



Index OBERON - OMASERVE

Overview.....	2
System Management.....	6
Control.....	6
Settings.....	7
Location of Import jobs and Logging.....	9
.....	9
Initialise	10
Options	
.....	11
Edging	11
Macro	12
Limits	12
Tracking	12
Drill Library.	14
Add, Change, Copy or Delete a Frame Shape	14
Recall Drill Library entries for a Job.....	22
Frame Shape Library.....	25
Importing Jobs to Oberon / OMAServ.....	27
Definition of the fields required:.....	28



Overview

Oberon

The module that links laboratory machines directly to the order processing and tracking modules of the central laboratory management “**Labman**” system.

The application allows up to 12 glazing machines (edger, blocker, tracer, drill etc.) to be connected to one PC via RS232 link.

It is also possible to run multiple versions of **Oberon** on different PC’s if more machines are to be connected or for redundancy.

Oberon is supplied with Job data from “**Labman**” or it can be entered via its own job entry screen. Thus, it is possible by one scan of a barcode at each machine to download all the pertinent data for each job.

Omaserv

This is a “**standalone**” version of **Oberon** that runs independent to “**Labman**” and will import job information from an import file created by another software system. – see [Importing Jobs](#)

- Both **Oberon** and **Omaserv** are managed by parameters that are accessible to each device dependant on its type. e.g. Frame tracers can be used to create the frame shape library that would be accessed by the glazing blockers and edging equipment to enable the lenses to be cut to the required shape. Hole Drilling equipment can also be fed with co-ordinates from a [Drill Library](#).
- Up to 12 devices can be managed concurrently by the **Oberon** module that resides on a PC dedicated to the function of managing these interfaces. Typical equipment that can be connected using VCA / OMA 3.02 protocols include: Frame Tracers, Glazing Blockers, Edgers, Smoothers, Polishers and rimless glazing Drills.
- Each device and its associated characteristics is managed by a “**Tab**”, each tab is directly associated with the computers serial ports (Com1: to Com12 :).

Oberon Job data required for Blockers / Glazing Edgers / Generators / Drills etc. is obtained from “Labman” order files whilst Frame Tracers will send data to “Labman”.

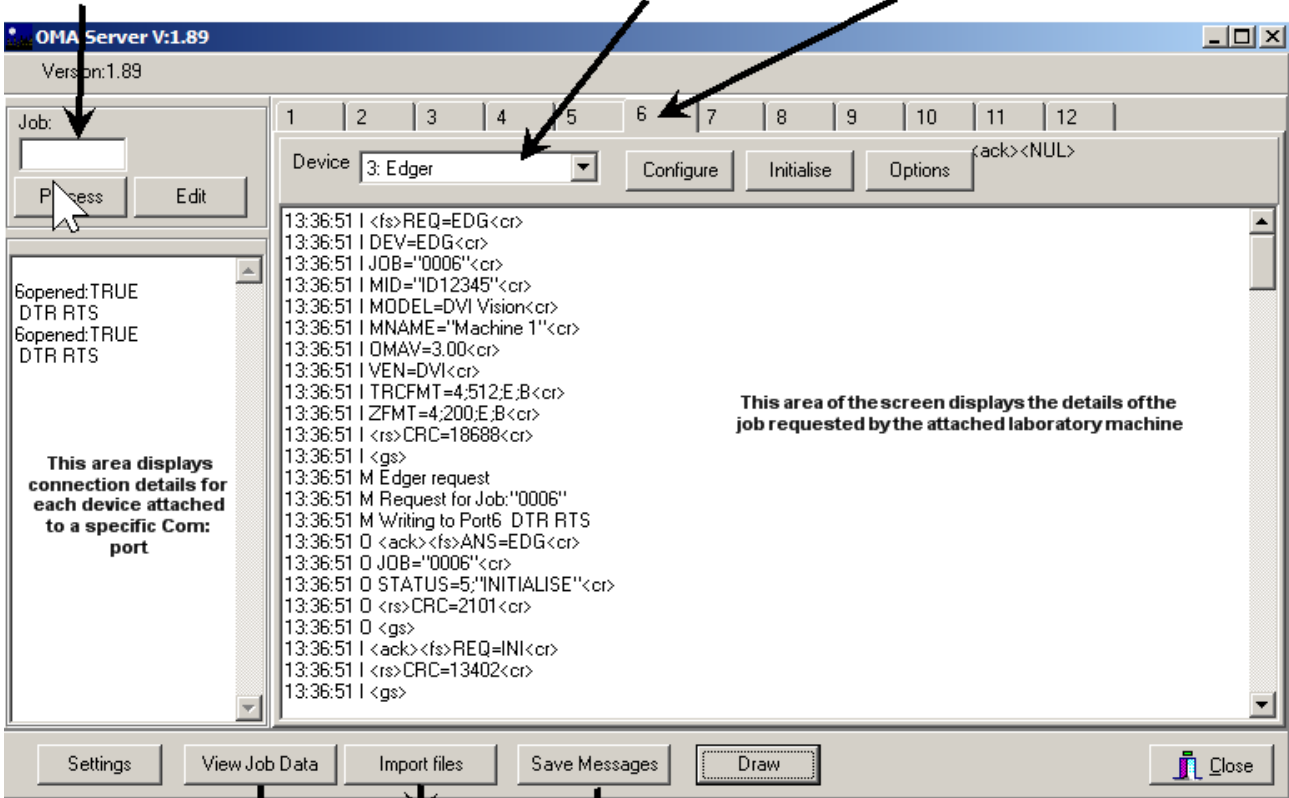
Omaserv Job data required for Blockers / Glazing Edgers / Generators / Drills etc. is from imported files created by another software system using the “**Import**” button.



