

Stock Control (SC)

For accurate and efficient inventory management



Stock control

A complete stock system for sheet materials - it can also be integrated with external systems such as the Homag Automation SQL server stock management system.

Offcuts generated in one optimisation can be sent back to the board library for use in later runs with customised cost adjustment.

The exact amount of stock can be reserved for future jobs.

The simplest operation is to control the physical stock in the Board library.

- Optimise run (or batch of runs)
- Issue stock for runs

The sheets required for cutting are removed from the library and any offcuts generated by the run are entered as new items in the library.

Control physical stock

The board inventory is shown in the Board library.

Board library																	
Materials																	
Material	Description	Thickness	Default grain	Book	Material parameters	Picture	Type	Density									
GREEN GLOSS 18MM	Gloss finish - Green 18mm	18.0	N	0			Gloss finish	0.400									
HARDBOARD-4MM	Hardboard 4mm	4.0	N	8	HBD04			0.750									
HARDBOARD-WHITE-4MM	Hardboard 4mm - White	4.0	N	8	HBD04			0.750									
IVORY GLOSS 18MM	Gloss finish - Ivory 18mm	18.0	N	0			Gloss finish	0.400									
MAPLE MDF 18MM	Medium Density Fibreboard - Maple 18mm	18.0	Y	0			MDF	0.650									
MED-DEN-FIBRE-18MM	Medium Density Fibreboard 18mm	18.0	N	0			MDF	0.650									
MED-DEN-FIBRE-25MM	Medium Density Fibreboard 25mm	25.0	N	0			MDF	0.650									
Boards for material: IVORY GLOSS 18MM Gloss finish - Ivory 18mm Thickness:18.0 Book:0																	
Board code	Type	Length	Width	Informati	Stock	Alloc	Order	Cost	Limit	Bin	Supplier	Min Stk	ReOrd	Grain	Parameters	Method	
IVORY GLOSS 18MM/A		2440.0	1220.0		52	0	0	5.250	0	225		20	30	N		Area	
XIVORY GLOSS 18M...	A	2440.0	664.0		1	0	0	2.700	0			0		N		Area	
XIVORY GLOSS 18M...	X	538.0	349.5		1	0	0	2.700	0			0		N		Area	
XIVORY GLOSS 18M...	X	664.0	200.7		1	0	0	2.700	0			0		N		Area	

Stock control - Board library

This includes offcuts generated from earlier jobs (labelled with X ...)

Board library

File Edit View Help

Clear Filter

Material	Description	Thickness	Default grain	Book	Material parameters	Picture	Type	Density
GREEN GLOSS 18MM	Gloss finish - Green 18mm	18.0	N	0			Gloss finish	0.400
HARDBOARD-4MM	Hardboard 4mm	4.0	N	8	HBD04			0.750
HARDBOARD-WHITE-4MM	Hardboard 4mm - White	4.0	N	8	HBD04			0.750
IVORY GLOSS 18MM	Gloss finish - Ivory 18mm	18.0	N	0			Gloss finish	0.400
MAPLE MDF 18MM	Medium Density Fibreboard - Maple 18mm	18.0	Y	0			MDF	0.650
MED-DEN-FIBRE-18MM	Medium Density Fibreboard 18mm	18.0	N	0			MDF	0.650
MED-DEN-FIBRE-25MM	Medium Density Fibreboard 25mm	25.0	N	0			MDF	0.650

Boards for material: IVORY GLOSS 18MM Gloss finish - Ivory 18mm Thickness:18.0 Book:0

Board code	Type	Length	Width	Informati	Stock	Alloc	Order	Cost	Limit	Bin	Supplier	Min Stk	ReOrd	Grain	Parameters	Method
IVORY GLOSS 18MM		2440.0	1220.0		52	0	0	5,250	0	225		20	30	N		Area
XIVORY GLOSS 18M...	X	2440.0	664.0		1	0	0	2,700	0			0		N		Area
XIVORY GLOSS 18M...	X	538.0	349.5		1	0	0	2,700	0			0		N		Area
XIVORY GLOSS 18M...	X	664.0	200.7		1	0	0	2,700	0			0		N		Area

NUM

Stock control - Offcuts

The quantity of boards required for any job is calculated by the optimization.

