



FlexFlow flow-through shelving

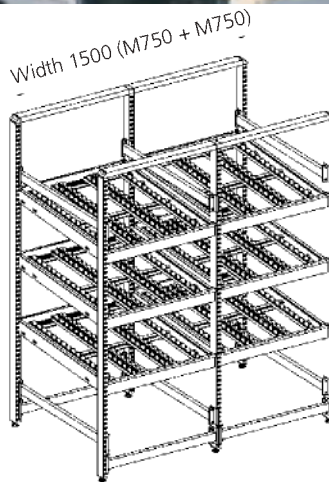
FlexFlow flow-through shelving can be used as a standalone solution or integrated into a single workstation or assembly line, resulting in faster throughput, less WIP, higher productivity and managed inventories. Your assembly process as a whole will become simpler and more efficient.

FlexFlow is a flexible solution that allows easy addition and removal of components as the role of the workstation changes. FlexFlow can easily be customised to your application and operator using a wide range of accessories. When FlexFlow is equipped for, and adjusted to individual needs the whole production process benefits.



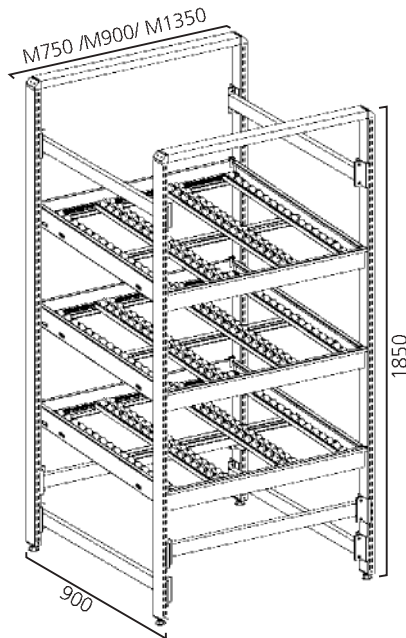
FlexFlow module sizes

FlexFlow is based on module sizes in order to allow it to be easily integrated with other Sovella workspace solutions and the MultiLine transfer system. The available sizes are M750 and M900. Both the width and the depth can be increased by combining standard modules that are M750 and M900 in width and 900 mm in depth.

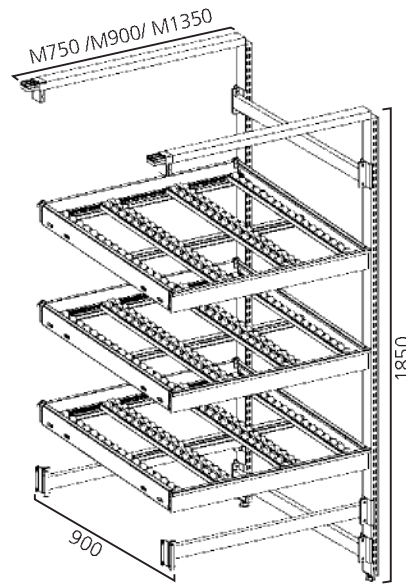




FlexFlow combinations



Base section



Extension section

FlexFlow base sections with 3 roller tops and 9 tracks.

name	max load kg	quantity	M750 x 900 Order No C 801 35 033		M900 x 900 Order No C 802 35 033		M1350 x 900 Order No C 803 35 033				
			module	size W x D x H mm	order No	module	size W x D x H mm	order No	module	size W x D x H mm	order No
Frame support 1850 with adjustment screw	600	4		1850	852 535-35		1850	852 535-35		1850	852 535-35
Spacer bar width		2	M750		851 483-35	M900		840 106-35	M1350		854 862-35
Spacer bar depth		4		900	852 459-35		900	852 459-35		900	852 459-35
Horizontal tube		2	M750		847 402-35	M900		840 104-35	M1350		850 914-35
Corner bracket pair		2			848 336-35			848 336-35			848 336-35
Roller top	200	3	M750	M750 x 900	852 502-35	M900	M900 x 900	852 505-35	M1350	M1350 x 900	850 902-35
Assembly rail pairs		3	M750		852 517-35	M900		852 518-35	M1350		850 909-35
Roller profile 850, without flange, ESD	3kg/roll	6		850	852 731-00		850	852 731-00		850	852 731-00
Roller profile 850, with flange, ESD	3kg/roll	12		850	852 727-00		850	852 727-00		850	852 727-00
Stopper/cover rail, unloading end		3	M750		852 515-35	M900		852 516-35	M1350		850 913-35
Stopper/cover rail, loading end		3	M750		852 525-35	M900		852 526-35	M1350		850 911-35

