A Guide to the



Case, Crate and Pallet Production System

Incorporated in the



Software System

System Overview

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FREIGHTPACK software has been developed as an additional module to our **FASTFREIGHT** multimodal international forwarding system and can be used solely for the production of timber products and flight cases or integrated as part of the forwarding system, producing seamlessly international documentation, shipment management and reporting.

FASTFREIGHT has been in use and continually developed over the last 16 years. The timber products production tool is much more recent and developed sharing creation dialogue with timber products industry professionals.

Both systems are easy to understand and operate and installation is made on site and includes unlimited training subsequently at no additional cost.

The software is fully compatible with a PC running any version of Windows, a separate server is not required for the majority of installations. The System does not require a great deal of computer resources. The program requires 10MB space on the hard disk for its main files. Additional space is required for storage of databases and report files.

Installing the Software

Once a database has been prepared to your corporate identity, incorporating your stock items listings, your logo, together with those of any trade associations you belong to, installation of the software and training is done by our technicians on your premises, unlimited training is provided inclusive of the initial cost. Training on site will include the application of several of your case designs utilising your stock items list and adaptation to your favoured component parts titles and nominal codes.

Integration

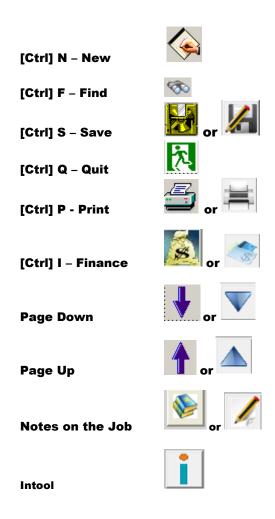
Sales and purchase invoice values are transferred as an electronic file to almost any accounts system.

For larger companies the case making application can be linked to an existing ERP electronic file to almost any accounts system. system such as Sage, Nav Vision, SAP and industry specific Accounts Solutions, sharing stock items listings, addresses and sales and purchase invoice data or it can send sales and purchase invoices as an

If you are a forwarder the system links with all the Ocean Container Carriers, Customs and Excise for Export Entries, and of course your accounts system.

System Control Overview

Throughout the system shortcut keystrokes are available. You can either use the shortcut keys or hold down the Control key *[Ctrl]* whilst pressing a particular key, thus:



[Ctrl] D - Delete (there is no shortcut key for this)

Hints are provided at the bottom of most screens. There is no formal way of entering data. The user can enter any field as or when information is received, making the program flexible and easy to use.

Using *FASTFREIGHT* as a Forwarder

FASTFREIGHT is easy to learn and operate. Comprehensive user guides to the Forwarding System, NES customs export entries and links via the In Tool portal to the world shipping lines are available free of charge.

Using FREIGHTPACK

Entry to the system is gained via pass word controlled access with levels specific for each user. The users name and title, email address and direct line telephone number can be displayed on documents of their own creation

FASTFREIGHT
Version 1.34.33
Full Licence 20 Companies
User ID:
Password:
Enter Your User ID Logistical
Software

Using *FASTFREIGHT* as a Case Maker

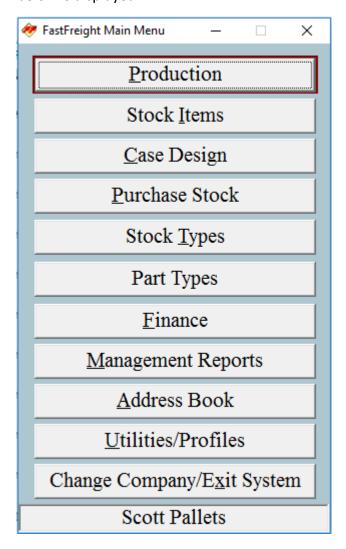
If your company provides international forwarding the menu below is displayed.

Once the title 'Packing Case' is selected it expands to show Case Production specific fields as shown on following screen image.



Using FASTFREIGHT as a Case Maker

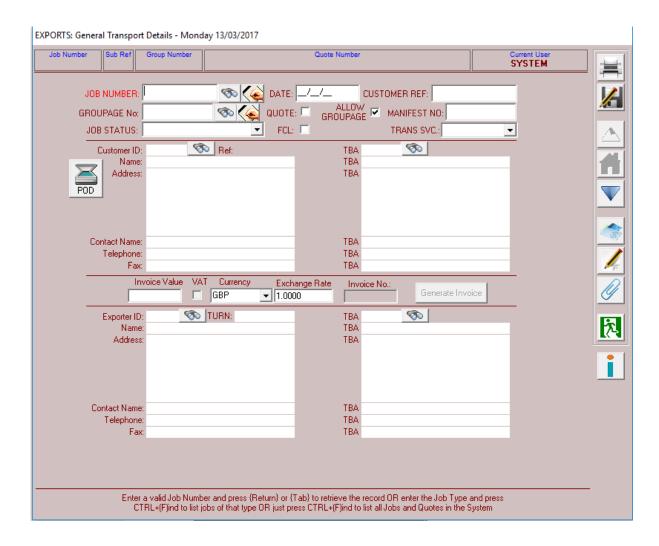
If using the system solely for timber products and flight case production the menu below is displayed.



If trading as more than one company we can include an additional company specific database. Both databases can be accessed from once only password controlled entry.

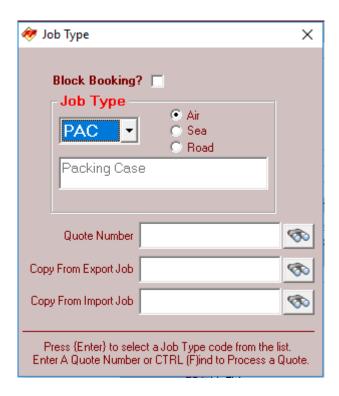
Job Creation Screen

If using the system as forwarder the screen below will be displayed, if you are a case maker the address fields will be limited.



Job Reference Creation

Unique Job number generation is automated following job prefix selection from the screen below. Note that previous jobs can be copied and if a forwarder quotations can be converted to a shipment.

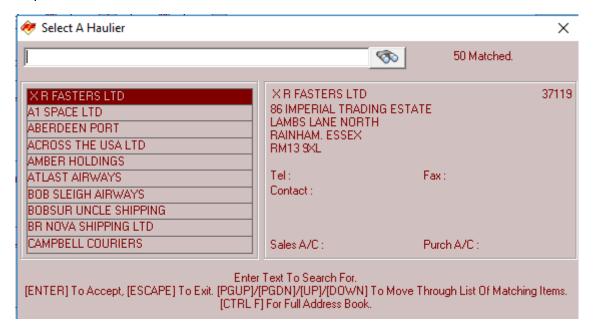


The system includes your address book. The screen below provides quick access to all addresses regardless whether a customer, delivery point or supplier. Invoice account references are included to enable accurate and easy transfer to any accounts system that will accept an electronic file.

Please view <u>www.logistical-software.co.uk</u> to learn more of our systems

Address book fast access

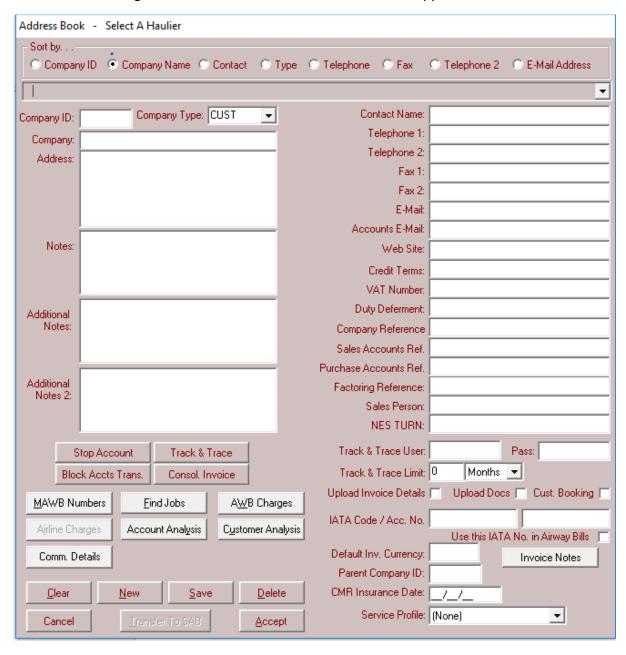
Predictive typing gives fast selection of the company name, address, town, postcode or phone number.