Review runs

File Edit View Settings Summaries Stock Help

Pattern preview

Bedroom & bathroom

Bedroom & bathroom///?default/?default/? [Rules:BL]

Revision 2 : 27 Sep 2018 08:54 : Optimised by Richard

Ptn:1 Qty:5 Cycles:1
Board: 1.MFC18-OAK/01
Size: 3050.0 x 1220.0

Ptn:2 Qty:3 Cycles:1
Board: 1.MFC18-OAK/01
Size: 3050.0 x 1220.0

Ptn:3 Qty:1 Cycles:1
Board: 1.MFC18-OAK/01
Size: 3050.0 x 1220.0

Ptn:4 Qty:5 Cycles:1
Board: 2.MFC18-OAK/02
Size: 2440.0 x 1220.0

Batch reports

Summaries

Advanced

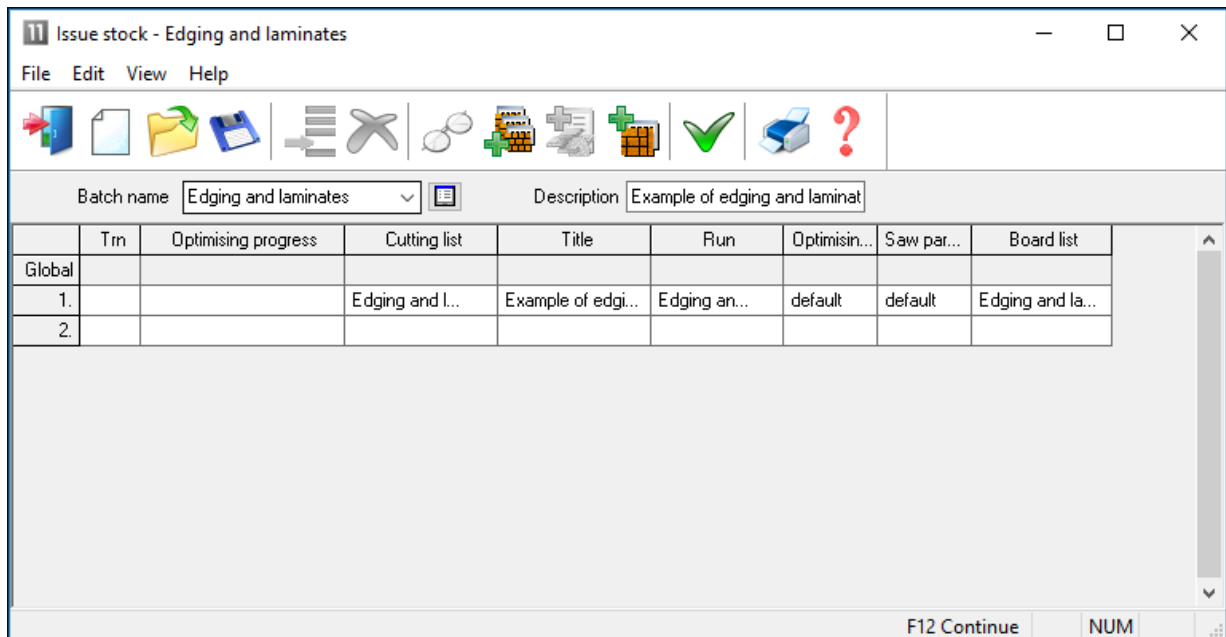
Patterns

Machining

Custom

Stock control - optimising

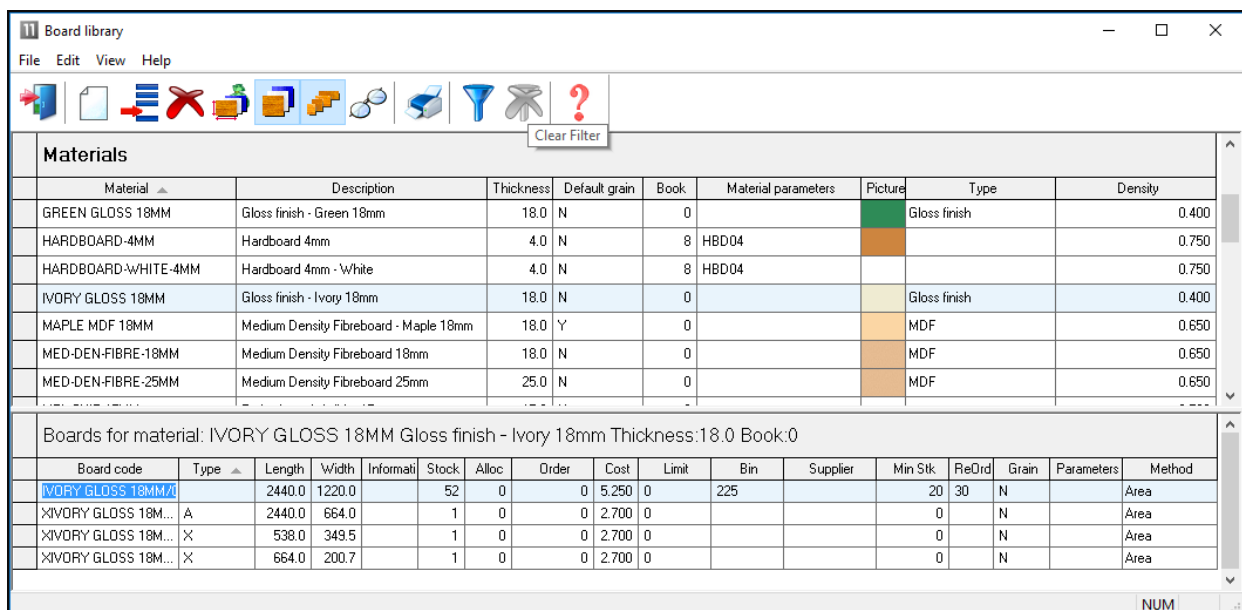
Once the run is committed for cutting (data sent to saw) the stock can be updated by the 'Issue stock for runs' options.



Issue stock for runs

The Board library is updated.

The board quantities are reduced and any offcuts are added back to the library.



Board library update

The program carefully controls the operation of part lists and optimising - once a run has been used for a stock issue it cannot be manually changed or re-optimised

Stock allocation and receipts

The SC module includes a full set of options for the allocation and receipt of stock. Allocation can be used after optimising to reserve stock for the job. Receipts are used to record incoming stock and adjust stock levels.

The Board library includes fields for Stock on order and Allocated stock and the optimiser takes account of the allocated stock (reserved stock) when optimising so that reserved stock is not used.

Material	Description	Thickness	Default grain	Book	Material parameters	Picture	Type	Density
GREEN GLOSS 18MM	Gloss finish - Green 18mm	18.0	N	0			Gloss finish	0.400
HARDBOARD-4MM	Hardboard 4mm	4.0	N	8	HBD04			0.750
HARDBOARD-WHITE-4MM	Hardboard 4mm - White	4.0	N	8	HBD04			0.750
IVORY GLOSS 18MM	Gloss finish - Ivory 18mm	18.0	N	0			Gloss finish	0.400
MAPLE MDF 18MM	Medium Density Fibreboard - Maple 18mm	18.0	Y	0			MDF	0.650
MED-DEN-FIBRE-18MM	Medium Density Fibreboard 18mm	18.0	N	0			MDF	0.650
MED-DEN-FIBRE-25MM	Medium Density Fibreboard 25mm	25.0	N	0			MDF	0.650