The main operating display is shown below along with descriptions of the functionality

Omaserv requires the job to be requested first before a machine can receive data

The example shown shows an Edger machine attached to Com6:



This area displays connection details for each device attached to a specific Com: port

This area of the screen displays the details of the job requested by the attached laboratory machine

Job data called for by the laboratory machine can be edited and sent back for processing

Files can be imported directly into Oberon/Omaserv and held for processing requests from the relevant laboratory machine

For query resolution messages created by the software can be stored for further investigation

View Job Data

“View Job Data” button allows for a job to be recalled from the Labman system and edited enabling the laboratory machine to operate more precisely. e.g. for the purpose of edging a change may be necessary to the library shape attached to the order at entry time. This is to allow for variations in actual frame shape requirements.

Edit Job

“Oberon”: The job number must be entered for it to be recalled from the “Labman” system, this will display all the associated data as shown:

- Frame details
- Rx PD details
- Lens details
- Frame Shape details

an example is described below



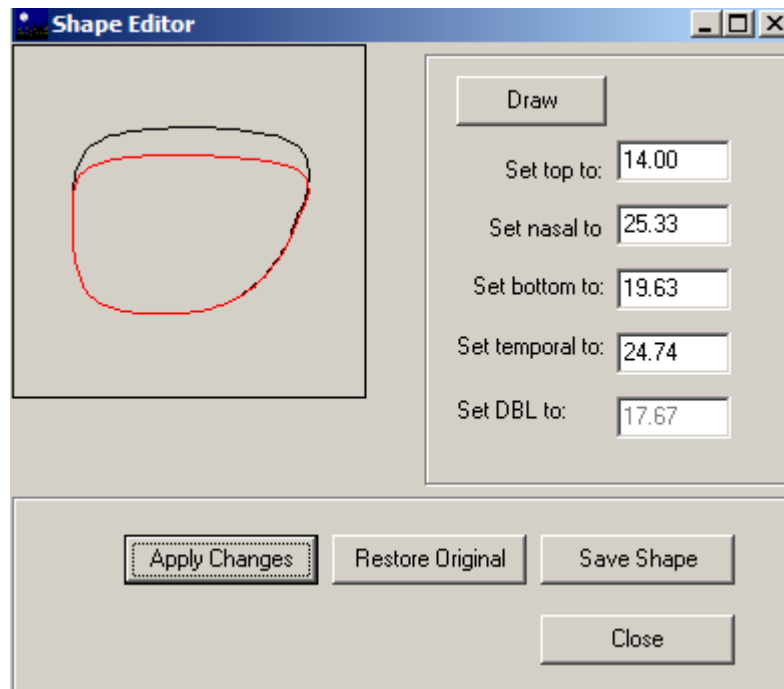
To change the Frame shape details click on the “*Edit Shape*” button, the display will reveal the present frame settings and await a change to be made.

e.g to reduce “*Set to top*” down to 14.00mm. The black line shows the original shape and the red line shows the new shape.

If any other values need changing then make these changes before clicking the “*Apply Changes*” button. Click the “*Save Shape*” button to update the shape for this job.

At any time **before** clicking the “*Save Shape*” button the original shape can be restored by clicking on the “*Restore Original*” button.

To return to the “*Edit Job*” display click the “*Close*” button



On the “*Edit Job*” screen.

To draw the new shape into the job display click on the “*Draw*” button.

To overwrite the frame shape in the library with this new shape, click on the “*Copy to Library*” button.

To delete the frame shape from the library, click the “*Delete*” button.

N.B if you accidentally overwrite or delete the frame shape it will need to be re traced into the library.

The “*QUICK SELECT OPTION*” Buttons are a shortcut way of changing certain frame material / edge type combinations appropriate to the “*Glazing*” process.



These buttons will set the frame type and edge types

- Click the “*Plastic / Bevel*” button to select
- Click the “*Metal / Bevel*” button to select
- Click the “*Plastic / Rimless*” button to select
- Click the “*Metal / Rimless*” button to select
- Click the “*Plastic / Groove*” button to select
- Click the “*Metal / Groove*” button to select

These buttons will set the lens material and lens type

- Click the “*Plastic SV* (Single Vision)” button to select
- Click the “*Plastic Bifo* (Bifocal)” button to select
- Click the “*Plastic/ Vari* (Varifocal)” button to select