Master address book

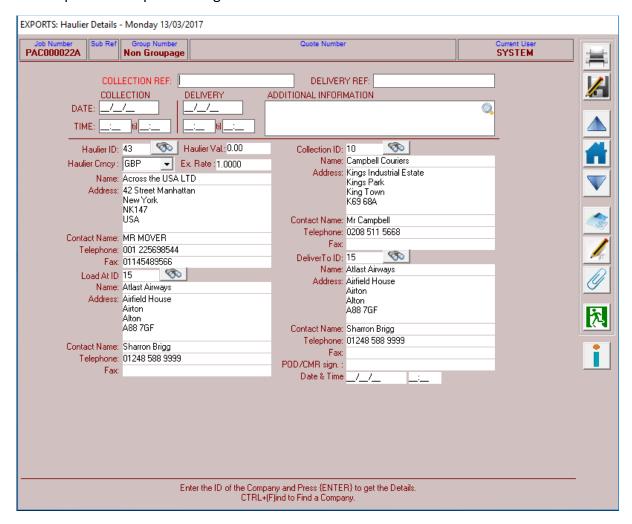
The screen below displays the master address book. As can be seen, as much or as little data as you wish can be assigned to each client.

Accounts can be put on hold; previous jobs can be found and financially analysed, and access can be granted to our web enabled **CARGOTRACK** application.



Collection and Delivery date creation screen

For Forwarders Cargo delivery and collection times are included below or as a Case Maker the collection day and times of goods for packing and delivery of the finished timber products or packed cargo to the client will be included.



If you are using a third party haulier, a collection or delivery instruction can be created here and the hauliers estimated charges included. As and when the single or multi-job haulier's invoices received it can be passed for payment in the value shared your accounts system.

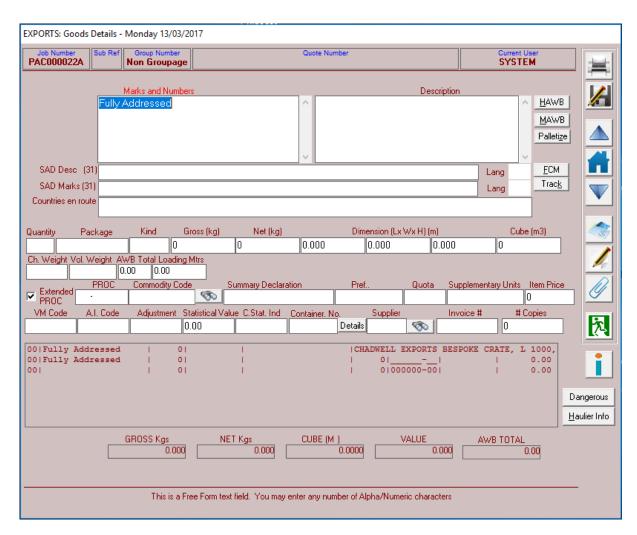
Notes can be added to any document.

Cargo or Product for packing goods details screen

This screen displays the Goods Details for forwarding, items to be packed or simply allows a case maker access to the cutting sheet creation screen line by line.

As a forwarder airway bills can be created, along with customs declarations to be transferred to HMRC NES portal, and additional data for sharing containers with the shipping lines.

Dangerous Goods Notes and supporting documentation can be created for each line of goods.



Please be mindful that the **FASTFREIGHT** system is a comprehensive and long established tool utilised by many companies for a great many years.

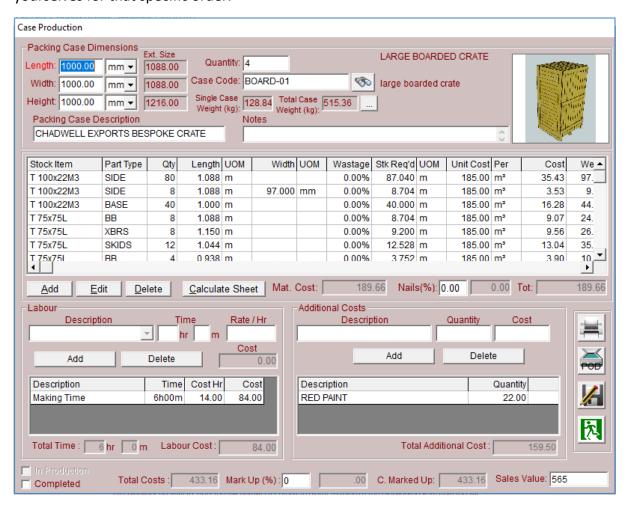
Cutting Sheet Creation

In order to generate costings, together with all required case making documentation, simply click on the right-hand side of the Goods Lines displaying the screen shown below.

The user must select the applicable case design; enter the internal dimensions; and the quantity of cases required. Alternately a packing case description may be added and stock items manually added to the listing

A standard case design cutting list is generated. As can be seen, the user has the option to add or edit any component to the production, add cutting making and packing times as required, along with any additional items supplied specifically for that job (see example below as 'RED PAINT'.

The image displayed on the right can be an image provided by your client or yourselves for that specific order.



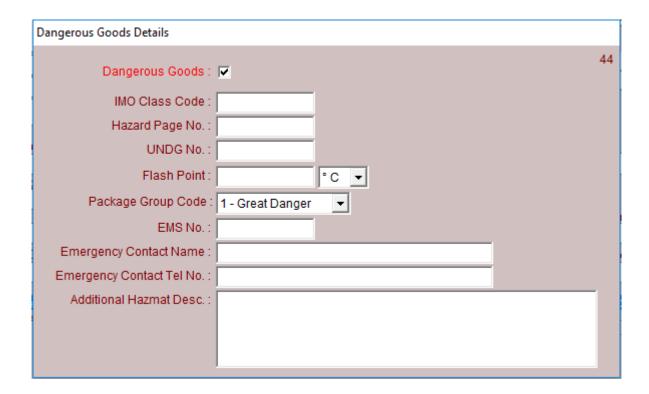
The total costs are displayed, and all values can be marked up by percentage displaying a total "Marked Up" value, this can then be adjusted to create the sales/quotation value.

Quotation Creation.

Exactly the same procedures are required to create a quotation (and its supporting documentation as required) as for a confirmed order. If stock levels are to be monitored, entry of a 'tick' on 'in production' or 'completed' will remove the stock items utilised, including wastage, from your stock levels. Note that the cost of nails is expressed as a percentage of the component costs.

Dangerous goods notes

Dangerous goods documentation for both air and sea shipments can be created for each line of goods as shown below, or for the entire shipment.



Print, view and email menu

Almost every screen in the system has its own print menu which can accommodate up to 36 documents. The screen below displays that as required by typical forwarder who is also a case maker.

The case maker's quotation document for every line of the Clients' Order is displayed at the footer of this menu image. Note all documents can be assigned to any printer, viewed or emailed as a PDF along with accompanying notes and a replica of your present email signature using Microsoft Outlook.

It is a regular task of our support team to adjust the print menu to display only the documents and document variants you require.



Please be reminded we have guides to the Forwarding System, NES customs entries and the direct links to the shipping lines provided by Logistical Software.

Cutting sheet example



Family Stock Code

BASE T 100x22M3

BASE T 75x75L

BASE T 75x75I

BASE T75x75L

BASE T 75x75L

END T 100x22M3

END T 100x22M3

SIDE T 100x22M3

SIDE T 100x22M3

T 75x22L

T 100x22M3

T 100x22M3

SIDE T 75x22L

T 100x22M3

T 100x22M3

T 100x100L

FND

END

END

TOP

TOP

TOP

FREIGHTPACK

Description

Base Bearers

Base Bearers

End Batten Horiz

End Batten Vertical

Side Batten Vertical

Top Batten Horiz

CUTTING SHEET



Part

BB

FBH

EBV

END

END

SBV

TOP

BASE Base BB Base

SKIDS Skids

END End

SIDE Side

SIDE Side

TOP Top

XBRS Cross Bearers

End

End

Quantity: 15

Description: test crate

Cust Case Ref :
Date Required : 03/02/17
Treatment Type :

Case Type : LARGE CRATE DEMO

Dims (LxWxH) : 1200.000mm x 400.000mm x 800.000mm

Qty	Length	Width	Used	Substitut
30	0.400 m	0.000	12.720 m	
10	1.288 m	0.000	13.234 m	
5	1.138 m	0.000	5.889 m	
15	0.444 m	0.000	7.093 m	
10	0.550 m	0.000	5.968 m	
20	0.200 m	0.000	4.160 m	
20	0.822 m	0.000	16.933 m	
40	0.400 m	0.000	16.400 m	
4	1.000 m	0.000	4.280 m	
10	0.400 m	22.000 mm	4.120 m	
30	0.941 m	0.000	30.488 m	
40	1.288 m	0.000	54.611 m	
10	1.288 m	97.000 mm	13.395 m	
15	0.444 m	0.000	6.753 m	
10	1.288 m	0.000	13.460 m	
5	1.288 m	44.000 mm	6.955 m	

Hrs	Min(s)
Hrs	Min(s)
Hrs	Min(s)
	Hrs

rack	шэ		WITH(5)
Total Time	Hrs		Min(s)
Value			
Costs	Checked	Date	Signed
Materials			

Costs	Checked	Date	Signed
Materials			
Cutting			
Assembly			
Pack			
Additional			

Additional Comments

Prepared by: Alex DATE: 07/04/2017 11:10

Like all our documents this will be adjusted to suit your specific requirements, the logged in user name can be included together with the date and time printed.