Board code	Type	Length	Width	Inform	Stock	Alloc	Order	Cost	Limit	Bin	Supplier	Min Stk	ReOrd	Grain	Parameters	Method
IVORY GLOSS 18MM/0		2440.0	1220.0		52	0	0	5.250	0	225		20	30	N		Area
XIVORY GLOSS 18M...	A	2440.0	664.0		1	0	0	2.700	0			0		N		Area
XIVORY GLOSS 18M...	X	538.0	349.5		1	0	0	2.700	0			0		N		Area
XIVORY GLOSS 18M...	X	664.0	200.7		1	0	0	2.700	0			0		N		Area

Board library - stock levels

Stock can be reserved by 'Stock allocation' (*Stock - Allocate stock*)

Trn	Optimising progress	Cutting list	Title	Run	Optimisin...	Saw par...	Board list
Global							
1.		Edging and l...	Example of edgi...	Edging an...	default	default	Edging and la...
2.							

Allocate stock

The stock for a selected run is allocated.

The details of all the current allocations can be review via: *'Stock Allocations'*

The screenshot shows the 'Allocations' window with a menu bar (File, Edit, View, Help) and a toolbar with various icons. The main area contains a table with the following data:

Code	Quantity	Material	Length	Width	Thickness
MEL-CHIP-18MM/01	6	MEL-CHIP-18MM	3050.0	1220.0	18.0
MEL-CHIP-18MM/02	8	MEL-CHIP-18MM	2440.0	1220.0	18.0
MFC18-OAK/01	2	MFC18-OAK	3050.0	1220.0	18.0
MFC18-OAK/02	4	MFC18-OAK	2440.0	1220.0	18.0
HARDBOARD-WHITE-4MM/01	7	HARDBOARD-WHITE-4MM	2440.0	1220.0	4.0
WHAC12/01	36	WHITE-ACRYLIC-12MM	2440.0	1220.0	12.0

View stock allocations

There is also a full set of screens and options for ordering and receiving stock.

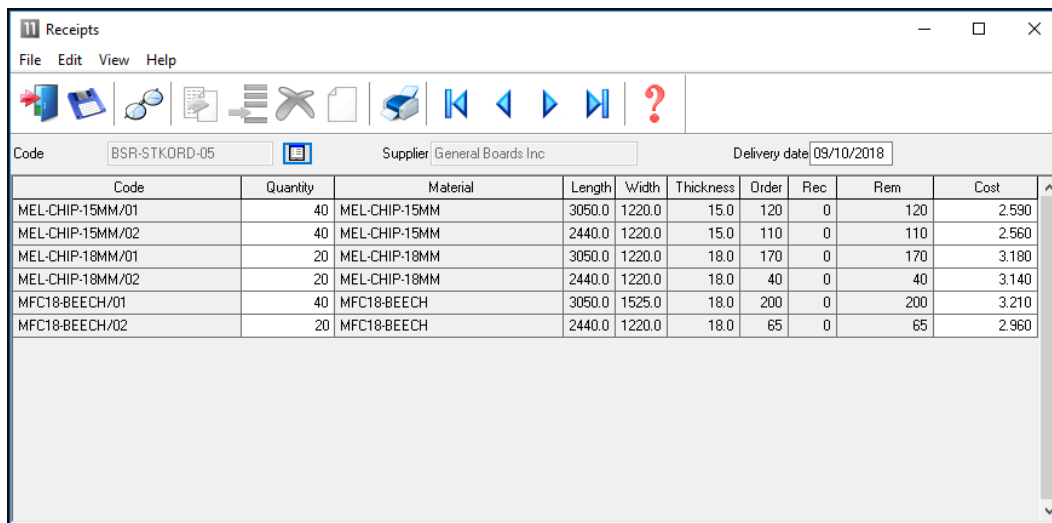
Stock is ordered via the Order screen:-

The screenshot shows the 'Orders' window with a menu bar (File, Edit, View, Help) and a toolbar. The main area contains a table with the following data:

