>	2120	83.4	4100	161.4	4100	161.4
<b>Depth with safety beams</b>	4000	157.4	5420	213.4	5420	213.4
	Kg	pounds	Kg	pounds	Kg	pounds
<b>Weight</b>	500	1100	1500	3300	1800	3970

Table 6-1 F Series dimensions

## 4.2 Shipping dimensions

F1612		
	mm	inch
<b>Height</b>	1420	43.3
<b>Width</b>	2530	92.5
<b>Depth</b>	2230	76.4
	Kg	pounds
<b>Weight</b>	500	1100

	F1330									
	Width		Depth		Height		Weight		Weight (tare)	
	mm	inch	mm	inch	mm	inch	kg	lbs	kg	lbs
Box	3930	155	980	39	1090	43	800	1764	300	662
Box	1980	78	1180	47	1090	43	800	1764	200	441
2 x Box	1980	78	1180	47	1090	43	400	882	200	441
Total							2400	5292	900	1985

		F2630							Weight (tare)		
		Width		Depth		Height		Weight			
		mm	inch	m	inch	m	inch	kg			lbs
Box		3930	155	980	39	1090	43	800	1764	300	662
Box		3280	129	980	39	1090	43	700	1543	250	551
Box		1980	78	1180	47	1090	43	700	1543	200	441
2 x Box		1980	78	1180	47	1090	43	400	882	200	441
Total								3000	6614	1150	2536

Table 6-2 F series shipping dimensions

### 4.3 Media handling

	F1612	F1330	F2630
<b>Media Width</b>	Up to 1650 mm	Up to 1350 mm	Up to 2700 mm
<b>Working Area</b>	1600 x 1200 mm	1300 x 3050 mm	2650 x 3005 mm
<b>Media Weight</b>	maximum 300 kg maximum 100kg/m <sup>2</sup>		
<b>Media Weight using Conveyor</b>	maximum 60 kg maximum 30kg/m <sup>2</sup>		
<b>Roll Specifications with Roll Support &amp; Flanges</b>	Diameter: maximum 17cm Weight: maximum 25 kg, Inner Core Diameter: 7,5cm		
<b>Maximum Roll Weight with Roll Support</b>	50 kg	50 kg	50kg per side or 100 kg if roll is equally carried by both sides
<b>Vacuum</b>	1.3 kW <sup>(1)</sup> (50Hz) 1,5 kW (60Hz)	2,2 kW (50Hz) 2,55 kW (60Hz)	2x 2,2 kW (50Hz) 2 x 2,55 kW (60Hz)
<b>Vacuum Zones</b>	Variable over width of machine	6 zones (2 rows x 3 columns)	12 zones (2 rows x 6 columns)
<b>Repeatability</b>	Within $\pm 0.05$ mm on plots		
<b>Accuracy</b>	0.05 % of move or 0.05 mm, whichever is greater		
<b>Clearance</b> <sup>(2)</sup>	5 cm (1.9 in.)		

<sup>(1)</sup> F1612 monophasic has a monophasic vacuum blower of 1.5 kW

<sup>(2)</sup> Distance between vacuum table and Y-beam. Not taking into account the thickness of a cutting matt or conveyor belt

Table 6-3 F Series media specifications

### 4.4 Performance

	F1612	F1330	F2630
<b>Speed</b>	Up to 1000 mm/s (40 ips)		
<b>Acceleration</b>	Up to 1 G		
<b>Repeatability</b>	Within $\pm 0.05$ mm (2 mil) on plots		
<b>Accuracy</b>	0.05 % of move or 0.05 mm (2 mil), whichever is greater		
<b>Mechanical resolution</b>			
<b>Maximum Allowed Forces</b>	Vertical: 200 Newton (45 Pounds) Horizontal: 200 Newton (45 Pounds)		

Table 6-4 F Series performances

## 4.5 Noise level

xx dBA xxxxxxxxxxxxxxxxxxxx

xx dBA xxxxxxxxxxxxxxxxxxxx

xx dBA xxxxxxxxxxxxxxxxxxxx

## 4.6 Interface

<b>Communication</b>	USB
<b>USB</b> I/O Port connector Mating connector	USB series "B" receptacle (female plug) USB series "B" plug (male plug)
<b>Axis Control</b>	Acts as control panel
<b>Remote Controller</b>	Bluetooth controller with Bluetooth adapter