Space is left on the document for the case makers hand written notes.

Job sheet





JOB SHEET

Customer: Across the USA LTD
Date: 07/04/2017
P.O. Ref: MEL1

Job Ref : CRA000025A / 49 Quantity : 15

025A / 49

Cust Case Ref : Date Required : 03/02/17 Treatment Type :

Case Type : LARGE CRATE DEMO
Dims (LxWxH) : 1200.000mm x 400.000mm x 800.000mm

Description: tes	torate					800.000mm	1	
• 0			12 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	145.00		· · · · · · · · · · · · · · · · · · ·		
Stock Code	Part	Qty	Length	Width	Waste	Used	Cost	Total
100x22M3	END	40	0.400 m	0.000	2.50	16.400 m	185.00 m ³	6.68
100x22M3	END	10	0.400 m	22.000 mm	3.00	4.120 m	185.00 m ³	1.68
100x22M3	EBV	20	0.822 m	0.000	3.00	16.933 m	185.00 m ³	6.90
100x22M3	EBH	20	0.200 m	0.000	4.00	4.160 m	185.00 m ³	1.70
75x22L	ТВН	15	0.444 m	0.000	1.40	6.753 m	185.00 m ³	2.05
75x22L	SBV	30	0.941 m	0.000	8.00	30.488 m	185.00 m ³	9.31
100x22M3	SIDE	40	1.288 m	0.000	6.00	54.611 m	185.00 m ³	22.22
100x22M3	SIDE	10	1.288 m	97.000 mm	4.00	13.395 m	185.00 m ³	5.46
100x22M3	TOP	10	1.288 m	0.000	4.50	13.460 m	185.00 m ³	5.48
100x22M3	TOP	5	1.288 m	44.000 mm	8.00	6.955 m	185.00 m ³	2.83
100x22M3	BASE	30	0.400 m	0.000	6.00	12.720 m	185.00 m ³	5.18
75x75L	BB	10	1.288 m	0.000	2.75	13.234 m	185.00 m ³	13.76
75x75L	XBRS	10	0.550 m	0.000	8.50	5.968 m	185.00 m ³	6.22
75x75L	SKIDS	15	0.444 m	0.000	6.50	7.093 m	185.00 m ³	7.38
75x75L	BB	5	1.138 m	0.000	3.50	5.889 m	185.00 m ³	6.12
100x100L	END	4	1.000 m	0.000	7.00	4.280 m	185.00 m ³	7.92
100x22M3 100x22M3 100x22M3 75x75L 75x75L 75x75L	TOP TOP BASE BB XBRS SKIDS BB	10 5 30 10 10 15 5	1.288 m 1.288 m 0.400 m 1.288 m 0.550 m 0.444 m 1.138 m	0.000 44.000 mm 0.000 0.000 0.000 0.000	4.50 8.00 6.00 2.75 8.50 6.50 3.50	13.460 m 6.955 m 12.720 m 13.234 m 5.968 m 7.093 m 5.889 m	185.00 m ³	

Nails (4.00%): 4.44 Total Material Cost: 115.33

Description	Qty	Cost	Total	Stock Code	Stock Used	Cost
red paint	2.00	25.00	50.00	T 100x100L	4.280 m	7.92
Handles	30.00	6.99	209.70	T 100x22M3	142.754 m	58.13
	Total Addition	al Costs:	259.70	T 75x22L	37.241 m	11.36
				T 75x75L	32.184 m	33.48

 Description
 Time
 Cost (Hr)
 Total

 Cutting Time
 2 h 0 m 12.50 25.00

 Making Time
 4 h 0 m 12.50 50.00

 Total Labour Costs:
 75.00

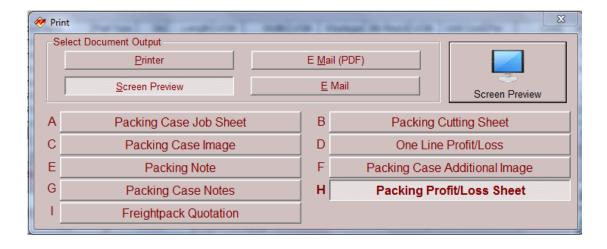
Total Cost £: 450.03

Prepared by: Alex

Date Created: 07/04/2017 11:10

The job sheet, if required can include as much or as little information as you wish.

Typical timber products creation menu



This menu will include exactly the documents you require, up to 36 titles can be included, when e-mailed your regular email signature will be included along with subject lines and notes.

Profit and loss document





£194.97

PROFIT / LOSS SHEET

Customer	Across the USA	LTD		Cust	Case Re	. .		
	07/04/2017	LID			Date Required : 03/02/17			
P.O. Ref : N			Treatment Type :					
	CRA000025A / 4	19	Case Type: LARGE CRATE DEMO					
Stock Code	Part	Qty	Length	Width	Waste	Used	Cost	Total
T 100x22M3	END	40	0.400 m	0.000	2.50	16.400 m		6.68
T 100x22M3	END	10	0.400 m	22.000 mm	3.00	4.120 m	***************************************	1.68
T 100x22M3	EBV	20	0.822 m	0.000	3.00	16.933 m		6.90
T 100x22M3	EBH	20	0.200 m	0.000	4.00	4.160 m		1.70
T 75x22L	ТВН	15	0.444 m	0.000	1.40	6.753 m	100000000000000000000000000000000000000	2.05
T 75x22L	SBV	30	0.941 m	0.000	8.00	30.488 m	The second second	9.31
T 100x22M3	SIDE	40	1.288 m	0.000	6.00	54.611 m		22.22
T 100x22M3	SIDE	10	1.288 m	97.000 mm	4.00	13.395 m	185.00 m³	5.46
T 100x22M3	TOP	10	1.288 m	0.000	4.50	13.460 m	185.00 m ³	5.48
T 100x22M3	TOP	5	1.288 m	44.000 mm	8.00	6.955 m		2.83
T 100x22M3	BASE	30	0.400 m	0.000	6.00	12.720 m	185.00 m³	5.18
T 75x75L	BB	10	1.288 m	0.000	2.75	13.234 m	185.00 m ³	13.76
T 75x75L	XBRS	10	0.550 m	0.000	8.50	5.968 m	185.00 m ³	6.22
T 75x75L	SKIDS	15	0.444 m	0.000	6.50	7.093 m	185.00 m ³	7.38
T 75x75L	BB	5	1.138 m	0.000	3.50	5.889 m	185.00 m ³	6.12
T 100x100L	END	4	1.000 m	0.000	7.00	4.280 m	185.00 m ³	7.92
				Nails (4.	00%): 4.4	14	Total Material Cost :	115.33
Description	Qty	Cost	Total		Stock Cod	le	Stock Used	Cost
red paint	2.00	25.00	50.00	T 100x1	00L		4.280 m	7.92
Handles	30.00	6.99	209.70	T 100x2	2M3		142.754 m	58.13
	Total Additio	nal Costs	: 259.70	T 75x22	L.		37.241 m	11.36
				T 75x75	L		32.184 m	33.48
Description	Time	Cos	t (Hr) Tota	Sal	es Value £	<u>E:</u>	£64	15.00
Cutting Time	2 h	11-1-1-1	2.50 25.0	T-4	al Labour	Cost £:	£	75.00
Making Time	4 h		2.50 50.0		al Materie	Cost £:	£1	15.33
Total Labour Costs: 75.00				Total Additional Costs £		£25	59.70	

Date: 07/04/2017 11:10 Prepared by: Alex

Whilst we believe our system to be very good we can't guarantee a profit on every job!