System Management

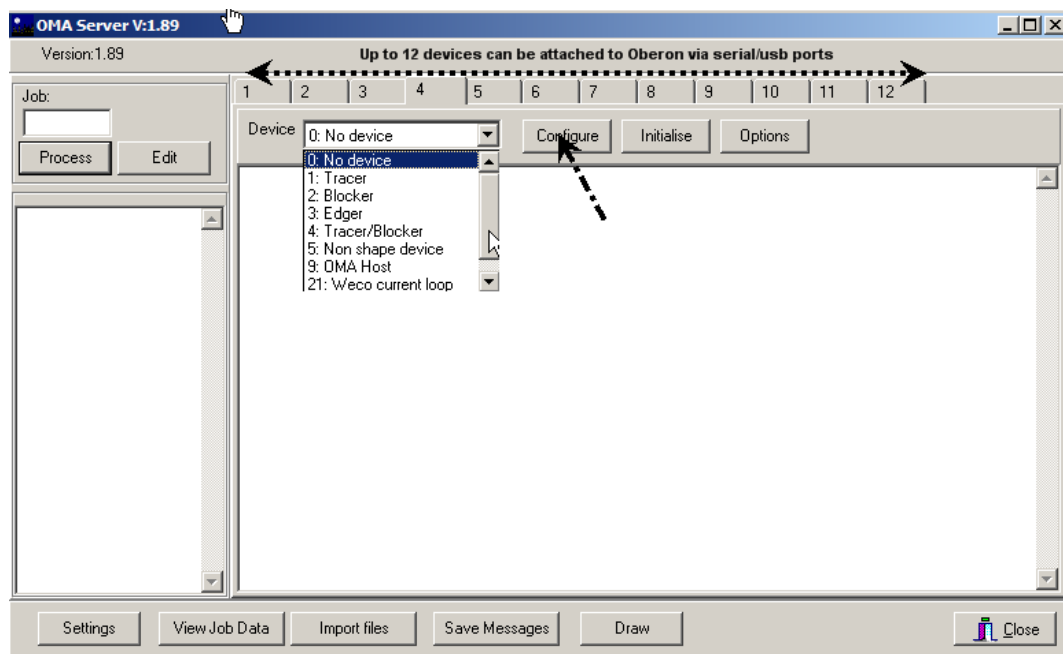
The following screen shots describe the functionality of the control configuration and settings required for each type of device

Control

The “Control” interface covers the “**Configuration**” and “**Options**” and is required to activate a specific device on its associated serial port. N.B. A Pc with 2 serial ports can be expanded by including additional “Multi port” PCI interface cards with either 4 or 8 additional ports

Device Types include Frame Tracers, Blockers, Edgers, Tracer/Blockers, Non shape devices (such as QC Focimeters) and Drill Machines including integrated edging/drill devices.

A port is activated by selecting a device for the port and is de-activated by selecting “No device”.



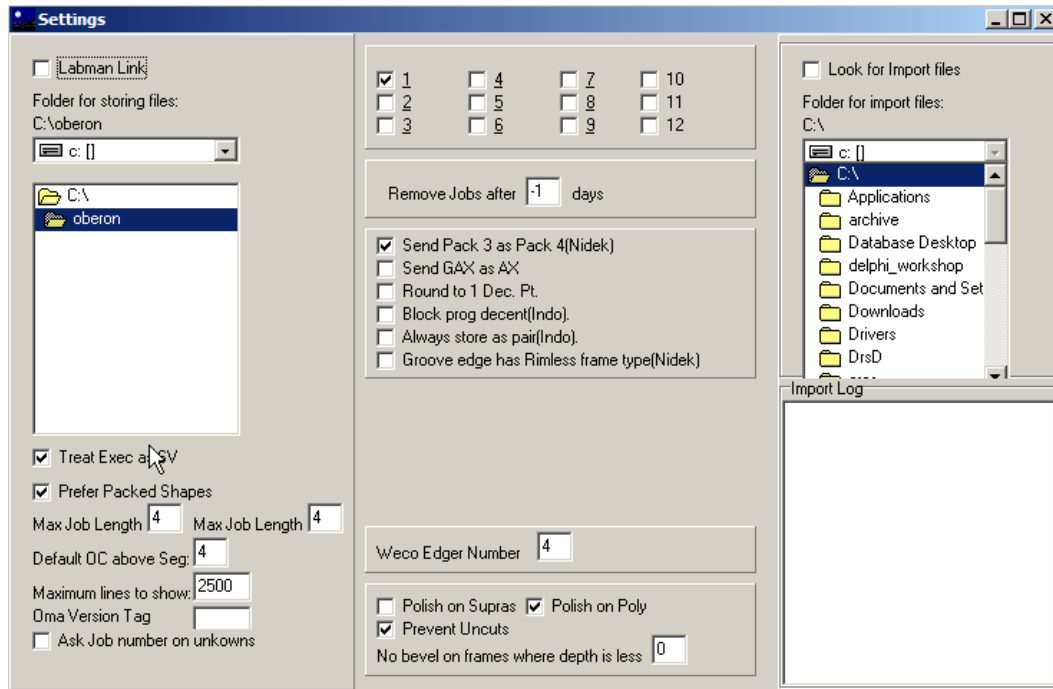
Oberon: The left hand side of the screen shows the requested “Job No” and allows the job to be processed or edited before processing, below this is an area for messages to be displayed to the user to help with the resolution of problems.

Omaserv: As jobs are imported from a file the left hand side of the screen is not shown.



There is a general configuration screen selected by clicking on the “Settings” button.

Settings



For each “Tab” selected on the “Control” display a “Tick” will appear in the corresponding box at the top centre section of the “Settings” display. The other details across the three vertical sections of this display relate to:

- Section 1 (Left) - Defaults and Overrides.
- Section 2 (centre) – Specific considerations
- Section 3 (right) - Location of Import jobs and Logging

Defaults and Overrides.

- The “*Labman Link*” tick box must be ticked if this software is being run as a module of the main “**Labman**” system. This allows for orders created in Labman to be called by the laboratory machines The “*Labman Link*” is not applicable to **Omaserv**:
- The “*Folder for Storing Files*” must be an **existing folder** residing on the Pc. The folder must be set up before hand, but has to be allocated here.
- The “*Treat Exec as SV*” tick box should be ticked if that situation is valid.