Table 6-5 F Series INTERFACE SPECIFICATIONS

## 4.7 Environmental

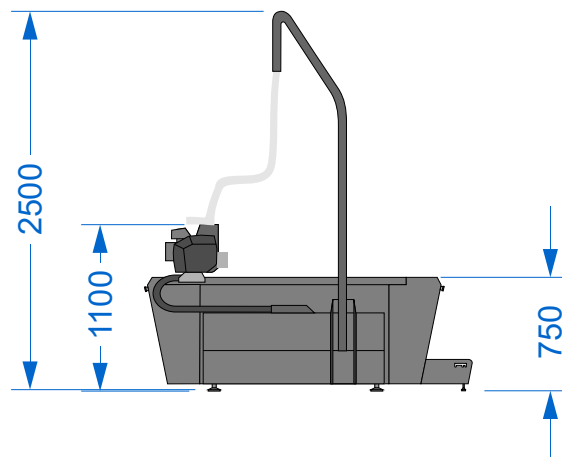
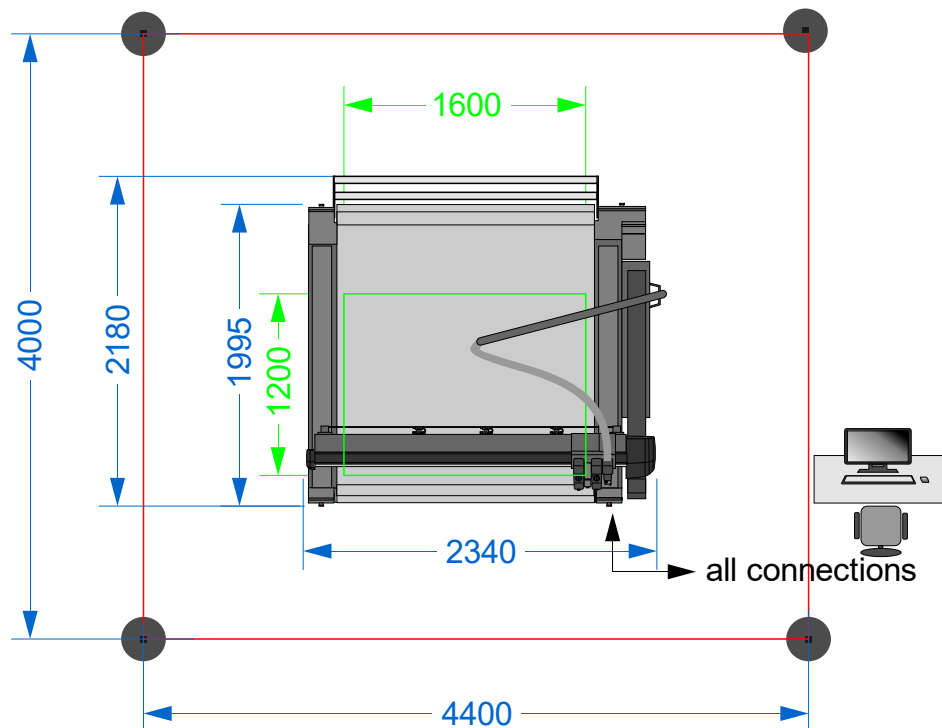
<b>Operating Temperature</b>	15 to 35 °C	59 to 95 °F
<b>Storage temperature</b>	-30 to 70 °C	-22 to 158°F
<b>Vacuum pump</b>	If installed separately: ambient temperature maximum 40 °C or 104 °F	
<b>Relative humidity</b>	35 - 75 %, non-condensing	