Profit / Loss £:

Quotation Document



FREIGHTPACK Rainham House Manor Way Rainham Essex RM13 8RE

Tel: +44(0)1708 691 001 Fax:+44(0) 1708 552 754



QUOTATION

To: Across the USA LTD 42 Street Manhattan New York NK147 USA

Our Ref : CRA000025A Date: 22/02/2017 Customer. Ref: MEL1 Date Required: 03/02/17

Our quotation is to be understood without engagement and valid for 30 days, subject to terms and conditions, rates of exchange and tariffs currently in force.

To	Supply:

Qty 15	Description of Packaging test crate	DIMS (LXWXH) 1200.00mm x 400.00mm x 800.00mm	Cost £645.00
	as you can see from the additional image screen we image you require	can add add	
4	Demo Pallet Demo Pallet	800.00mm x 800.00mm x 150.00mm	£110.00
23	Demo Crate 2	800.00mm x 800.00mm x 800.00mm	£735.00

Total Quotation: £1,490.00

Terms & Conditions

Charges are due in accordance with agreed payment terms. The company reserves the right to charge for storage of cases ordered should payments be overdue. Payment

Packaged goods stored at our premises are entirely at the owners risk and stored in accordance to the National Association of Warehouse Keepers (NAWK). Packaged goods lost or damaged in transit, where we are not the assigned freight forwarding agent, are the sole responsibility of the customer and their selected freight forwarder. Liability

Goods held on premises requiring export packing are not insured unless this is specifically requested for and included in the quotation. Insurance

Exclusions The total excludes any storage charges incurred due to delays on the part of the customer

> 11:12 Best Regards, Alex



It is certified that the supplies detailed hereon have been subject to full inspection in accordance with our documented procedures and fully conform to the requirements of the contract or purchase order, unless otherwise specifically stated.

All business is undertaken in accordance with our current terms & conditions and that of the Road Haulage Association







FREIGHTPACK

Rainham House Manor Way Rainham Essex RM13 8RE

Tel: +44(0)1708 691 001 Fax:+44(0) 1708 552 754



QUOTATION

To: Across the USA LTD 42 Street Manhattan New York NK147 USA

Our quotation is to be understood without engagement and valid for 30 days, subject to terms and conditions, rates of exchange and tariffs currently in force.

To Supply:

 Qty
 Description of Packaging
 DIMS (LXWXH)
 Cost

 15
 test crate
 1200.00mm x 400.00mm x 800.00mm
 £645.00

as you can see from the additional image screen we can add add image you require $% \left(1\right) =\left(1\right) \left(1\right)$

Total Quotation: £645.00

Terms & Condit	ions				
Payment		ccordance with agreed uld payments be overd	payment terms. The compue.	any reserves the right to c	harge for storage
Liability	Association of Wareh assigned freight forward	ouse Keepers (NAWK) arding agent, are the so	entirely at the owners risk . Packaged goods lost or dele responsibility of the cust	amaged in transit, where comer and their selected fr	we are not the eight forwarder.
Insurance	Goods held on premi included in the quotal		cking are not insured unles	s this is specifically reque	sted for and
Exclusions	The total excludes an	y storage charges incu	rred due to delays on the p	art of the customer	
	Rest Regards	ΔΙαν	Date:	07/04/2017	11:10



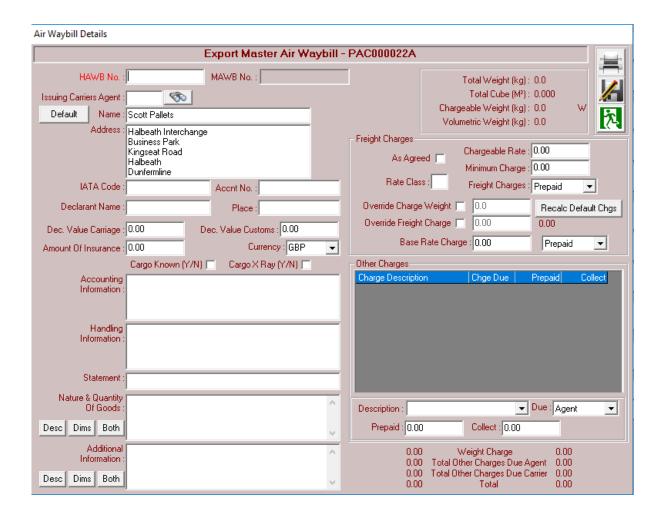
It is certified that the supplies detailed hereon have been subject to full inspection in accordance with our documented procedures and fully conform to the requirements of the contract or purchase order, unless otherwise specifically stated.

All business is undertaken in accordance with our current terms & conditions and that of the Road Haulage Association.





A typical airway bill creation screen.



Please be reminded that the *FASTREIGHT* international forwarding application is a very powerful tool providing every facility that the most sophisticated forwarder could require

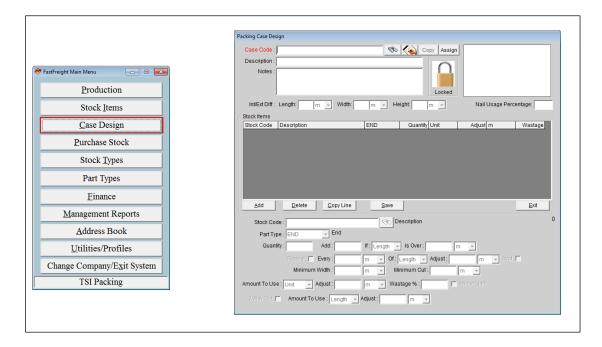
CRATE & PALLET DESIGN GUIDE

General Introduction

When defining Crates (units) for *FREIGHTPACK* it is important to understand that *FREIGHTPACK* only requires the relative values for the various parts of the unit components and how they are relatively positioned between one another.

Once you have defined a particular Crate Pallet or Case (unit), it can be used for the generation of cutting sheets for a unit of any internal dimensions within the case design constraints.

First select the Case Design screen from the Main Menu.



Please note that a case design can be copied adjusted and varied to cover a greater weight or volume and given a new Case code/description. In addition a case design can be assigned specifically to one or more customer.

It is very easy to create a new case design title and gain access to this cutting sheet creation tool.

The weight of the unit components (based upon the Timcon or supplier recommendations) is included in the listing, allowing *FREIGHTPACK* to calculate the final product weight.

Create a new unit design

Click on the icon to create a new Unit Code. This will bring you to the following screen where you can enter a unique Unit Code/Case title; type in the desired code and hit [ENTER] on the keyboard.



Entering new Unit Code

FREIGHTPACK then starts you off with your first line of unit component part definitions. To add more click the ___Add__ button on the Packing Crate Design screen to add additional crate component parts to crate design definition. Also you can click the ___Delete__ button to remove a single part definition and click _____ at any time to save the unit in the database.

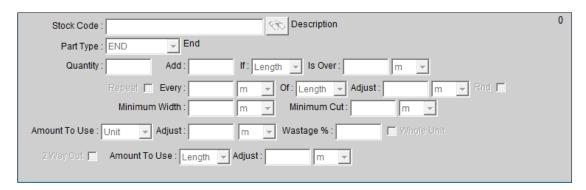
Please be reminded a case can be copied and assigned to a specific customer.

Details of our other products and services can be learnt from www.logistical-software.co.uk or simply by calling sales on 01708 691 011.

Case/unit component list

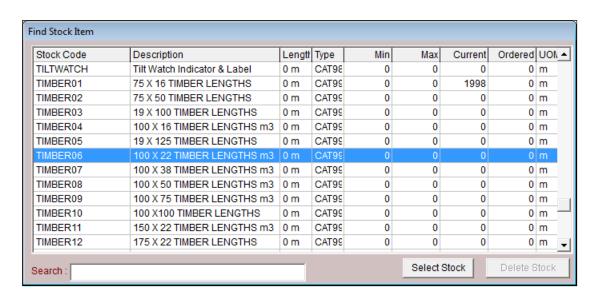
Once a Packing Crate Design title has been created a component list can be created. An initial single definition is initiated and a default Part Type assigned. You can change this to any Part Type you wish from those available (it is also possible to add new Part Types/Families).

To select the type of material you wish to use for any Part Type you wish to define click on the button to bring up all defined Stock Items in *FREIGHTPACK*.



Defining the individual crate components

Once you have clicked the button a list of your stock items defined is displayed, on the stock items listing screen displayed below.



Stock Item selection screen

Here you can select any Stock Item you have previously entered into the *FREIGHTPACK* database for use as a crate component.

Be reminded a case design can only be created if the components are included in the stock listing

External Size differences.