Code	Quantity	Material	Length	Width	Thickness	Order	Rec	Rem
MEL-CHIP-15MM/01	120	MEL-CHIP-15MM	3050.0	1220.0	15.0	120	0	120
MEL-CHIP-15MM/02	110	MEL-CHIP-15MM	2440.0	1220.0	15.0	110	0	110
MEL-CHIP-18MM/01	170	MEL-CHIP-18MM	3050.0	1220.0	18.0	170	0	170
MEL-CHIP-18MM/02	40	MEL-CHIP-18MM	2440.0	1220.0	18.0	40	0	40
MFC18-BEECH/01	200	MFC18-BEECH	3050.0	1525.0	18.0	200	0	200
MFC18-BEECH/02	65	MFC18-BEECH	2440.0	1220.0	18.0	65	0	65

Stock orders

Stock receipts are recorded in the Receipts screen.



The screenshot shows a software window titled "Receipts" with a menu bar (File, Edit, View, Help) and a toolbar. Below the toolbar, there are input fields for "Code" (BSR-STKORD-05), "Supplier" (General Boards Inc), and "Delivery date" (09/10/2018). The main area contains a table with the following data:

Code	Quantity	Material	Length	Width	Thickness	Order	Rec	Rem	Cost
MEL-CHIP-15MM/01	40	MEL-CHIP-15MM	3050.0	1220.0	15.0	120	0	120	2.590
MEL-CHIP-15MM/02	40	MEL-CHIP-15MM	2440.0	1220.0	15.0	110	0	110	2.560
MEL-CHIP-18MM/01	20	MEL-CHIP-18MM	3050.0	1220.0	18.0	170	0	170	3.180
MEL-CHIP-18MM/02	20	MEL-CHIP-18MM	2440.0	1220.0	18.0	40	0	40	3.140
MFC18-BEECH/01	40	MFC18-BEECH	3050.0	1525.0	18.0	200	0	200	3.210
MFC18-BEECH/02	20	MFC18-BEECH	2440.0	1220.0	18.0	65	0	65	2.960

Stock receipts

Pre-laminated material - where boards are laminated prior to cutting the stock update automatically keeps track of both core material and laminate material used.



Laminates and core material are stored in the Board library.

Stock reports

A range of reports are available for monitoring the stock process.

- Orders by material
- Orders by supplier
- Allocations by material
- Stock valuation
- Minimum free stock
- Monthly material summary
- Stock issues summary
- Audit trail report
- Stock history
- End of month/year

Each report can be viewed on screen and printed.

Orders by Material

Board	Length mm	Width mm	Stock	Order	Date	Order Qty	Area m2	Cost / m2	Order Cost
<u>BLUE GLOSS 18MM Gloss finish - Blue 18mm Thickness 18.0 Grain N Book 0</u>									
BLUE GLOSS 18MM/01	2440.0	1220.0	152	MCS-STKORD-01	01/09/15	40	119.07	0.000	212.80
						40	119.07		212.80
<u>CHERRY GLOSS 18MM Gloss finish - Cherry 18mm Thickness 18.0 Grain N Book 0</u>									
CHERRY GLOSS 18MM/01	2440.0	1220.0	80	LMG02-ORD-P5	17/09/15	20	59.54	5.230	311.37
				MCS-STKORD-01	01/09/15	62	184.56		965.26
						82	244.10		1276.63
<u>GREEN GLOSS 18MM Gloss finish - Green 18mm Thickness 18.0 Grain N Book 0</u>									
GREEN GLOSS 18MM/01	3050.0	1525.0	32	MCS-STKORD-01	01/09/15	20	93.03	0.000	106.40
						20	93.03		106.40
<u>MED-DEN-FIBRE-18MM Medium Density Fibreboard 18mm Thickness 18.0 Grain N Book 0</u>									
MED-DEN-FIBRE-18MM/01	3050.0	1525.0	1221	BSR-STKORD-08	31/08/10	155	720.94	4.500	3244.25
						155	720.94		3244.25
<u>MED-DEN-FIBRE-25MM Medium Density Fibreboard 25mm Thickness 25.0 Grain N Book 0</u>									
MED-DEN-FIBRE-25MM/01	2440.0	1220.0	1089	BSR-STKORD-08	31/08/10	190	565.59	6.300	3563.23
						190	565.59		3563.23