Table 6-6 F Series environmental specifications



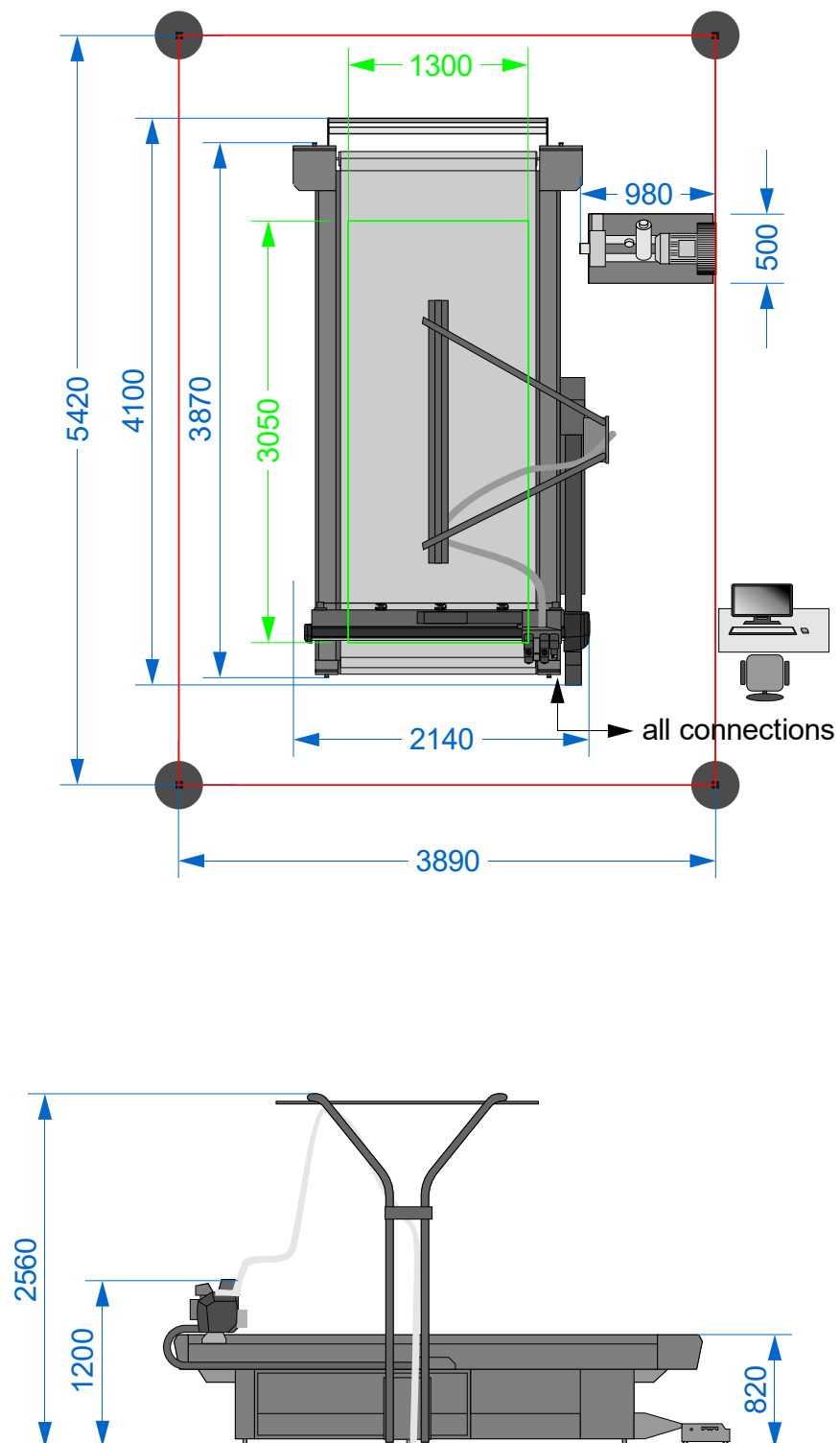
#### 4.7.1 Typical setup F 1612

All values are in mm



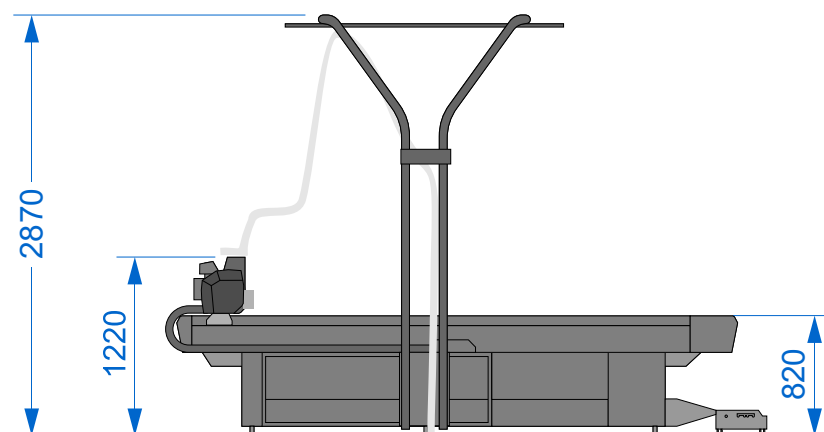
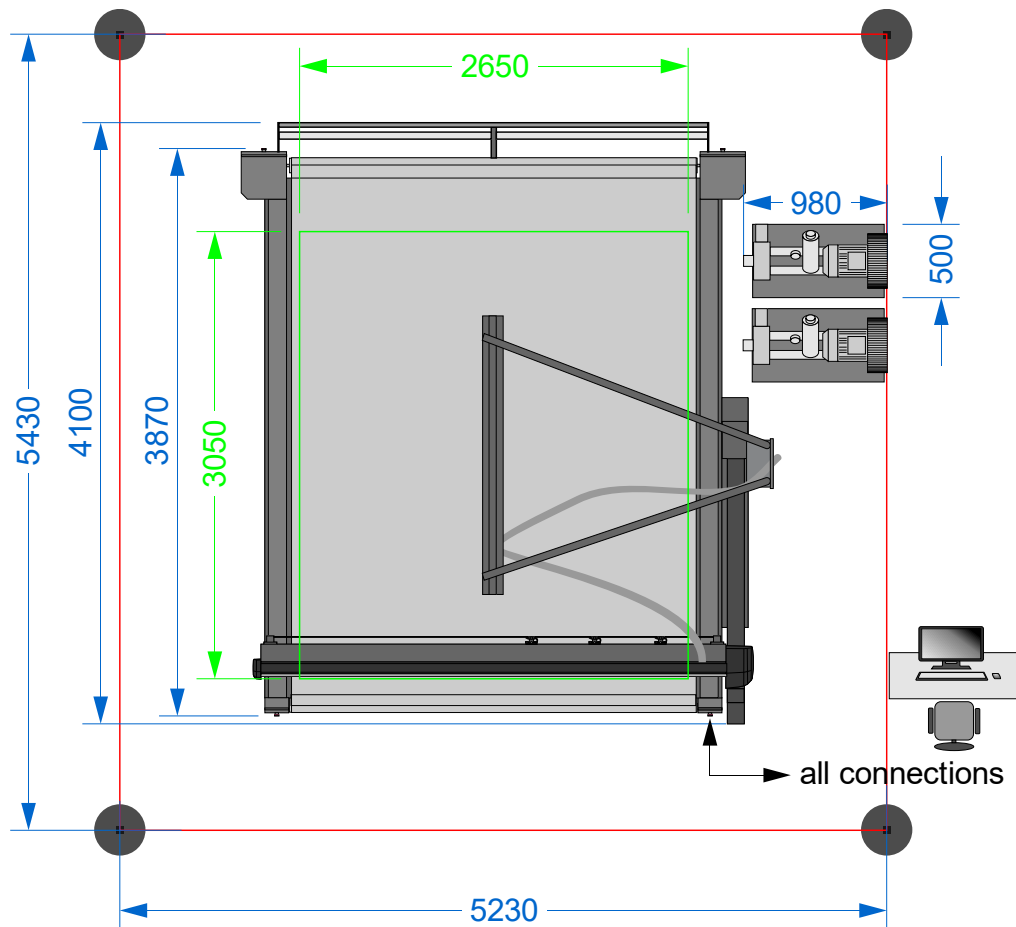
#### 4.7.1 Typical setup F 1330

All values are in mm



### 4.7.2 Typical setup F 2630

All values are in mm



## 4.8 Electrical

<b>F1612</b>	3 x 400V + N , 50Hz	3 x 230V, 50Hz	230 VAC 1ph, 50 Hz	3x 208V + N ,60 Hz
Max Amp	15A	15A	30A	30A
Router Pack	OK	OK	XX <sup>(3)</sup>	OK
Metabo vacuum cleaner	OK	OK	XX <sup>(3)</sup>	OK
3Flow vacuum cleaner	OK	EXTRA SOCKET <sup>(1)</sup>	XX <sup>(3)</sup>	XX <sup>(4)</sup>

<b>F1330</b>	3 x 400V + N , 50Hz	3 x 230V, 50Hz	3x 208V + N ,60 Hz
Max Amp	30A	30A	30A
Router Pack	OK	OK	OK
Metabo vacuum cleaner	Not recommended <sup>(2)</sup>	Not recommended <sup>(2)</sup>	Not recommended <sup>(2)</sup>
3Flow vacuum cleaner	OK	OK	XX <sup>(4)</sup>

<b>F2630</b>	3 x 400V + N , 50Hz	3 x 230V, 50Hz	3x 208V + N ,60 Hz
Max Amp	30A	30A	30A
Router Pack	OK	OK	OK
Metabo vacuum cleaner	Not recommended <sup>(2)</sup>	Not recommended <sup>(2)</sup>	Not recommended <sup>(2)</sup>
3Flow vacuum cleaner	OK	EXTRA SOCKET <sup>(1)</sup>	XX <sup>(4)</sup>

- (1) The vacuum cleaner needs a secondary wall socket for flatbeds running at 3x230 Volt. It is not allowed to get the power from the main power entry of the F-series. The extra socket should be single phase, 230 Volt 15 Amps
- (2) Although this vacuum cleaner can be installed, it is discouraged to use it because of the small dust bag in reference to the large working area
- (3) The router option cannot be installed in this configuration
- (4) Current 3Flow vacuum cleaner that Summa is offering cannot be used in this configuration.