Versions and technical data T 1120 P

Machine / Unit		T 1120 – FP		T 1120 – FP		T 1120 – R		Folding unit II 1120		Folding unit II 780	
Feeder		FP 1020/110		FP 1120/110 – 165 cm		R 1020 Dualfeed					
		cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Infeed width	min	30,00	11 3/4	30,00	11 3/4	15,00	5 7/8	–	–	–	–
	max	112,00	44 1/8	112,00	44 1/8	112,00	44 1/8	110,00	43 1/4	76,00	29 7/8
Infeed length	min	25,00	9 7/8	25,00	9 7/8	20,00	7 7/8	–	–	–	–
	max	145,00	57 1/8	165,00	65	145 (175)	57 1/8	–	–	–	–
With small format device	min	17,00	6 3/4	–	–	–	–	–	–	–	–
Folding length	min	7,00	2 3/4	7,00	2 3/4	7,00	2 3/4	7,00	2 3/4	6,00	2 3/8
NIRO buckle plates											
Buckle plate 1	max	73,00	28 3/4	73,00	28 3/4	73,00	28 3/4	–	–	70,00	27 1/2
Buckle plate 2	max	–	–	–	–	–	–	–	–	49,00	19 1/4
Buckle plate 3	max	–	–	–	–	–	–	–	–	49,00	19 1/4
Other buckle plates	max	–	–	–	–	–	–	–	–	49,00	19 1/4
Combiplates											
Buckle plate 1	max	–	–	–	–	–	–	85,00	33 1/2	64,00	25 1/4
Buckle plate 2	max	66,00	26	66,00	26	66,00	26	66,00	26	43,00	16 7/8
Buckle plate 3	max	45,00	17 3/4	45,00	17 3/4	45,00	17 3/4	45,00	17 3/4	43,00	16 7/8
Other buckle plates	max	45,00	17 3/4	45,00	17 3/4	45,00	17 3/4	45,00	17 3/4	43,00	16 7/8
Number of buckle plates	min	4		4		4		4		4	
	max	6		6		6		6		6	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Fold roller diameter		49,50	2	49,50	2	49,50	2	49,50	2	43,70	1 3/4
Slitter shaft diameter		60,00	2 3/8	60,00	2 3/8	60,00	2 3/8	60,00	2 3/8	35,00	1 3/8
Product thickness at exit*		2,00	1/8	2,00	1/8	2,00	1/8	2,00	1/8	2,00	1/8
		m/min	inch/min	m/min	inch/min	m/min	inch/min	m/min	inch/min	m/min	inch/min
Speed	min	10	394	10	394	10	394	10	394	10	394
	max	160	6299	160	6299	160	6299	130	5118	205	8071
Control	MC Control/NAVIGATOR Control, electronically adjustable										