OBERON – OMASERV Machine Interface

- The “*Max Job Length*” and “*Min. Job Length*” refers to the **maximum number of characters**. in the Job Number
- The default “*OC above Seg.*” setting relates to the height of the lens **Optical Centres** above the multifocal “Seg” Height position.
- The “*Maximum Lines to Show*” relates to lines in the information tab. If memory is short on the PC then this should be set to a small number.
- The “*OMA Version Tag*” relates to a message such as V3.02 which is sent back by Oberon to the machines.
- The “*Ask Job Number on Unknowns*” will cause a pop-up to appear when a trace is made and the tracer has not provided a job number.

Specific considerations

The top part of this centre section indicates which device numbers (1 to 12) are in use.

- “*Remove Jobs After*” box will cause jobs to be removed from *Oberon* after the selected number of days. This is important to prevent the PC becoming clogged with old data but a **value of -1 will keep the data on file for ever**. N.B. *Omaserv*: “*Remove Jobs After*” box **cannot** be amended.
- “*Send Pack 3 as Pack 4 (Nidek)*” should be ticked if Nidek machines are connected.
- “*Send GAX as AX*” is relevant for the ICE blocker and should be ticked if such a machine is connected. **The blocker should be set for minus cyl.**
- “*Round to 1 decent(Indo)*” relates to the rounding of PD. Default is **NO**. If set then 31.25 is sent as 31.2. This is because some machines (Indo) expect 1 DP.
- “*Block prog decent(Indo)*” relates to the blocking of progressives on the frame blocker.
- “*Always store as pair (Indo)*”. Some machines cannot process single eye orders, if this is set then a single eye is stored as a pair. Default is **NO**.
- “*Groove edge has Rimless frame type (Nidek)*” This should be set if Nidek machines are present.
- “*Weco Edger Number*” relates to communication over Weco current loop and is the device ID of the PC in the current loop. Default is **4**
- “*Polish on Supras*” indicates if “Supras” are to be polished



- “*Polish on Poly*” indicates if Polycarbonate lenses are to be polished.

Location of Import jobs and Logging

If the tick box “*Look for Import files*” is **on**, then this section relates to orders that are to be automatically presented to **Oberon**: otherwise each job has to be called up manually using the “*Job Number*” entry on the Control display.

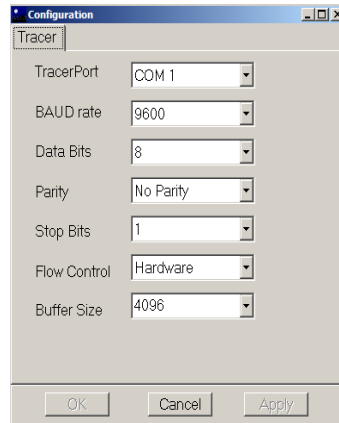
The location which contains these import files has to be chosen from the Drive and Folder hierarchy list. **The folder must already exist.**

The program will try to import ALL files in the folder and will then delete it. Take care when setting this folder so as not to point it to a folder where valuable files are stored.

The “*Import Log*” window shows the activity that takes place during Job importing and will contain important message information should there be any queries during processing.



Configuration



Each Machine type assigned to a Tab (Pc Serial port) has to be configured so that the settings on the computer match those on the machine.

These relate to:

- “*Port*” – The serial port on the computer to which the device is attached i.e Com1 to Com12 inc. **Default COM1**
- “*Baud Rate*” – the speed at which the machine will communicate with the computer. **Default 9600 baud**
- “*Data Bits*” – the number of bits that a character consists of. **Default 8**
- “*Parity*” has the data from the machine an Odd, Even or none setting. **Default none**
- “*Stop Bits*” How many stop bits does each character contain. **Default 1**
- “*Flow Control*” – data flow controlled by the machine (hardware) or XON/XOFF (software) **Default Hardware.**
- “*Buffer Size*” The amount of memory in the computer into which the data from the order can be read and passed to the machine. It is recommended that if the device works with shapes that have a large buffer. **Default 4096kb**

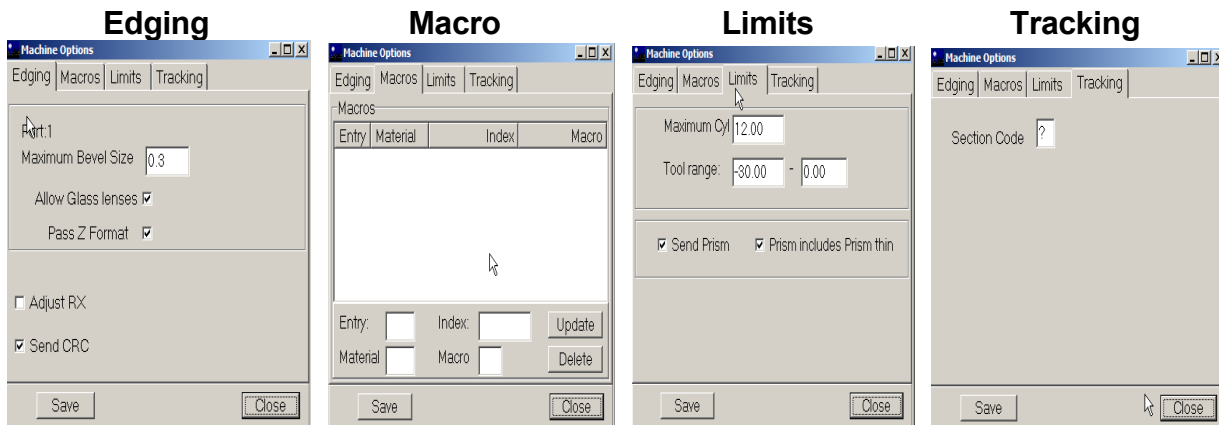
Initialise

Clicking this will set the PC to send a request to the machine attached to the associated Com: port, that a re-initialisation of the device is wanted.

