## STANDARD MODULAR FRAME SYSTEM

There is no doubt that the trickiest part of supplying an on-line hot foil or thermal transfer printer is designing the printer mounting frame. This is also the most difficult to learn and hardest to teach. The greatest aid to designing a mounting frame is experience but that is something that Open Date cannot teach.

Every packaging machine has it's own peculiarities and even common models are likely to have been customised by the manufacturer, agent or customer. Some will be continuous motion and some intermittent. Some will require the web to be printed on the top and some on the bottom. Every pack will be longer or shorter, wider or narrower than the last and inevitably print positions will be different.

Customers may have their own views as to where and how the printer should be mounted although these are best discouraged as they will further complicate an already difficult task.

Although Open Date has made an effort to keep printer designs similar, every one is slightly different.

All of these variables complicate the make-up of printer mounting frames so in order to help, Open Date produce a standard modular frame system which will simplify the process of designing, building and installing them.



The system comprises of rollers, print registration units and tie bars of varying lengths, end plates, base plates and printer mounting plates etc. which can be assembled, dismantled and reassembled as necessary so that the requirements of the packaging machine, pack, customer and printer are best met

Frames can be designed to suit continuous or intermittent printers by fitting lower roller units, rubber covered print rollers or flat print pads. Pre-drilled holes are provided in the end plates so that rollers can be positioned as required and for fixing print registration units and other accessories. The standard modular frame system is a comprehensive range of parts and sub-assemblies. However as previously mentioned, there are many variables which will determine the way that a frame is assembled. Whilst the parts available will cover most, they will not cover all and it is possible that one or two items might still have to be manufactured possibly including brackets in order to fix the finished mounting frame to the packaging machine.



## STANDARD MODULAR FRAME PARTS

The parts listed below can be used to build mounting frames for all Thermocodes and the following Hot Foil Printers; Digi 3 Coder, Eurocode, Printmaster, Sprint and Sprint Major. Parts can be made to special order for printers not listed.

#### **Design Notes**

When deciding which items are needed to build a mounting frame, the most important factors to take into account are the printer model (from those listed above), maximum web width, maximum pack length and the frame width. The frame width is likely to be determined by that of the parent machine or by ensuring that the printer can be adjusted within the frame across the full width of the web. Parts for 500, 600, 700, 800, 900 and 1000 mm wide frames are available as standard, other sizes can be supplied to special order.

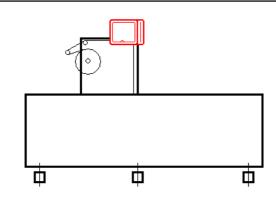
The width of the rollers used should be greater than the maximum width of web specified for the parent machine. It is not necessary to match the roller width to that of the mounting frame. Roller shafts should be specified according to the frame width. It is strongly recommended that at least one spare roller and shaft is available during installation.

Select the items required which are relevant to the printer model, frame width and roller width as detailed in the

	Item	Description & Notes	Size/Spec	Order Ref.
0-0-	1	Universal End Plates (two required per frame).	All printers except 53L & 107L 53L & 107L	SMF177080 SMF177056
	2	Printer & Print Base Mounting Tubes with End Plugs. (two required for printer mounting and two for print pad mounting)	for 500 mm frame for 600 mm frame for 700 mm frame for 800 mm frame for 900 mm frame for 1000 mm frame	SMF177505 SMF177507 SMF177509 SMF177511 SMF177513 SMF177515
	3	Rollers (31.5 mm Ø) with bearings.  Item 4 required to mount this.	400 mm wide 500 mm wide 600 mm wide 700 mm wide 800 mm wide 900 mm wide	SMF177525 SMF177527 SMF177529 SMF177531 SMF177533 SMF177535
	4	Roller Shafts (12 mm Ø) with roller positioning collars.	for 500 mm frame for 600 mm frame for 700 mm frame for 800 mm frame for 900 mm frame for 1000 mm frame	SMF177549 SMF177551 SMF177553 SMF177555 SMF177557 SMF177559
	5	Print Registration Units to suit 450 mm maximum pack length. Supplied with a 1000 mm long roller shaft which can be cut to length as required.	Required for intermittent printers only.  Does not include roller (item 3 above) which will have to be ordered separately.  All printers except 53L & 107L  53L & 107L	SMF177565 SMF177566
	6	Printer Mounting Assemblies.	for Thermocode 53E for Thermocode 53S & M, 107S & M for Thermocode 53C & 107C for all Hot Foil Printers	SMF177570 SMF177571 SMF177572 SMF177573