Machine / Unit		Folding unit III 780		Folding unit III 780 RFE		Folding unit III 680		Folding unit III 680 RFE		Folding unit IV 560	
		cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Infeed width	min	–	–	–	–	–	–	–	–	–	–
	max	76,00	29 7/8	73,00	28 3/4	66,00	26	63,00	24 3/4	54,00	21 1/4
Infeed length	min	–	–	–	–	–	–	–	–	–	–
	max	–	–	–	–	–	–	–	–	–	–
With small format device	min	–	–	–	–	–	–	–	–	–	–
Folding length	min	6,00	2 3/8	6,00	2 3/8	6,00	2 3/8	6,00	2 3/8	6,00	2 3/8
NIRO buckle plates											
Buckle plate 1	max	49,00	19 1/4	49,00	19 1/4	49,00	19 1/4	49,00	19 1/4	31,00	12 1/4
Buckle plate 2	max	49,00	19 1/4	31,00	12 1/4	49,00	19 1/4	31,00	12 1/4	26,00	10 1/4
Buckle plate 3	max	49,00	19 1/4	49,00	19 1/4	49,00	19 1/4	49,00	19 1/4	–	–
Other buckle plates	max	49,00	19 1/4	26,00	10 1/4	49,00	19 1/4	26,00	10 1/4	–	–
Combiplates											
Buckle plate 1	max	43,00	16 7/8	43,00	16 7/8	43,00	16 7/8	43,00	16 7/8	31,00	12 1/4
Buckle plate 2	max	43,00	16 7/8	31,00	12 1/4	43,00	16 7/8	31,00	12 1/4	26,00	10 1/4
Buckle plate 3	max	43,00	16 7/8	43,00	16 7/8	43,00	16 7/8	43,00	16 7/8	–	–
Other buckle plates	max	43,00	16 7/8	21,00	8 1/4	43,00	16 7/8	21,00	8 1/4	–	–
Number of buckle plates	min	2		2		2		2		2	
	max	4		4		4		4		2	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Fold roller diameter		43,70	1 3/4	43,70	1 3/4	43,70	1 3/4	43,70	1 3/4	43,70	1 3/4
Slitter shaft diameter		35,00	1 3/8	35,00	1 3/8	35,00	1 3/8	35,00	1 3/8	35,00	1 3/8
Product thickness at exit*	max	2,00	1/8	2,00	1/8	2,00	1/8	2,00	1/8	2,00	1/8
		m/min	inch/min	m/min	inch/min	m/min	inch/min	m/min	inch/min	m/min	inch/min
Speed	min	10	394	10	394	10	394	10	394	10	394
	max	205	8071	205	8071	205	8071	205	8071	205	8071
Control	MC Control/NAVIGATOR Control, electronically adjustable										

* (thicker on request)

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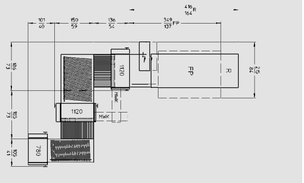
Floorplan
T 1120 P



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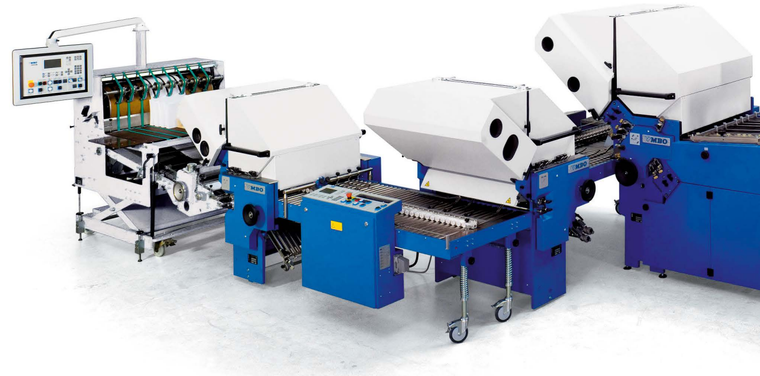
T 1020 / T 1120 Perfection

Folding XL style

Size is not the only thing that matters, perfection is also important



T 1120 P 4/4/4, FP palletised feeder, NAVIGATOR Control, TOUCHSCREEN, noise insulation device, delivery SBAP 82 ME

Tailor-made folding solution

Buckle folding machines by MBO convince with their universal application range and unique bandwidth of folding types.

All models of the Perfection series basically stand for the highest possible folding performance and maximum output. MBO folding machines and features are orientated on the users – both regarding practical requirements and the variety of the paper medium. Convenience plays a major role. The simpler the processes and workflows, the more efficient becomes production. With their high performance and excellent quality, the T 1020 and T 1120 Perfection provide the ideal preconditions for highest productivity.

A broad range of folding types and individual automation options guarantee that the Perfection models live up to their names.

The equipment features of our folding machines have been especially designed for the purpose of their application. We never rest on our well-proven product development achievements but always try to recognise new requirements as early as possible. Ideally soon enough to offer you a solution before you even face the problem. Some of these special solutions can be found on the T 1020 and T 1120 Perfection.