N.B. This is only valid for those machines that support this feature.



Options



4 Machine Options tabs are available to select specific features for each machine attached to one of the ports (COM1 to COM12)

The 4 selectable “*tabs*” enable settings to be applied to:

- Edging
- Macros
- Limits
- Tracking

Edging

Features apply to glazing equipment attached to any of the 12 serial ports. Each port is assigned values individually, the active port being identified by reference to it on the display.

- “*Max bevel size*” **Default 0.3**, this has been updated to indicate front and rear bevel on different frame types.
- “*Allow Glass Lenses*” **Default Yes**,
- “*Pass Z format*” to indicate that the device can accept 3D shape data.
- “*Adjust Rx*” yes/no **Default No**,
- “*Send CRC*” should be “Yes” but it has been known to cause a problem with some machines. **Default is No.**



OBERON – OMASERV Machine Interface



Macro

features allow for various macro settings around Material and Index of any lens.

Limits

relates to

- “*Max cyl allowable*” **Default 12**
- “*Tool Range*” **Default -30 to 0**
- “*Send Prism*” **Default yes**
- “*Prism inc. Prism thin*” **Default yes**

Tracking

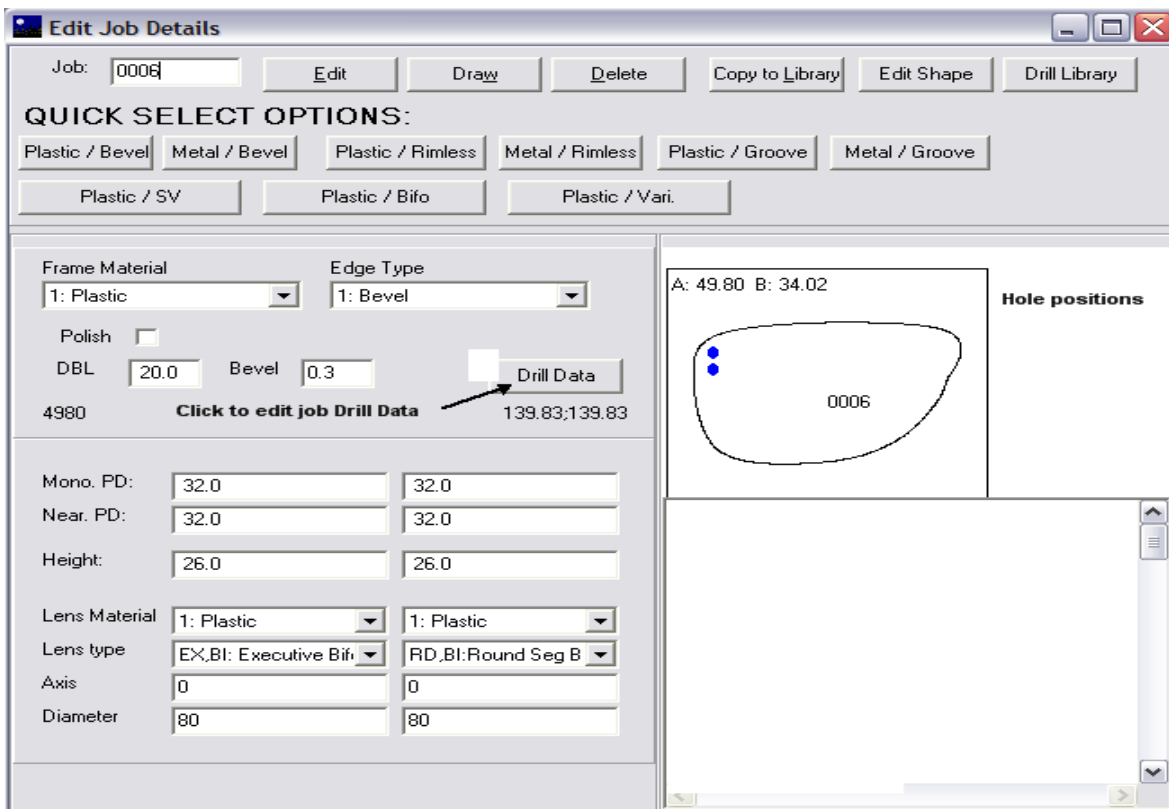
Relates to

- “*Section Code*” assigned to this specific ports attached machine.

All Jobs require data to be “sent to” or “received from” specific laboratory machines.



Drill co-ordinates can be entered (or altered) when processing a specific job. To edit the Drill Data for the job click the “Drill Data” button and apply the same processing defined in the [Drill Library](#) section. An example of changing or setting up drill co-ordinates for a job is shown below





0006

Eye	Start X	Start Y	Dia	Depth	End X	End Y	Normal	Angle1	Angle2
B	-21	10	2		-21	9	B		
B	-21	6	2		-21	5	B		

2 holes for Both lenses are required in the above example - each located on separate lines

X & Y co-ordinates are measured in mm from optical centre of the lens
minus values are to the left/bottom and plus value to the right/top
eg X=-21 and Y=10
positions a 2mm drill in the positions shown on the frame/lens shape diagram in blue dots

Click the Drill Data button to view the settings for the job

depth of hole (Lens thickness)

Drill Data
139.83;139.83

position of holes
0006

Eye
 B Right
 L Left
 B Both

Start X: -21
Start Y: 10
Dia: 2
Depth: []
End X: -21
End Y: 9

Drill Normal to:
 Front
 Back
 Angle

Update Delete Motif

Close

Drill Library.