 Item	Description & Notes	Size/Spec	Order Ref.
7	Print Pad Assemblies Required for intermittent Printers only.	All printers excepts 53L & 107L For Thermocode 53L & 107L	SMF177578 SMF177579
8	Lower Roller Unit. Item 9 required to mount this.	Only required for Continuous Thermocode	ASY764133
9	Mounting Bar and Clamps for Lower Roller Unit.	for 500 mm frame for 600 mm frame for 700 mm frame for 800 mm frame for 900 mm frame for 1000 mm frame	SMF177589 SMF177591 SMF177593 SMF177595 SMF177597 SMF177599
10	Rubber Covered Lower Roller (50 mm Ø). Optional for Thermocode 53C & 107C as an alternative to item 8. Item 11 required to mount this.	400 mm wide 500 mm wide 600 mm wide 700 mm wide 800 mm wide	SMF177605 SMF177606 SMF177607 SMF177608 SMF177609
11	Lower Roller Shaft (16 mm Ø) with roller positioning collars.	for 500 mm frame for 600 mm frame for 700 mm frame for 800 mm frame for 900 mm frame for 1000 mm frame	SMF177619 SMF177621 SMF177623 SMF177625 SMF177627 SMF177629
12	Printer Adjustment Lead Screw with handle & fixing block.	1000 mm long lead screw can be cut to length as required. Only for Continuous Thermocode.	SMF177635
13	Encoder & bracket assembly.	1000 mm long shaft can be cut to length as required. Only for Continuous Thermocode	SMF177075
14	Frame mounting plate. (two required per frame)	To adapt the frame to the parent machine.	SMF177013
15	Alignment block & shaft assembly. Recommended for continuous as well as M & L Thermocode	Alignment block assembly Alignment shaft available for 300mm to 1000mm frames.	SMF177640 SMF177641 to SMF177655

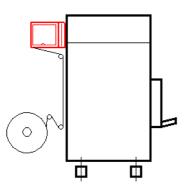
### MODULAR FRAME INSTALLATION EXAMPLES



#### **Horizontal Bagging Machine**

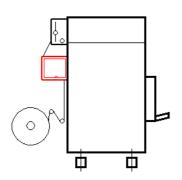
The mounting frame can be fitted above or on the side of the machine.

Due to their design, some horizontal bagging machines only allow the mounting frame to attached at one end and it may be necessary to add an additional support leg. The frame shown in red is fitted with a print registration unit.



#### **Vertical Bagging Machine**

The mounting frame can be fitted on the side of or inside the machine and can also be turned upside down depending upon which side of the film is to be printed. As there is no means of adjusting the print along the length of the pack, the mounting frame shown in red is fitted with a print registration unit.



# <u>Vertical Bagging Machine already equipped with print registration roller</u>

As above, the mounting frame can be fitted on the side of or inside the machine and can be turned upside down depending upon which side of the film is to be printed. The basic frame shown in red is sufficient.

#### **Ordering Example**

The mounting frame shown on page 1 of this leaflet is for a Eurocode hot foil printer. It is 700 mm wide, has 600 mm rollers and a print registration unit. The following items were used to build it;

<b>Quantity</b>	<b>Description</b>	Size/Specifications	Order Ref.	Item (from p3)
2 x	Universal End Plates		SMF177080	Item 1
4 x	Printer & Print Base Mounting Tubes	for 700 mm frame.	SMF177509	Item 2
5 x	Rollers	600 mm wide.	SMF177529	Item 3
4 x	Roller Shafts	for 700 mm frame.	SMF177553	Item 4
1 x	Print Registration Unit		SMF177565	Item 5
1 x	Printer Mounting Assembly	for hot foil printer.	SMF177573	Item 6
1 x	Print Pad Assembly	for hot foil printer.	SMF177579	Item 7
1 x	Printer Adjustment Lead Screw		SMF177635	Item 12



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