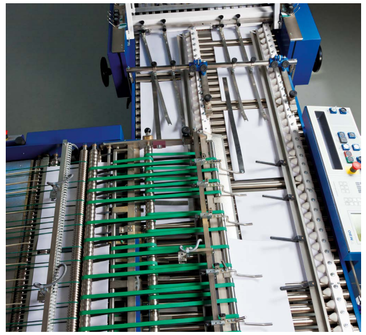
More flexibility desired: The newly developed transfer table with an alternating deflector and waste paper ejector are applied in the T 1120 Perfection

The newly developed transfer table which can be used with the Perfection buckle folding machine T 1120 in folding unit I enables unimagined possibilities with only one additional investment. The transfer table which is fixed at the folding unit I is equipped with a so-called alternating deflector. The alternating deflector can divide the product stream of folding unit I in turns to two sidelays in folding unit II. Therefore, the mechanical speed of folding unit II is cut in half, thus enabling this folding unit to handle a higher output of folding unit I, especially in the case of landscape size. Due to the bisection of speed a very high folding quality and a safe change of transport direction in folding unit II is guaranteed.

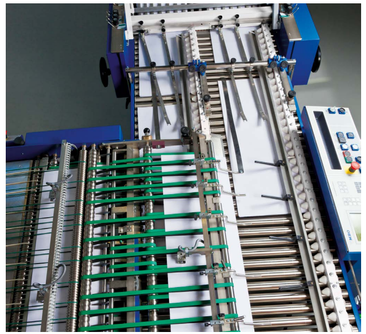
Therefore, for many products that can very often be produced with a high speed in folding unit I but which are then slowed down in folding unit II (due to e.g. variations in folding, difficult changes of transport direction, "flying" paper edges of thin products) the output can be increased by up to 40 %. And all of that with just one touch.

The waste paper ejector integrated in the transfer table ensures higher net outputs. Misfolded sheets or double-sheets (recognised by the ultrasonic double-sheet control) are ejected before the alternating deflector during production.

Further possibilities of the transfer table:
With the specialized MBO transfer table it's easy to setup traditional double stream production; no time consuming add-on installations would be required. For standard production with only one sidelay in folding unit II the alternating deflector is easily deactivated with a switch.



Double stream production



Production with alternating deflector

As convincing as the performance features: The folding results

Top quality at top speed
MBO Perfection models are the only buckle folding machines worldwide operating without the „ball" transport system which is very susceptible to markings. In order to reliably avoid markings even for high throughput speeds, MBO applies the innovative vacuum infeed and alignment system VIVAS, as well as patented HIGH-SPEED-GUIDE conical rollers.

Impressive standard equipment and effective extensions
The Perfection series features unique MBO systems, many years of experience of developing and optimising folding processes and the typical user-friendliness MBO is renowned for. With its excellent basic design and a large variety of extension options, the Perfection series is open for any solution.

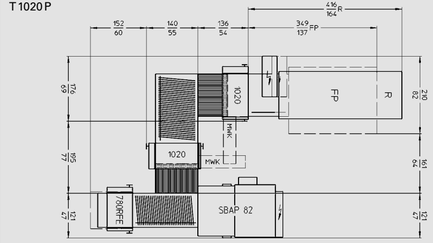
Whether it is a higher output due to the double stream device, the increase of capacity by means of special deliveries, more convenience for the operator because of the NAVIGATOR Control or the RFE sheet return device patented by MBO which reduces the distance between the feeder and the delivery by 80 % compared to standard production lines.