On the main menu screen is a specific area for entering the deltas for the differences between the internal dimensions and the physical external dimensions of the completed crate. This can either be derived by taking the largest adjustment values for your crate for length, width and height or as currently being added from the actual crate design specifications.



External/Internal dimension differences for each defined crate

NB Crate weight is calculated based on actual cutting sheet components generated for a given crate size required, based on the weights provided in the individual stock item details plus the percentage defined for wastage

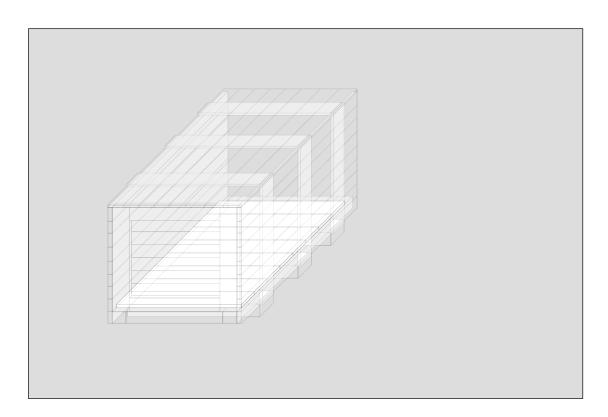
3. Defining your first crate

The initial stage has been tackled in the previous two sections; i.e. accessing the Crate Production screen and entering a unique Crate Code to begin defining a new crate. You will then automatically be returned to the main Packing Crate Design screen to enter a description and any additional notes. An image can be assigned by clicking the blank white box next to the padlock icon and selecting an image file from the file.

Below is a simple example of a typical crate with the top, base bearers, skids and ends ghosted out highlighting the position of the boarded base.

The first component we will be defining is the actual boarded base of the crate as shown below.

(Please see the complete crate design specification in Appendix A)



Boarded Crate - wireframe diagram showing boarded base

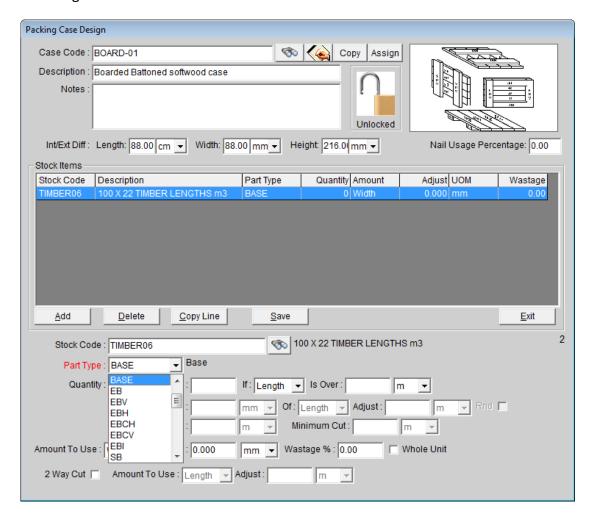
From this diagram we can see that the boards need to be cut to {internal width} and they need to be of a sufficient quantity to tile the equivalent of {internal length} to make a solid base from the boarded wood.

Please be reminded that the images, stock items codes, categories, nominal codes and job preferences will be as you define or provide

Boarded Base

Once you have entered your unique Crate Code the system will initially start with a blank crate component line for you to begin defining your first component. The next stage then is to select your Stock Code to define what timber type is to be used, which in our crate is 100x22mm timber and then ensure your Part Type is set to BASE as we are creating the base section.

See image below:



Part Type selection example screen

Note that only the password controlled system administrator can lock or unlock this screen.

Be reminded, you define the part type titles and of course stock codes.

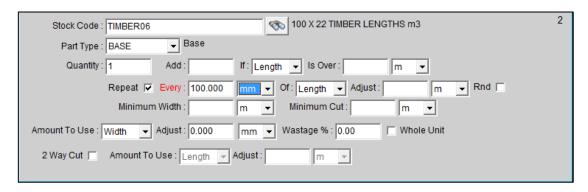
Continue creating unit components

Now that we have told *FREIGHTPACK* what stock item to use and what crate component part we are defining you can continue to define the actual component specifics from your crate design specification (see Appendix A).

We enter the 'Quantity' we need, in this instance only '1', and then we define a repeating boarded base by clicking the checkbox for 'Repeat' as shown by this Repeat . Then we enter '100' and select 'mm' alongside 'Every' because the boards are 100mm wide and we are doing a close boarded crate so we need a new board every 100mm (width of the boards used).

Now we must tell *FREIGHTPACK* what area; i.e. either length, width or height, that the boards must cover. The individual boards in our crate are cut to the {internal width} and the quantity of these widths must cover the {internal length} exactly. So we select 'Length' in 'of' and 'Width' in 'Amount to use'.

As we're using the exact width and length of internal dimensions to be packed there are no values entered into the 'Adjust' boxes so they are left blank. We will cover how to enter components that differ to the actual internal L/W/H dimensions when dealing with undersized/oversized boarded panels further on.



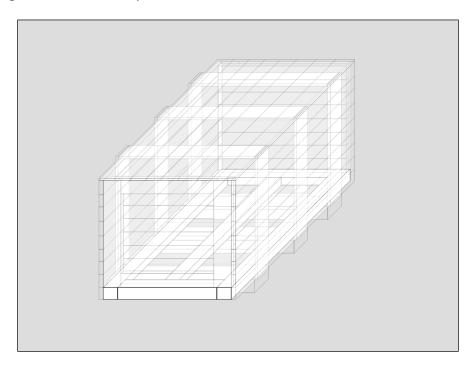
Boarded base component definitions

This is your first crate component completed; now we need to repeat this process until all crate components are entered. Next we will complete the 'base section' of the crate in detail to give an idea of how to enter crate components based on the exact way your crate is built.

Base Bearers and Cross Bearers

The next component is for the 75x75mm base bearers. There are three distinct aspects to these. We have two identical pieces running lengthways and another single piece 150mm shorter in length when combined with the two pieces running across the width. These five pieces of 75x75mm timber need to be broken into three groups and entered into *FREIGHTPACK* as crate component parts.

The diagram shows all five pieces of the 75x75mm base bearers inside the crate.



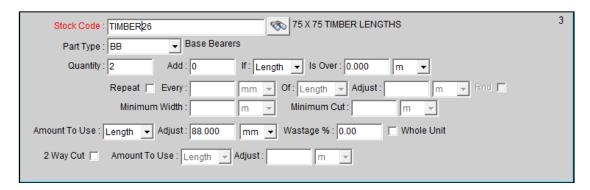
Boarded Crate - wireframe diagram showing base bearers under boarded base

it's best to look for repetition in the components that make up this layer. We have two sets of two identical pieces and one centre base bearer, in this case, three definitions for the two base cross bearers, two identical base bearers and a separate base bearer as the centre one is shorter than the two outers.

<u>Identical Pair of Base Bearers</u> - First define the two longest base bearers running lengthways on the outer edge of the boarded base already defined, use the button to define another component. Then using the button select stock item, in this instance 75x75mm timber. Now we define our 'Part Type' as base bearer which is 'BB'.

Now enter your 'Quantity' as '2' (be advised we are only defining the two outer edge base bearers not all three as they are of different lengths).

All we need is two pieces cut to the correct length, and in our crate this is the {external length}. The total length needed is {internal length} + 88mm because the ends of the crate sit on the base bearers and butt against the boarded base. The two 'end' panels are 44mm in thickness. So now we enter 'Length' in 'Amount to use' and then enter '88' and 'mm' in the 'Adjust' field on screen.



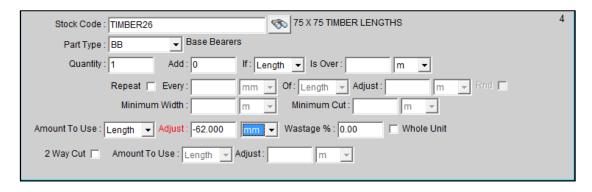
First of the two lengthways Base Bearer definitions required

Now we need to define the Base Bearer that runs down the middle of the crate underneath the boarded base. This must be defined separately as it is cut shorter, 150mm shorter than the outer two base bearers at either side.

Individual Centre Base Bearer - Once again we start by adding an extra line via the button and selecting from the 'Stock Code' and defining the 'Part Type' as 'BB' for Base Bearer using the button. As far as FREIGHTPACK is concerned this Base Bearer definition has nothing to do with the previous one and if is simply another component which also happens to be a Base Bearer using the same 75x75mm timber.