Report - orders by material

Minimum free stock

Board	Length mm	Width mm	Stock	Alloc	Free Min Stock	Order	ReOrder	Supplier
<u>GREEN GLOSS 18MM Gloss finish - Green 18mm Thickness 18.0 Grain N Book 0</u>								
GREEN GLOSS 18...	3050.0	1525.0	32	0	32	50	20 60	Laminate Supply Co
<u>MFC18-OAK Prelaminated - Oak 18mm Thickness 18.0 Grain Y Book 0</u>								
MFC18-OAK/02	2440.0	1220.0	118	4	114	120	42 150	
<u>OAK MDF 18MM Medium Density Fibreboard - Oak 18mm Thickness 18.0 Grain Y Book 0</u>								
OAK MDF 18MM/01	3050.0	1525.0	78	0	78	100	0 120	
OAK MDF 18MM/02	2440.0	1220.0	59	0	59	100	0 120	
<u>OAK-LAM-1MM Oak Laminate 1mm Thickness 1.0 Grain Y Book 10</u>								
OAK-LAM-1MM/01	3050.0	1525.0	78	0	78	100	55 120	Laminate Supply Co
OAK-LAM-1MM/02	2440.0	1220.0	59	0	59	100	40 120	Laminate Supply Co
<u>TEAK MDF 18MM Medium Density Fibreboard - Teak 18mm Thickness 18.0 Grain Y Book 0</u>								
TEAK MDF 18MM/01	2440.0	1220.0	81	0	81	100	0 120	
TEAK MDF 18MM/02	3050.0	1525.0	89	0	89	100	0 120	

Report - Minimum free stock

Stock issues

The screenshot shows a software window titled 'Stock issues' with a menu bar (File, Edit, View, Settings, Reports, Help) and a toolbar with icons for navigation and search. The main content area displays a table of stock issues for the period '29-Jul-10 To 27-Sep-18'. The table is organized into sections for different board types, each with a summary row and a detailed row for a specific issue.

Board	Length mm	Width mm	Issue	Area m2	Volume m3	Cost / m2	Total Cost
<u>CHIPBOARD-18MM Chipboard Core 18mm Thickness 18.0 Grain N Book 0</u>							
CHIPBOARD-18MM/01	2440.0	1220.0	14	41.68	0.75	2.950	122.94
				41.68	0.75		122.94
<u>HARDBOARD-4MM Hardboard 4mm Thickness 4.0 Grain N Book 8</u>							
HARDBOARD-4MM/01	2440.0	1220.0	9	26.79	0.11	0.890	23.84
				26.79	0.11		23.84
<u>MED-DEN-FIBRE-18MM Medium Density Fibreboard 18mm Thickness 18.0 Grain N Book 0</u>							
MED-DEN-FIBRE-18MM/01	3050.0	1525.0	6	27.91	0.50	4.500	125.58
				27.91	0.50		125.58
<u>MED-DEN-FIBRE-25MM Medium Density Fibreboard 25mm Thickness 25.0 Grain N Book 0</u>							
MED-DEN-FIBRE-25MM/01	2440.0	1220.0	2	5.95	0.15	6.300	37.51
				5.95	0.15		37.51
<u>MEL-CHIP-15MM Prelaminated - White 15mm Thickness 15.0 Grain N Book 0</u>							
MEL-CHIP-15MM/02	2440.0	1220.0	1	2.98	0.04	2.560	7.62

Report - stock issues

The SC module includes options to consolidate the library at a period end and has a full audit trail. There are also options to manage stock and update costs etc.

All the stock reports can be fully customized and all have print options.