Versions and technical data T 1020 P

Machine / Unit		T 1020 – FP		T 1020 – R		Folding unit II 1020		Folding unit II 780	
Feeder		FP 1020/110		R 1020 Dualfeed					
		cm	inch	cm	inch	cm	inch	cm	inch
Infeed width	min	30,00	11 3/4	15,00	5 7/8	–	–	–	–
	max	102,00	40 1/8	102,00	40 1/8	100,00	39 3/8	76,00	29 7/8
Infeed length	min	25,00	9 7/8	20,00	7 7/8	–	–	–	–
	max	145,00	57 1/8	145,00 (175)	57 1/8	–	–	–	–
With small format device	min	17,00	6 3/4	–	–	–	–	–	–
Folding length	min	7,00	2 3/4	7,00	2 3/4	7,00	2 3/4	6,00	2 3/8
NIRO buckle plates									
Buckle plate 1	max	73,00	28 3/4	73,00	28 3/4	–	–	70,00	27 1/2
Buckle plate 2	max	–	–	–	–	–	–	49,00	19 1/4
Buckle plate 3	max	–	–	–	–	–	–	49,00	19 1/4
Other buckle plates	max	–	–	–	–	–	–	49,00	19 1/4
Combiplates									
Buckle plate 1	max	–	–	–	–	73,00	28 3/4	64,00	25 1/4
Buckle plate 2	max	66,00	26	66,00	26	45,00	17 3/4	43,00	16 7/8
Buckle plate 3	max	45,00	17 3/4	45,00	17 3/4	45,00	17 3/4	43,00	16 7/8
Other buckle plates	max	45,00	17 3/4	45,00	17 3/4	45,00	17 3/4	43,00	16 7/8
Number of buckle plates	min	4		4		4		4	
	max	6		6		6		6	
		mm	inch	mm	inch	mm	inch	mm	inch
Fold roller diameter		49,50	2	49,50	2	49,50	2	43,70	1 3/4
Slitter shaft diameter		60,00	2 3/8	60,00	2 3/8	60,00	2 3/8	35,00	1 3/8
Product thickness at exit	max	2,00	1/8	2,00	1/8	2,00	1/8	2,00	1/8
		m/min	inch/min	m/min	inch/min	m/min	inch/min	m/min	inch/min
Speed	min	10	394	10	394	10	394	10	394
	max	160	6299	160	6299	130	5118	205	8071
Control	MC Control/NAVIGATOR Control, electronically adjustable								

Machine / Unit		Folding unit III 780		Folding unit III 780 RFE		Folding unit III 680		Folding unit III 680 RFE		Folding unit IV 560	
		cm	inch	cm	inch	cm	inch	cm	inch	cm	inch
Infeed width	min	–	–	–	–	–	–	–	–	–	–
	max	76,00	29 7/8	73,00	28 3/4	66,00	26	63,00	24 3/4	54,00	21 1/4
Infeed length	min	–	–	–	–	–	–	–	–	–	–
	max	–	–	–	–	–	–	–	–	–	–
With small format device	min	–	–	–	–	–	–	–	–	–	–
Folding length	min	6,00	2 3/8	6,00	2 3/8	6,00	2 3/8	6,00	2 3/8	6,00	2 3/8
NIRO buckle plates											
Buckle plate 1	max	49,00	19 1/4	49,00	19 1/4	49,00	19 1/4	49,00	19 1/4	31,00	12 1/4
Buckle plate 2	max	49,00	19 1/4	31,00	12 1/4	49,00	19 1/4	31,00	12 1/4	26,00	10 1/4
Buckle plate 3	max	49,00	19 1/4	49,00	19 1/4	49,00	19 1/4	49,00	19 1/4	–	–
Other buckle plates	max	49,00	19 1/4	26,00	10 1/4	49,00	19 1/4	26,00	10 1/4	–	–
Combiplates											
Buckle plate 1	max	43,00	16 7/8	43,00	16 7/8	43,00	16 7/8	43,00	16 7/8	31,00	12 1/4
Buckle plate 2	max	43,00	16 7/8	31,00	12 1/4	43,00	16 7/8	31,00	12 1/4	26,00	10 1/4
Buckle plate 3	max	43,00	16 7/8	43,00	16 7/8	43,00	16 7/8	43,00	16 7/8	–	–
Other buckle plates	max	43,00	16 7/8	21,00	8 1/4	43,00	16 7/8	21,00	8 1/4	–	–
Number of buckle plates	min	2		2		2		2		2	
	max	4		4		4		4		2	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Fold roller diameter		43,70	1 3/4	43,70	1 3/4	43,70	1 3/4	43,70	1 3/4	43,70	1 3/4
Slitter shaft diameter		35,00	1 3/8	35,00	1 3/8	35,00	1 3/8	35,00	1 3/8	35,00	1 3/8
Product thickness at exit		2,00	1/8	2,00	1/8	2,00	1/8	2,00	1/8	2,00	1/8
		m/min	inch/min	m/min	inch/min	m/min	inch/min	m/min	inch/min	m/min	inch/min
Speed	min	10	394	10	394	10	394	10	394	10	394
	max	205	8071	205	8071	205	8071	205	8071	205	8071
Control	MC Control/NAVIGATOR Control, electronically adjustable										