Again we define the 'Quantity', in this instance '1', and tell FREIGHTPACK we need it cut to 'Length' in the 'Amount to use' field. Now we need to define the correct length with an 'Adjust' of '-62mm'. Now you will be asking where minus 62 millimetres came from no doubt. This is because the other two Base Bearers on the edge of the base are {internal length} + 88mm but this middle Base Bearer needs to be 150 mm. Therefore the final value is {internal length} - 62mm. This is still a difference of 150mm and so this is correct.

It is VERY IMPORTANT that this figure is entered as a negative/minus value. This indicates to *FREIGHTPACK* that the part is to be shortened by the adjusted value.



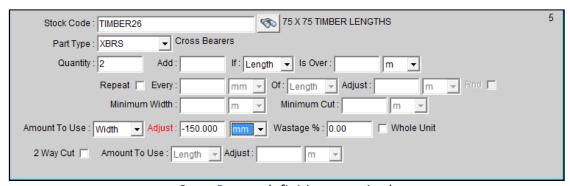
Second of the two lengthways Base Bearer definitions required

Please note that the part type description and part type abbreviation will be as you use now, we will bring the data from your present stock listings into the tables of *FREIGHTPACK*. Once you have added additional data such as item weight, value and additional codes et cetera,

To complete this layer of the crate design, all the 75x75mm components fixed under the boarded base and above the skids, we must enter the details of the Cross Bearers. This is the two pieces that run widthways between the two Base Bearers running at either side of the boarded base.

<u>Cross Bearers</u> - Add an extra line via the <u>add</u> button and select 75x75mm timber using the <u>button</u> button. Then set the 'Part Type' again as 'XBRS' for Cross Bearers.

Now for the 'Quantity' we enter a value of '2' because we need two of them. We also know from our crate design that the total width of this layer of the crate construction (i.e. the 75x75mm Base Bearers and Cross Bearers under the boarded base) will be a maximum width of {internal width}. So we can define the adjustment for this component by entering '-150' and selecting 'mm' as the unit of measure for the 'Adjust' field.



Cross Bearer definitions required

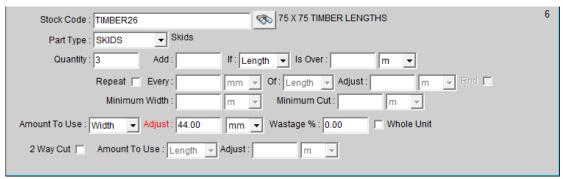
So now we have defined the 100x22mm boarded base layer, and all of the various Base and Cross Bearers needed for the underlying layer of 75x75mm timber.

Now just we need to tell *FREIGHTPACK* about the Skids/Chocks that make up the base to complete the 'base component' of the crate.

SKIDS - Add an extra line via the button and select 75x75mm timber using the button. Then set the 'Part Type' as 'SKIDS' for the skids.

Now once again we need to work out how wide the skids need to be. Looking at the crate design we can see that the skids sit flush under the boarded side panels. These are 22mm thick (as they are composed of 100x22mm timber) so that means the final value we need is {internal width} + 44mm in total to accommodate this.

So we enter '3' in the 'Quantity' field and then select 'Width' as the 'Amount to use'. Now we need to tell *FREIGHTPACK* about the extra 44mm of timber to cut so we enter '44' and select 'mm' as unit of measure for the 'Adjust' field.

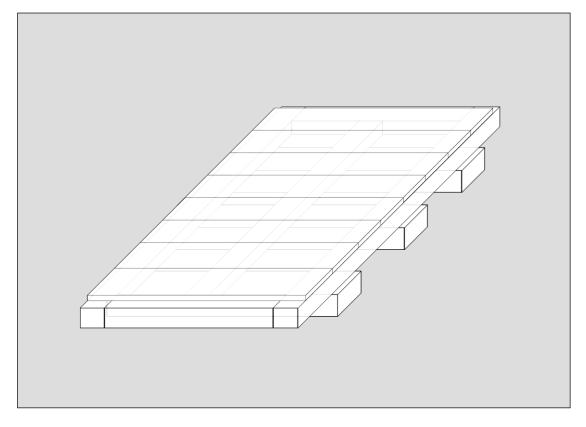


Skids/Chocks definitions required

Cup of tea time!

Congratulations! You have entered the base family of components that make up this crate design; now is a good time to look back at all the items we have entered and take time to understand why we are entering the information we have entered so far based on the crate design specifications in Appendix A.

As far as **FREIGHTPACK** is concerned we have now defined the 'base' aspect of the crate design in its entirety. A visual representation of what we have defined is shown below for ease of understanding. This is what **FREIGHTPACK** will generate components for in the cutting sheet if asked.



Representation of what we have defined so far – ALL base related components of crate (shown together)

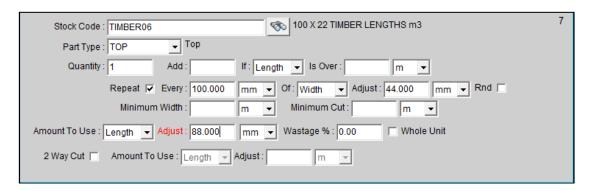
Defining the remaining top, side and end components

The top/lid panel is a boarded panel and three batons all made up of 100x22mm timber. Therefore we need to split this into two components. Top and TBH (Top Baton Horizontal).

<u>Boarded Top panel</u> – First we use the <u>Add</u> button so we can add a new part definition to our crate design. Then we select the stock item for 'Part type' of 'Top'. As this is a single piece so we set the 'Quantity' to '1' also.

The top panel is comprised of a boarded area using the 100x22mm timber laid in parallel with the length/side of the crate to cover the required width. So we set the 'Repeat' value by ticking the check box to produce a boarded panel and set it to repeat 'Every' '100' 'mm' area of the 'Width'. As the top sits on the boarded side panels (but not the side vertical batons) that's two sets of 22mm thickness timber i.e. {internal width} + 44m so we set the 'Adjust' to '44' 'mm' too.

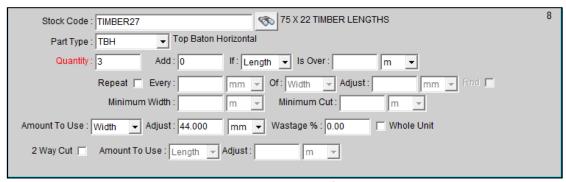
The lengths of the timber we need to cut in this crate has to cover the two end panels including the horizontal and vertical end batons so that's a total of four pieces of 22mm thickness timber i.e. {internal length} + 88mm so we set the 'Amount to use' by selecting 'Length' and then set 'Adjust' to '88' 'mm' so the timber lengths will fit flush on top of ends.



Boarded top panel definition

<u>Top Baton Horizontal</u> – There are a total of three top batons required and are fabricated from 100x22mm timber. So we once again use the <u>Add</u> button to add another component to the crate definition. Then we select 100x22 for 'Part type' of 'TBH'. There are three pieces so we set the 'Quantity' to '3'.

As the batons are going to be flush with the boarded top and will run at right angles to the timber lengths on the boarded lid panel we set the 'Amount to use' as 'Width' and we also set the 'Adjust' to '44' 'mm' so we will end up with three pieces to lay flush with the actual width of the boarded top panel.



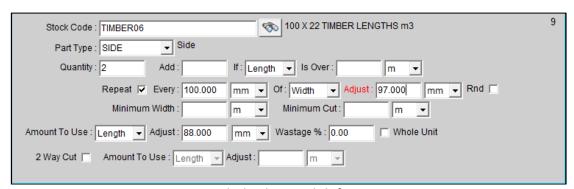
Top Baton horizontal definition

And that is the top family of components for this crate completed.

<u>Side panel</u> – The side panel is comprised of 100x22mm timber and is a boarded panel. So we use the <u>stock item</u> button so we can add a new part definition to our crate design. Then we select as the 'Stock Code' for 'Part Type' of 'Side'. There are two pieces so we set the 'Quantity' to '2'. The boards on the side panel run at right angles in parallel with the boards on the top/lid section.

The actual area this panel needs to cover is defined as the length of the top/lid panel and the height of the end panel (which {internal height} is + 22mm) as well as an extra 75mm to cover the height of the base bearers. So the actual figures are {internal length} + 88mm and {internal height} + 97mm (22+75mm) so we have all the figures. We click the checkbox for the 'Repeat' function and set the repeat pattern to the width of the timber we are using i.e. '100' 'mm', and then select the unit 'Of' to 'Height' with an 'Adjust' of '97' 'mm'.