Orders by material										
Board	Length mm	Width mm	Stock	Order	Date	Order Qty	Area m2	Cost/ m2	Order Cost	Weight
<u>MED-DEN-FIBRE-18MM Medium Density Fibreboard 18mm Thickness 18.0 Grain N Book 0</u>										
MED-DEN-FIBRE-18MM/01	3050.0	1525.0	1221	BSR-STKORD...	31/08/10	155	720.94	4.500	3244.25	8435.04
							<u>155 720.94</u>		<u>3244.25</u>	<u>8435.04</u>
<u>MED-DEN-FIBRE-25MM Medium Density Fibreboard 25mm Thickness 25.0 Grain N Book 0</u>										
MED-DEN-FIBRE-25MM/01	2440.0	1220.0	1089	BSR-STKORD...	31/08/10	190	565.59	6.300	3563.23	9190.87
							<u>190 565.59</u>		<u>3563.23</u>	<u>9190.87</u>
<u>MEL-CHIP-15MM Prelaminated - White 15mm Thickness 15.0 Grain N Book 0</u>										
MEL-CHIP-15MM/01	3050.0	1220.0	901	BSR-STKORD...	09/08/10	120	446.52	2.590	1156.49	3348.90
				BSR-STKORD...	23/08/10	55	204.66		530.06	1534.91
							<u>175 651.17</u>		<u>1686.54</u>	<u>4883.81</u>
MEL-CHIP-15MM/02	2440.0	1220.0	729	BSR-STKORD...	09/08/10	110	327.45	2.580	838.27	2455.86
							<u>110 327.45</u>		<u>838.27</u>	<u>2455.86</u>
<u>MEL-CHIP-18MM Prelaminated - White 18mm Thickness 18.0 Grain N Book 0</u>										
MEL-CHIP-18MM/01	3050.0	1220.0	933	BSR-STKORD...	09/08/10	170	632.57	3.180	2011.57	5693.13
				BSR-STKORD...	23/08/10	40	148.84		473.31	1339.56
							<u>210 781.41</u>		<u>2484.88</u>	<u>7032.69</u>
MEL-CHIP-18MM/02	2440.0	1220.0	370	BSR-STKORD...	09/08/10	40	119.07	3.140	373.89	1071.65
							<u>40 119.07</u>		<u>373.89</u>	<u>1071.65</u>
<u>MFC18-BEECH Prelaminated - Beech 18mm Thickness 18.0 Grain N Book 0</u>										
MFC18-BEECH/01	3050.0	1525.0	1099	BSR-STKORD...	09/08/10	200	930.25	3.210	2986.11	8435.04
				BSR-STKORD...	15/08/10	15	69.77		277.13	8435.04
							<u>215 *****</u>		<u>3263.24</u>	<u>8435.04</u>

Printed reports - stock control

For this printed report only the Stock quantity is shown. All the data for printed reports can be exported to an external file.

Integration with external stock systems

These days it is quite common for stock and orders etc. to be held in external systems including mechanical stock handling systems. The SC module can be integrated with external systems.

- Full integration with the Homag Automation SQL server materials system
- Import/Export options for materials and boards

- Option to run external linking program automatically

This later allows the Board library to be kept in sync with external databases.

The board library has a full set of editing options to allow manual adjustments and changes.

Stock control of parts

The stock control options include the control of parts so that over produced parts can be stored and taken into account in future lists by reducing the requirement for that part.

Stock control of Fittings and Edging material

With the PQ module the stock control options include the control of fittings (hardware) items in the Part library and Edging material in the Edging library (solid edging and laminate sheets).

Stock Control summary

Stock control typically requires one of the Optimising modules; SO, PO or NE

	SC	SC + PQ
Stock records	Unlimited	Unlimited
Stock reports (configurable)	•	•
Export stock data	•	•
Audit trail	•	•
Stock control of edging material	•	•
Stock control of fittings		•
Integration with external systems	•	•
Update stock after optimisation	•	•
Stock orders and receipts	•	•
Reserve stock	•	•
Board library (mdb)	•	•
Integrated local help	•	•