Floorplan
T 1020 P



Standard equipment and options

Equipment:

- MC Control
- DUALFEED continuous feeder R 1020 / R 1120
- VIVAS
- Anti-static lattice-type alignment table
- COMBIPLATE combination folding buckles in folding unit I and folding unit II 1020 / 1120
- Through sheet stop in buckle 1
- Low maintenance and low noise belt drive
- Ring folding roller with soft PU roller coating in folding unit I and folding unit II 1020 / 1120
- Spiral foldrollers with standard PU roller coating in folding unit II 780, folding unit III and IV
- Slitter shaft cassette MWK for single rear slitter shafts with plug bearings in folding unit I
- Scoring, perforating and cutting devices for standard operations
- Transfer table
- HIGH-SPEED-GUIDE

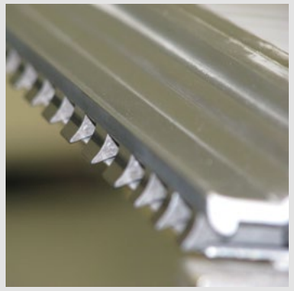
Alternative/Additional Equipment:

- NAVIGATOR Control
- TOUCHSCREEN
- DATA MANAGER
- FP-1020 / 1120-110 palletised feeder with pile-lowering device FLS, feeder head VACULIFT III and double VIVAS sheet infeed system, pile height 110 cm
- FP-1120 / 110 palletised feeder, format extension to 165 cm (T 1120)
- Extension to 6 COMBIPLATE combi buckle plates
- HIGH-GRIP spiral foldrollers for folding units II 780, III and IV
- Noise insulation device
- WINPLATE gatefold plate
- Pre-slitter shafts
- Slitter shaft cassette MWK in folding units II and III
- Sheet return device RFE for folding unit III
- Double stream device
- Strip trimming device
- Special strip trimming device
- Multiple perforating device
- Edge trimming device
- Special edge trimming device
- Punch perforating device
- Various peripheral units
- Various deliveries
- Automation RAPIDSET
  - Buckle plate and sheet deflector adjustment

Your benefits at a glance:

- Short changeover times, e.g. due to automated buckle plates and slitter shaft cassette MWK
- High productivity with Perfection quality
- Broad range of folding types for more flexibility
- Absolutely marking-free production of sensitive, freshly printed products
- Double stream extension possible for higher output and reduced cutting costs

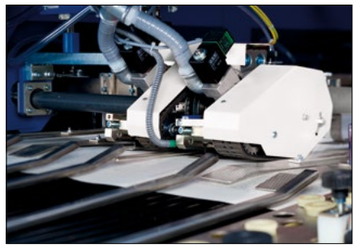
NAVIGATOR Control (Option)