FlexFlow extension sections with 3 roller tops and 9 tracks.

name	max load kg	quantity	M750 x 900 Order No C 801 35 133		M900 x 900 Order No C 802 35 133		M1350 x 900 Order No C 803 35 033				
			module	size W x D x H mm	order No	module	size W x D x H mm	order No	module	size W x D x H mm	order No
Frame support 1850 with adjustment screw	600	2		1850	852 535-35		1850	852 535-35		1850	852 535-35
Spacer bar width		2	M750		851 483-35	M900		840 106-35	M1350		854 862-35
Spacer bar depth		2		900	852 459-35		900	852 459-35		900	852 459-35
Horizontal tube		2	M750		847 402-35	M900		840 104-35	M1350		850 914-35
Straight bracket		2			851 827-35			851 827-35			848 336-35
Roller top	200	3	M750	M750 x 900	852 502-35	M900	M900 x 900	852 505-35	M1350	M1350 x 900	850 902-35
Assembly rail pairs		3	M750		852 517-35	M900		852 518-35	M1350		850 909-35
Roller profile 850, without flange, ESD	3kg/roll	6		850	852 731-00		850	852 731-00		850	852 731-00
Roller profile 850, with flange, ESD	3kg/roll	12		850	852 727-00		850	852 727-00		850	852 727-00
Stopper/cover rail, unloading end		3	M750		852 515-35	M900		852 516-35	M1350		850 913-35
Stopper/cover rail, loading end		3	M750		852 525-35	M900		852 526-35	M1350		850 911-35

Roller profiles 850

name	order No
Roller profile 850, without flange	852 509-00
Roller profile 850, with flange	852 592-00



Seven steps to assemble the FlexFlow:

A. Frame 1

- Pick up the frame support legs (equipped with an adjustable screw, a wheel or a wheel with a brake). 4 pcs per base module and 2 pcs per module extension are needed.

B. Spacer bars 2-6

- Start with one frame support leg and attach one width and one depth spacer bar to it. Attach another frame support leg to the previously assembled leg with spacer bars. Continue assembling the frame in this way.
- One base frame with four support legs has four depth spacer bars, two width spacer bars and two horizontal tubes (four width spacer bars if horizontal tubes are not used). Horizontal tubes can replace the topmost width spacer bars which frees up all the space between the uprights for items. If the items on the top roller shelf are taller than the upright height, horizontal tubes cannot be used.

C. Roller top and loading/unloading shelves 7-8

- Assemble the roller tops and attach them to the assembled frame. The heights and angles of the tops should be defined here before assembly. Normally a 3 degree angle is suitable (750 mm deep shelf > 3-4 cm, 900 mm deep shelf > 4-5 cm). Shelf angles should always be checked after assembly and the angle adjusted accordingly.