Now we need to define how long each of these repeating pieces of wood will be so we set the 'Amount to use' as 'Length' with an 'Adjust' of '88' 'mm' as the side panel needs to overlap and cover the two ends which are four pieces of timber thick in total comprising of 100x22mm timber.



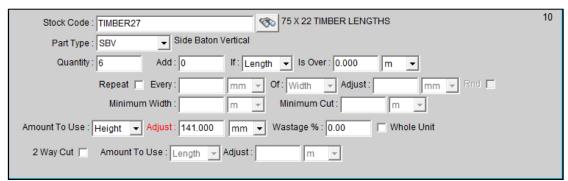
Boarded side panel definition

<u>Side Baton Vertical</u> – There are three 100x22mm timber pieces used as vertical side batons for each boarded side panel piece, and so six in total. Again we use the button so we can add a new part definition to our crate design.

Then we select the component as the 'Stock code' for 'Part type' of 'SBV'. There are six pieces per crate required so we set the 'Quantity' to '6'.

From the crate design we can see that each of these vertical side batons need to be {internal height} +141mm in total so they sit flush with the base bearers along the underside of the base. This is a combination of the 44mm thickness of the top panel pieces, 22mm thickness of the boarded base unit and 75mm for the thickness of the base bearers. 44+22+75 = 141.

So we select 'Height' for the 'Amount to use' and enter '141' 'mm' for the 'Adjust' value which will give us the required extra length needed.

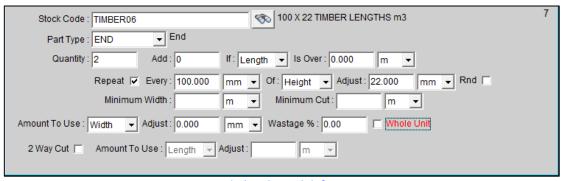


Side baton vertical definition

This is the Side Family of crate components defined.

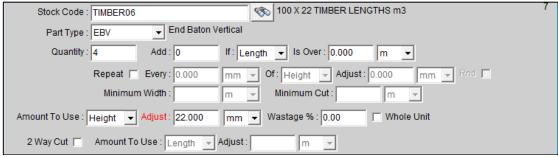
End Panel - The timber type for 'Stock Code' is 100x22mm timber pieces, and we have assigned it for the 'Part Type' of 'End'. We have selected a 'Quantity' of '2' as we need two identical end panels. We have to then define this boarded area. As the panels are stacked vertically above/below each other we instruct **FREIGHTPACK** to 'Repeat' the stock type every '100' 'mm' for a unit of 'Height'. We also need to define an 'Adjust' figure of an extra '22' 'mm' of the height because in the crate construction the end panel sits on the Base Bearers and therefore needs to account for the thickness of the boarded base, made of 100x22mm timber. Therefore we require a total height for the panel of {internal height} + 22mm to retain an internal height within the constructed crate.

Then all we need to do is tell the system how long each of these boards making up the end panel need to be cut to. So we select 'Width' in the 'Amount to use' field and the 'Adjust' is left as '0.000' because the width of these boards is identical to whatever given {internal width} which is to be packed.



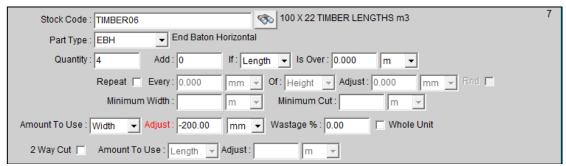
Boarded end panel definition

End Baton Vertical – EBVs are constructed from 100x22mm timber. We also set 'Part Type' to 'EBH'. As we have two end panels we need a total of four vertical end batons (two for each of the end panels) so we enter '4' in the 'Quantity' field. These are simply of the same height as the boarded area which is {internal height} + 22mm so we select 'Height' as 'Amount to use' with an 'Adjust' of '22' 'mm'.



Vertical end baton definition

<u>End Baton Horizontal</u> – We require four 100x22mm timber pieces for the horizontal end batons as with the EBVs above and set those in the same way and set the 'Part Type' to 'EBH'. Because the end panel is set as {internal width} and the EBH pieces sit between the two EBV pieces, which account for 200mm in total (two pieces of 100mm wide timber), we set the 'Amount to use' as 'Width' but we set the adjustment to Minus 200mm by entering '-200' and selecting 'mm' for the 'Adjust' field.



Horizontal end baton definition

We have completed the last family of our crate design.

Please be advised that you define the part types using your own long established terminology, your own stock items listings and your favoured financial nominal codes.

As and when we hopefully gain your order we will jointly produce an Excel spreadsheet of your stock items listing to include your costs, weights and perhaps stock levels for each item.

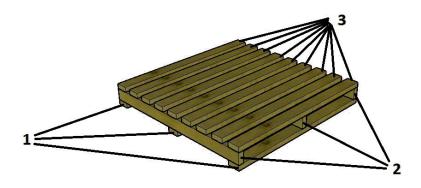
Please be reminded the component names are your own, you control system.

3. Defining your first Pallet

The initial stage has been tackled in the previous two sections; i.e. accessing the Production screen and entering a unique Unit Code to begin defining a new pallet. You will then automatically be returned to the main Design screen to enter a description and any additional notes. Now you can also assign an image if you wish by clicking the blank white box next to the padlock icon and selecting an image file of your choice.

Below is a simple diagram that shows the pallet we wish to build.

The first component we will be defining is the Skids



Pallet Breakdown into Parts

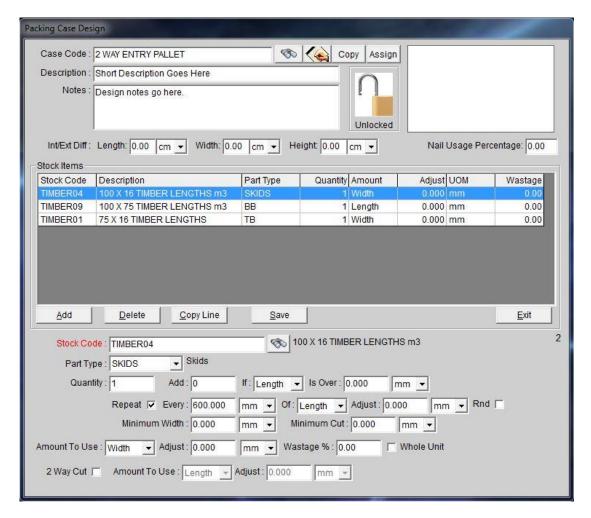
From this Diagram we can see that a basic pallet can be defined into 3 components

- 1. Skids
- 2. Base Bearers
- 3. Top Bearers

Each Component can be customised to your terms in the software.

Please note we do not provide any images or case designs they are all your own

1st Line of the Pallet

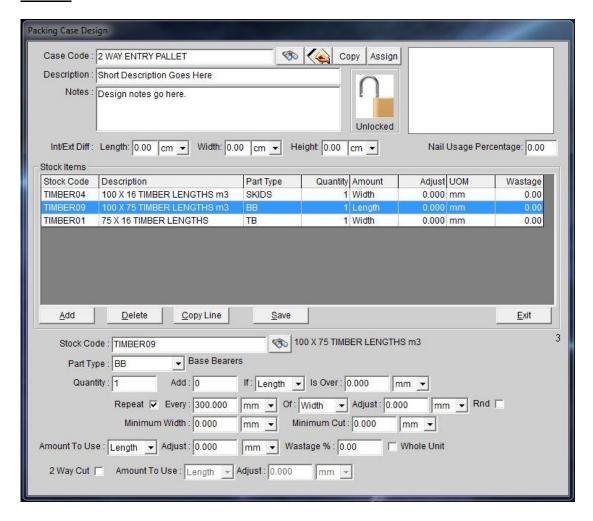


The diagram above shows the 1st line of our pallet entered already into the system.

- -Stock code is the type of material used here we are using 100x16mm lengths of timber.
- -Part type is a drop down and will list all part types entered into the system as this is defined as the skids we choose skids.
- -Quantity here we enter 1 as it is repeated across the length of the pallet (notice the check box repeat is checked and the distance it's repeated) you have to include the start of the 1st part of the material so each gap will be 500mm from each skid. The item is repeated along the length of the pallet
- -Amount to use this is where the calculation comes in on the material used. Here the item will run the length of the pallet.

There are some fields here that are not used as the skids are flush with the pallet.