This library depends upon the frame stock and shape records to have already been created. See separate “Create Frame Shape / Stock Data” documents. The Frame code preceded by the manufacturer code is the link that enables drill co-ordinates to be associated with the specific rimless frame

Add, Change, Copy or Delete a Frame Shape

Without selecting a job:

1. Click the “view job data” button the detail screen is displayed, then
2. Click Drill Library button



Edit Job Details

Job:

QUICK SELECT OPTIONS:

Frame Material: Edge Type:

Polish:

DBL: Bevel:

0

Mono. PD:

Near. PD:

Height:

Lens Material:

Lens type:

Axis:

Diameter:

A: 0.00 B: 0.00

To enter the Drill Library click the Drill Library button

- For the first time, you will have a blank screen in which to enter the positional coordinates and other drill / frame data into – see below



Frame	Eye	Drill Data 1
-------	-----	--------------

Eye	Start X	Start Y	Dia	Depth	End X	End Y	Normal
-----	---------	---------	-----	-------	-------	-------	--------

- Enter a frame code This code must be the same code that was used to create the Frame Stock record and must include the manufactures prefix code and associated eye size.
e.g. enter fred and the Eye(size) e.g. 54mm into the top row of the display and then press Add.
- The new frame shape will then appear in the centre section of the display but without any drill data.



OBERON – OMASERV Machine Interface

Frame	Eye	Drill Data 1
fred	54	

Eye	StartX	Start...	Dia	Depth	EndX	EndY	Normal
-----	--------	----------	-----	-------	------	------	--------

- Highlight the new line to indicate that you are going to update this frame.

Frame	Eye	Drill Data 1
fred	54	

- Enter Drill data in the lower section of the display.
- For each Eye separately or Both Eyes select the appropriate option

The [OMA](#) specification of the drill data is provided later in this document.



OBERON – OMASERV Machine Interface



For each hole enter Start X and Start Y coordinates as values relative to the centre of the frame shape e.g. Looking at the frame the most likely coordinate signs will be X (-nn mm) and Y (+nn mm).

- **Start X** is the centre of the start hole from the shape centre in horizontal.
 - **Plus** is nasal on right eye.
- **Start Y** is the centre of the start hole from the shape centre in vertical.
 - **Plus** is up.

(**Plus** values relate to positions to the right / above the centre of the frame shape.

Minus values relate to positions to the left and below the centre point of the frame shape.)

The grey section of this part of the display allows for other data requirements to be entered.

- **Dia.** is the diameter of the hole in mm
 - blank means default machine setting is used
- **End X** is the horizontal end of the hole – used to make a slot.
- **End Y** is the vertical end of the hole – used to make a slot
- **Drill Normal** indicates that drilling is normal (perpendicular) to front or back of the lens.
 - **Angle** is explained below.
Frame angles should be entered in the Angle 1 and 2 positions

Press Update to add this line.



Repeat for the additional drill holes.

If a line is entered in error then it can be removed by pressing the **Delete** button.

Additional frames are entered in the same way.

If the drill holes can be copied to another frame then highlight the frame and press **“Copy Highlighted”** button.

A box will appear to enter the frame and eye to copy to.



Drill Data [Window Title]

Frame Eye

Frame	Eye	Drill Data 1
fred	54	B:21;5;;;B::

Frame Eye

Lines

Eye	Start X	Start...	Dia	Depth	End X	End Y	Normal
B	21	5					B

Eye: Right Left Both

Start X: Start Y:

Dia: Depth:

End X: End Y:

Drill Normal to: Front Back Angle

Angle 1: Angle 2:

Optional Entries

Enter the frame and then press Copy Highlighted again.

Drill Data [Window Title]

Frame Eye

Frame	Eye	Drill Data 1
fred	54	B:21;5;;;B::
joe	52	B:21;5;;;B::

Lines

Eye	Start X	Start...	Dia	Depth	End X	End Y	Normal
-----	---------	----------	-----	-------	-------	-------	--------

Eye: Right Left Both

Start X: Start Y:

Dia: Depth:

End X: End Y:

Drill Normal to: Front Back Angle

Angle 1: Angle 2:

Optional Entries



Copy existing Frame drill co-ordinates

If the drill holes can be copied to another frame then highlight the frame and press “Copy Highlighted”.

A box will appear to enter the frame and eye to copy to.

Enter the frame code and eyesize.

Click the Copy Highlighted button to complete the task



Recall Drill Library entries for a Job

Below is an example of the effect of using the drill data on a specific job to highlight the positions on the lens where the holes will be located. At this stage the drill data for the job can be changed without it affecting any library data for the frame.

Drill Data

Frame Eye Search Add

Frame	Eye	Drill Data 1
0006	50	B:21.0;5.0;65;23.0;7.0;10.0;B:48;...
JOE	54	
TEST1	54	B:12.0;12.0;60;20.0;20.0;40.0;B:...

To Copy one frames "Drill Co-ordinates" to another Frame
 Highlight the frame to copy from, 2 new input boxes appear to the right,
 Enter into the new boxes the new frames name (JOE) and eyesize (54)
 Click the Add button

Delete Highlighted Copy Highlighted Frame Eye

Lines

Eye	Start X	Start Y	Dia	Depth	End X	End Y	Normal
B	21.0	5.0	65	10.0	23.0	7.0	B

Eye: B Right L Left B Both
 Start X Start Y
 Dia Depth
 End X End Y
 Drill Normal to: Front Back Angle
 Angle 1: Angle 2:

Update Delete

Optional Entries Close

Job Drill Data

0006 Load

Draw Delete Copy to Library Edit Shape Drill Library

Material / Rimless Plastic / Groove Metal / Groove
 Plastic / Vari.