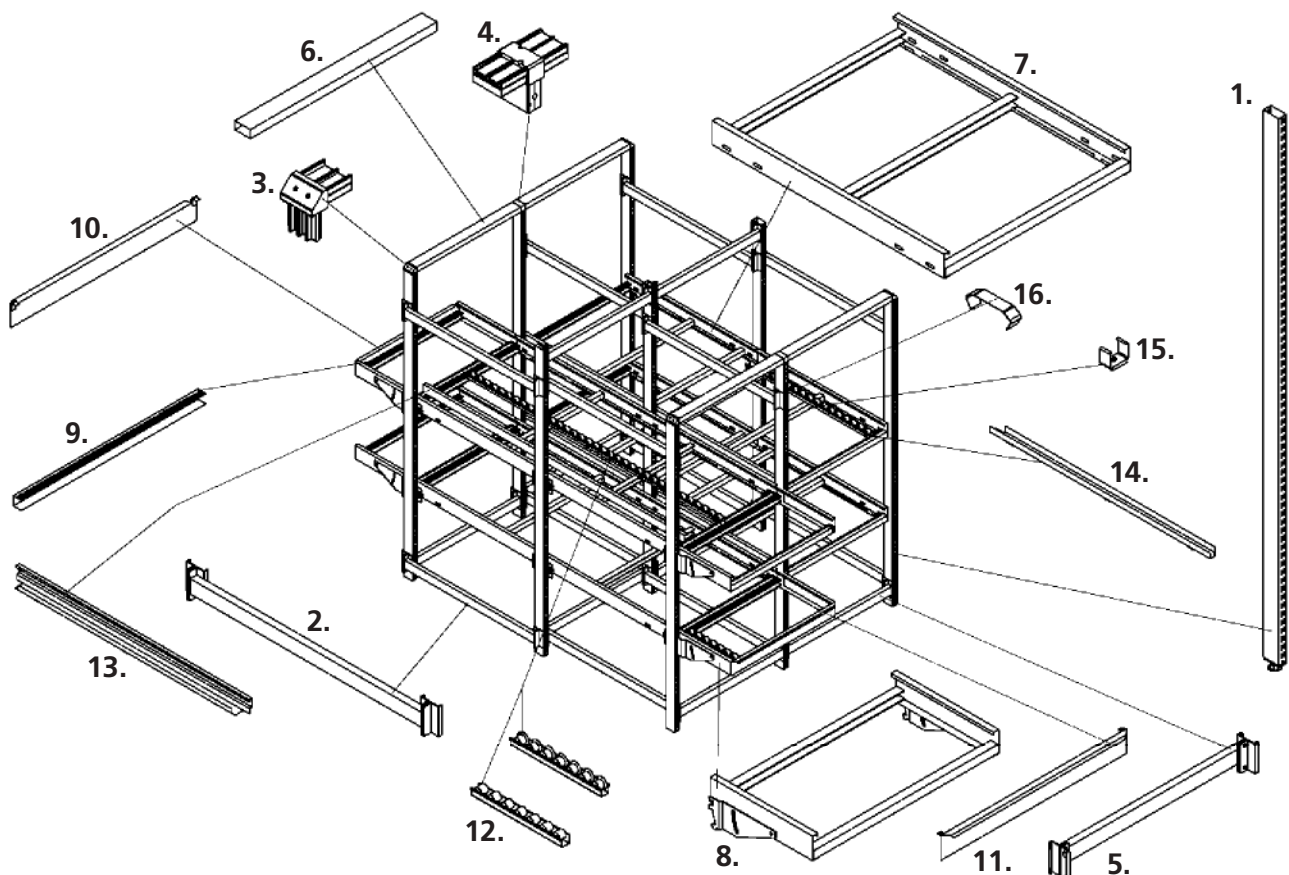
- Assemble the loading/unloading shelves (if ordered) and attach them at the correct height either on the loading or unloading end. Adjust the loading/unloading shelf to the correct angle. Please note that too large a difference in the angle (> 3 degrees) between the roller top and the loading/unloading shelf may prevent the item from rolling over e.g. onto the unloading shelf.

D. Assembly rail pair 9

- The assembly rail pair is used for fixing the roller profiles. You need one assembly rail pair per roller top or per loading/unloading shelf.
- Attach the assembly rails to the ends of the roller shelves and/or the loading/unloading shelf. The rail with longer clips should be on the loading end or the higher end.
- Do not fix the assembly rail with screws if you have a stopper/cover rail at the same end.

E. Stopper/cover rails 10-11

- The stopper rail is used at the unloading end. It closes the open profile ends, strengthens the roller top and stops the item. The stopper rail is attached either to the lower end of the roller top or to the end of the unloading shelf (if ordered).
- The cover rail is used at the loading end. It closes the open profile ends and strengthens the roller top. It has a cut for feeding the items onto the rollers.





F. Roller profiles 12-13

- First stick the roller profile towards the rear assembly rail at the higher end and under the longer clips, and then pull it back and fit it under the clips of the front assembly rail.
- The side profiles of the roller top guide the item and therefore flanged roller profiles are not needed on the sides. In the middle of the roller top, you should use either flanged roller profiles to divide the two tracks, or a divider rail pair if solid guidance is needed (e.g. for cardboard boxes or other flexible products). Flexible or heavy items (> 3kg/roll) may need additional roller profiles in the middle of the track.