2nd Line



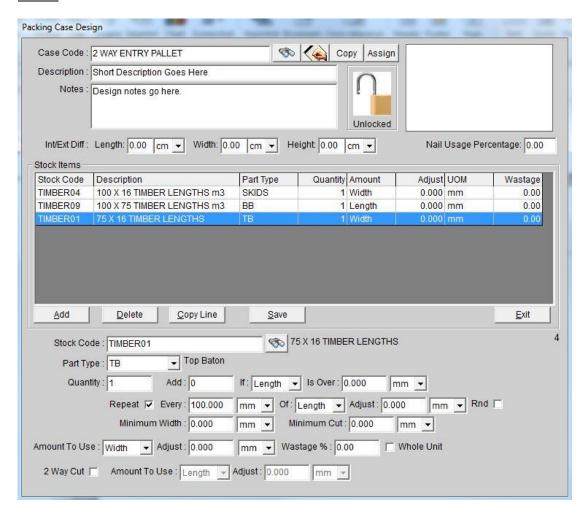
Again like before we have added 1 item to be used across the next section of the pallet.

This time it's the base bearers

As you can see almost the same options used before this time the dimensions used are different.

The item is repeated along the width of the pallet but uses length for material used.

3rd Line

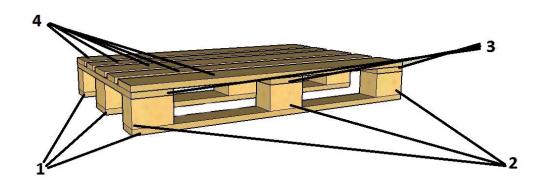


So once more 1 item used across the top of the pallet.

These are repeated across the top to give a small gap of 25mm between each top baton.

The batons are repeated along the length and material used again is measured along the width.

4Way Entry Pallet



Here we will take a look at the 4 way entry pallet.

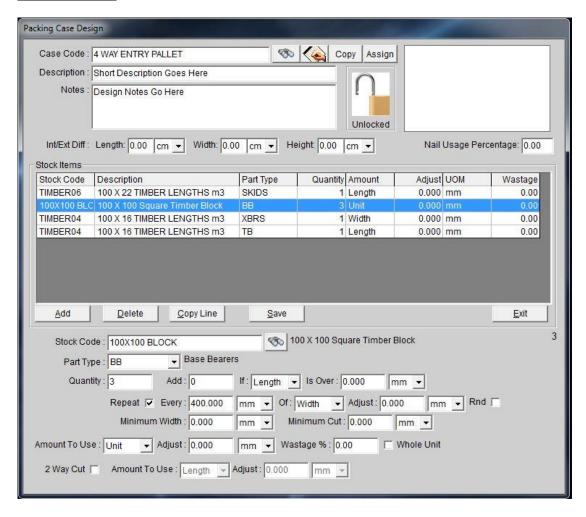
As you can see this one has been broken down into 4 Components

- 1. Skids
- 2. Base Bearers
- 3. Cross Bearers
- 4. Top Baton

Again these are customisable in the software to suit your designs

You can see this is almost identical to the 2 way apart from 2 components.

4 way Differences



From the above picture you can see that there are some slight changes.

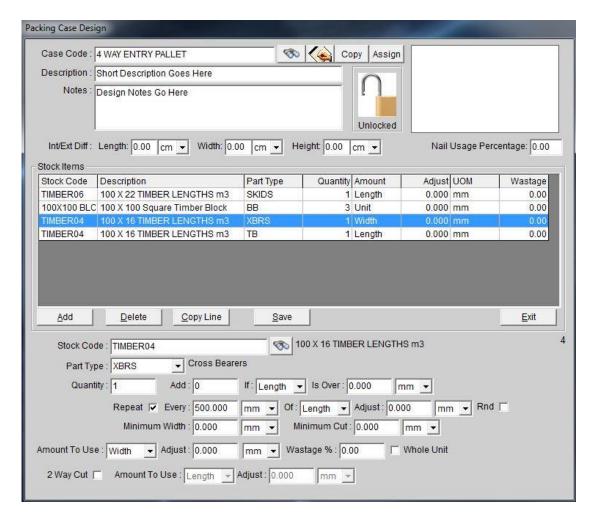
1st that you can see is the line highlighted is not a timber length but a premade item 100x100mm Timber block

This is for the base bearers we use 3 per instance to support the skids and cross bearers

These are repeated every 400mm of the width

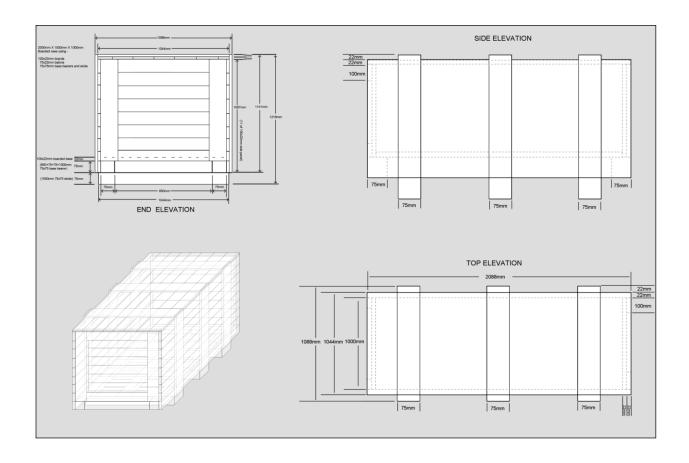
As they are a predefined item we have used a unit and not a measurement

4 Way Part 2



Again as like all the other stages of the pallet this Item is used once but repeated across the design of the pallet

APPENDIX A – DETAILED DESIGN SPECIFICATIONS FOR EXAMPLE CRATE



APPENDIX B – ADJUSTING THE CUTTING SHEET

In some units you may want to adjust the cutting sheet from the design specification.

The following guide will show you how to adjust the cutting sheet.

Step 1 - Highlight the odd cut as shown below and click edit.

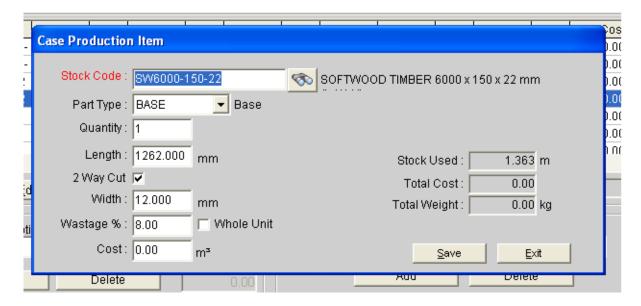
CASE CRATE AND PALLET MAKING SYSTEM OVERVIEW



Now from here you can either edit or remove completely by clicking delete to remove that line.

Step 2 - If you have decided to delete the line you can skip to Step 3.

The next screen will allow you to change everything in that line, including stock types, dimensions to cut, and so on.

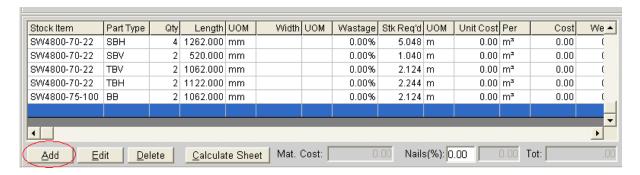


Note that rather than adding a percentage for wastage the whole unit can be included.

Adding a new line.

Simply just click add below the cutting items screen as below:

CASE CRATE AND PALLET MAKING SYSTEM OVERVIEW

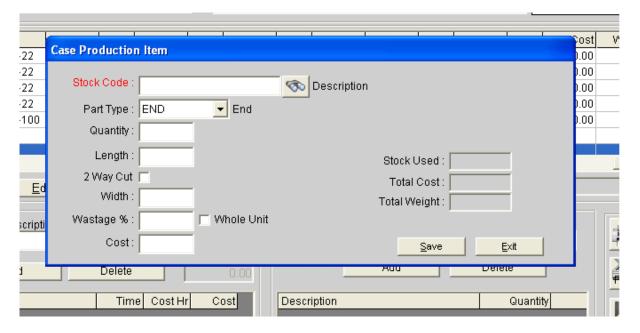


This will add a blank line.

Highlight the blank line, click edit and add all the information as above

This will allow you to add extra items to be cut.

This can be done as many times as required to adjust the overall design.



We hope this guide is of some help in your understanding of our systems, but be reminded unlimited training at no additional cost is included.

Please Contact Alex or Mel at Logistical Software for any query you may have.

V2.8 Revised 8.00 am 24/03/2017 copyright Logistical Software Ltd