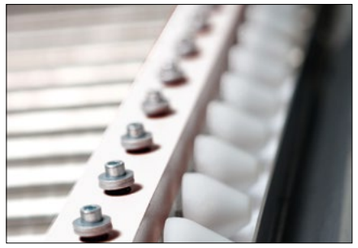
COMBIPLATE II

RFE Sheet return unit III

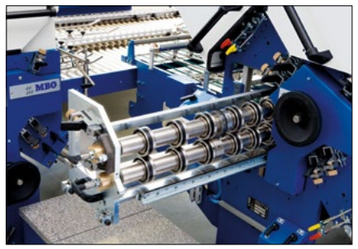
MBO Features



Double VIVAS
Double VIVAS is the reliable option for a flat sheet infeed and sheet running with high conveying power. The VIVAS vacuum system replaces the standard ball rails, thus guaranteeing marking-free documents, even if sensitive or freshly printed. In order to handle all types of papers and grammages appropriately, the vacuum on the suction belt may be regulated within two zones independently of each other. Since all settings can be done during the production run, short changeover times are guaranteed.



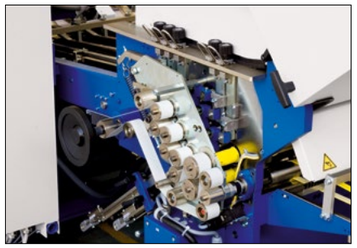
HIGH-SPEED-GUIDE
HIGH-SPEED-GUIDE for all mobile buckle folding units of the Perfection series ensure the absolutely safe transportation of sheets – even for high speeds – thanks to their motor-driven cone-shaped rollers. Due to the non-slip drive of the folding products markings can be ruled out, even if sensitive products are processed.



Slitter shaft cassette MWK
The slitter shaft cassette of the Perfection series can be drawn out and reduces changeover times to a minimum. In an ergonomically favourable height the cassette can be easily and quickly drawn out on the operator side. The scale on the cassette allows the precise adjustment and positioning of the knives. Moreover, all needed strippers (like e.g. strip trimming device) can be mounted directly on the cassette.

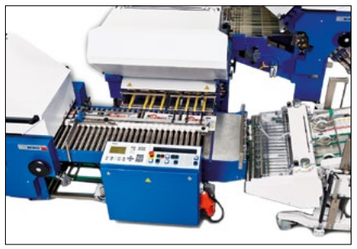
VACULIFT III
The VACULIFT feeder head provides a constant and optimal sheet separation – even if the pile is „undulated". The motor-driven height adjustment controlled by a presser foot positioned in centre ensures constant distance of the suckers towards the pile. Since the VACULIFT scans the position in the middle of the pile no readjustment is required. An even higher performance is achieved by the further developed version VACULIFT III. With four instead of two suckers and pre-blowers plus extended options to adjust the pre-blowers an even more reliable separation of the sheets is ensured.

MBO Features



Belt drive
The proven MBO belt drive guarantees extremely quiet operation and long maintenance-free periods. Thanks to the auto-tensioning elements, controlling and readjusting is no longer necessary. The functionality is monitored by the machine controller. Low follow-up and operational costs make the MBO belt drive an especially efficient long-term solution.

Noise insulation device
The mandatory equipment when it comes to safety at work. The noise insulation device by MBO corresponds to the European noise insulation regulations. Apart from a maximum noise insulation and the protection of the operator, comfort and accessibility play a major role for MBO. The two-piece construction for buckle folding machines ensures free access and easiest handling.



RFE Sheet return unit
The sheet return unit is optionally available for the mobile buckle folding units (folding unit III) on MBO Perfection machines. It offers more convenience for the operator by reducing the distance between the feeder and the delivery by approximately 80 %, thus making it possible that even buckle folding machines may be operated by one operator only. This results in a higher effective output, lower staff cost and a considerable reduction of required space.

NAVIGATOR Control
The NAVIGATOR Control is a digital micro processor control which evaluates and adjusts the regulation of optimal sheet gaps and speeds in all folding units automatically. The sheet monitoring and sheet length control is carried out by sensors in all folding units, even across all folding units. Malfunctions and error locations are displayed as text messages. Operation is possible from every unit.