G. Other parts for assembly 14-16

- The spring holder is used to fix the roller profile to the lateral supporting profile of the roller top. This is designed especially for 1800 mm long roller profiles with > 1 kg load/box.

- The spring latch is used to prevent the roller profile from opening under heavy loads. Over 2 kg per roll is considered here to be a heavy load. The spring latch is an easy solution for FlexFlows in occasional use. This product is a safety device and is highly recommended!
- The U-profile is used to prevent the roller profile from opening under heavy loads. Over 2 kg per roll is considered here to be a heavy load. The U-profile is the solution recommended for FlexFlows in frequent use. This product is a safety device and is highly recommended!
- Brake for roller profiles
 - Stopper rails are not designed to stop heavy items travelling at full speed.
 - The speed of the item can be adjusted using the roller top angle. The brakes are used in FlexFlow to control the acceleration of the item. This is essential for smooth functioning.
 - Brakes are needed on most FlexFlows. They are highly recommended!

Frame supports for all FlexFlow shelving

picture No	name	size mm	order No	ESD order No
1	Frame support with adjustment screw	1850	852 535-35	
1	Frame support with wheel	1976	852 523-41	852 523-35
1	Frame support with brake wheel	1976	852 524-41	852 524-35
2	Spacer bar, depth	900		852 459-35
3	Corner bracket pair			848 336-35
4	Straight bracket			851 827-35



Components for FlexFlow

picture No	name	M750		M900		M1350	
		size	order No	size	order No	size	order No
5	Spacer bar	M750	851 483-35	M900	840 106-35	M1350	854 862-35
6	Horizontal tube	M750	847 402-35	M900	840 104-35	M1350	850 914-35
7	Roller top 900	M750 x 900	852 502-35	M900 x 900	852 505-35	M1350 x 900	850 902-35
7	Roller top 1800	M750 x 1800	852 503-35	M900 x 1800	852 506-35	M1350 x 1800	850 903-35
8	Loading/unloading shelf	M750	852 519-35	M900	852 520-35	M1350	850 907-35
9	Assembly rail pair	M750	852 517-35	M900	852 518-35	M1350	850 909-35
10	Cover rail, loading	M750	852 525-35	M900	852 526-35	M1350	850 913-35
11	Stopper/cover rail, unloading	M750	852 515-35	M900	852 516-35	M1350	850 911-35

Roller profiles

picture No	name	size mm	with flange		without flange	
			order No	ESD-order No	order No	ESD order No
12	Roller profile, loading/unloading shelf	350	852 591-00	852 726-00	852 508-00	852 730-00
12	Roller profile 900	850	852 592-00	852 727-00	852 509-00	852 731-00
12	Roller profile 1800	1750	852 593-00	852 728-00	852 510-00	852 732-00
12	Roller profile 2700	2650	852 594-00	852 729-00	852 511-00	852 733-00
12	Roller profile 3600	3550	852 722-00	852 724-00	852 723-00	852 725-00

Other parts for assembling

picture No	name	size mm	order No
13	Divider rail pair	900	852 512-35
13	Divider rail pair	1800	852 513-35
14	U-profile	900	852 578-35
14	U-profile	1800	852 579-35
15	Spring holder, roller profiles*		852 595-50
16	Brake, roller profiles		852 546-00
	Spring latch**		852 441-00

*Spring holder is used to attach the roller profile to middle cross support and thus to prevent side movement.

**When loading of roller profiles is close to maximum the spring latch stop their from "spread out".

FlexFlow workstation accessories

name	size W x D mm	max load kg	order No (ESD)
Worktop bracket pair			860 139-35
Laminated worktop	1200 x 600	60	860 027-66
ESD worktop	1200 x 600	60	860 477-63

All module sized accessories can be used also with FlexFlow, e.g. Light/balancer rails and shelves

FlexFlow workstation M1350 accessories*

name	module size	size W x D mm	max load kg	order No
Steel shelf	M1350	1340 x 300	50	860 787-35
Steel shelf	M1350	1340 x 400	50	860 788-35
Adjustable shelf	M1350	1320 x 505	100	920 35 013
Adjustable shelf	M1350	1320 x 650	100	920 35 014
Light/balancer rail	M1350	1350	15	918 35 011

* M750 and M900 accessories, see pages 33 - 43.