Lines

Eye	Start X	Start Y	Dia	Depth	End X	End Y	Normal	Angle1	Angle2
B	-21	10	2		-21	9	B		
B	-21	6	2		-21	5	B		

2 holes for Both lenses are required in the above example - each located on separate lines
 X & Y co-ordinates are measured in mm from optical centre of the lens
 minus values are to the left/bottom and plus value to the right/top
 eg X=-21 and Y=10
 positions a 2mm drill in the positions shown on the frame/lens shape diagram in blue dots

depth of hole (Lens thickness)

Click the Drill Data button to view the settings for the job

Eye: B Right L Left B Both
 Start X Start Y
 Dia Depth
 End X End Y
 Drill Normal to: Front Back Angle
 Angle 1: Angle 2:

Update Delete Motif

Close

Drill Data 139.83;139.83

A: 49.80 B: 34.02
 position of holes
 0006



OMA Specification of Drill data.

The first field is the eye drill data is to be applied to:

R = right eye

L = left eye

B = both eyes. The xy coordinates oriented as right eye data.

The second field is the Cartesian x coordinate (mm) of hole start position.

The third field is the Cartesian y coordinate (mm) of hole start position.

The fourth field is the hole diameter (mm). If this field is empty, the hole will be drilled to diameter of tool.

The fifth field is the Cartesian x coordinate (mm) of hole end position. If this field is empty, a normal (round) hole will be drilled.

The sixth field is the Cartesian y coordinate (mm) of hole end position. If this field is empty, a normal (round) hole will be drilled.

The seventh field is the depth (mm) for drilling a blind hole. If this field is empty, hole will be drilled completely through lens.

The eighth field is the lens surface hole should be drilled normal to:

B = normal to back lens surface

F = normal to front lens surface

A = specified drill angle from next field

If this field is empty hole will be drilled normal to back lens surface.

The ninth field is the lateral hole-drilling angle. (degrees)

The tenth field is the vertical hole-drilling angle. (degrees)

See Figures A.1 and A.2.

The Cartesian coordinates for the hole start and end positions are referenced viewing the front surface of the lens, with its origin at the Frame centre and:

+x = Right Eye towards nasal, Left eye towards temple

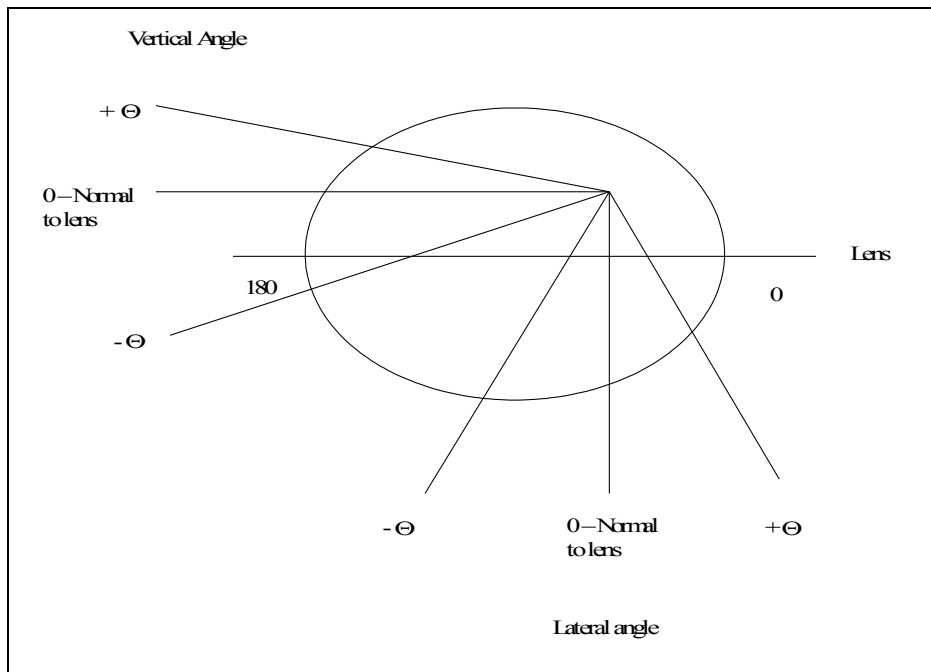
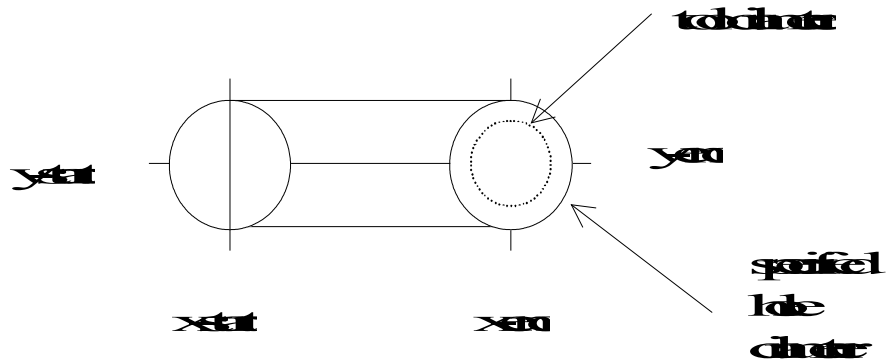
-x = Right Eye towards temple, Left eye towards nasal

+y = above frame centre

-y = below frame centre



OBERON – OMASERV Machine Interface
Figure A.1 – Drill Information





Frame Shape Library.

From the **Edit Job details** screen, with a shape selected, click the **'Copy to Library'** button

Edit Job Details

Job: 7724 Edit Draw Delete Copy to Library Edit Shape Drill Library

QUICK SELECT OPTIONS:

Plastic / Bevel Metal / Bevel Plastic / Rimless Metal / Rimless Plastic / Groove Metal / Groove

Plastic / SV Plastic / Bifo Plastic / Vari.

Frame Material: 2: Metal Edge Type: 1: Bevel

DBL: 21.0 Bevel: 0.3 Rear Bevel:

Polish: Groove Depth: 0.00 Groove Width: 0.00

5034 140.81;140.9 Drill Data

Mono. PD: 31.0

Near. PD: 31.0

Height: 16.0

Lens Material: 1: Plastic

Lens type: SV: Single Vision SV: Single Vision

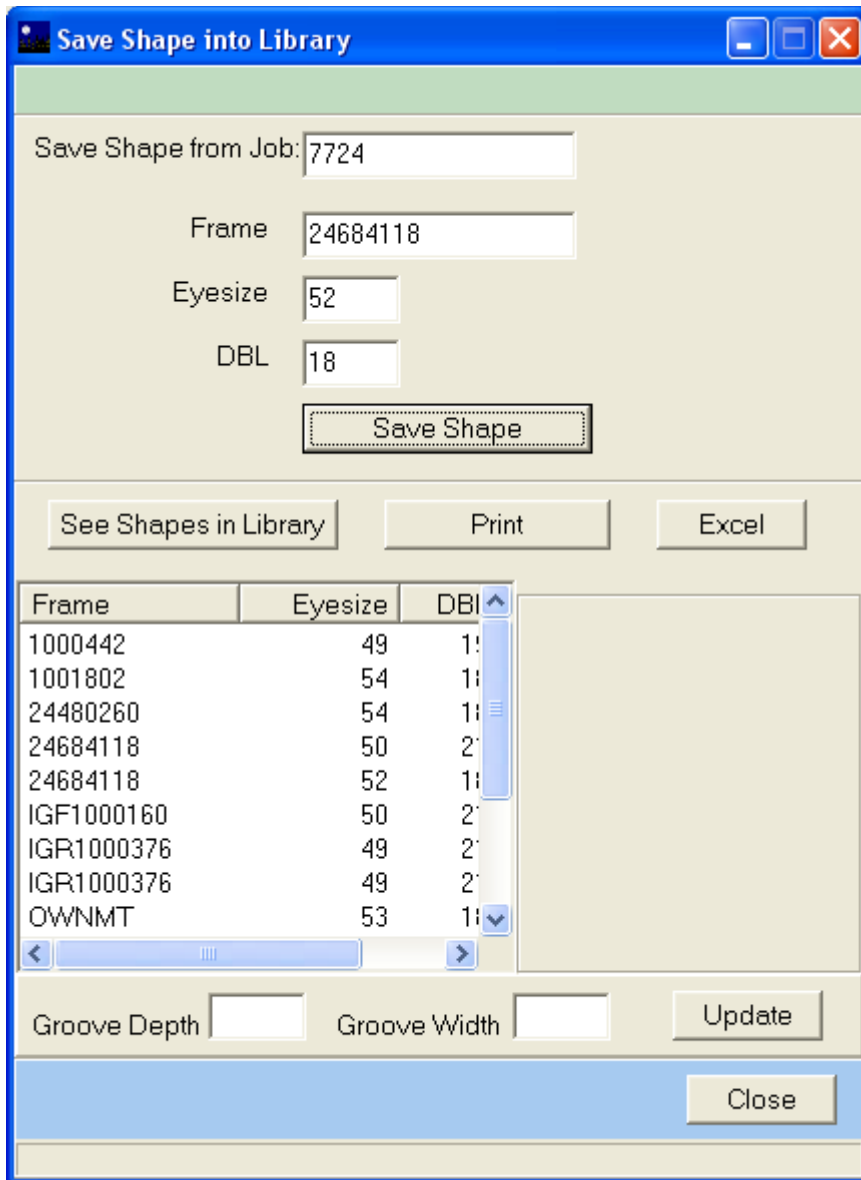
Axis: 125

Diameter: 65

A: 50.36 B: 32.01

7724

```
_ORDVDEC= 0.0;
_INPUTOCHT= 0.0;
_SEGTOP= 0.0;
_DECENT= 31.0;
_SEGIN= 0.0;
_VSEGPOS= 0.0;
ACCN="500030"
ADD=0.00;
AX=125;
BACK=0.00;
BCOCIN=0.00;
BCOCUP=0.00;
BCSGIN=0.00;
BCSGUP=0.00;
BCTHK=0.00;
```



Now Click the **'Save Shape'** button

- The OMA shape is then saved associated with the frame name and size. In this case the file name would be `_246841185218.OMA`
- You can pick up existing shapes in the library and add Groove depths and widths (measurements in mm)

Click the **"Update"** button to update the frame shape record with the Groove depth and width details.

- Jobs using a frame with a record in the library (NOTE – Frame code , Eyesize and DBL must match!) now automatically get the library shape associated with them without the need for retracing.

Example :



Job on tray number N992 is booked into Oberon.

Oberon picks up the RX data details for this job and finds the _FRAMECODE for the job, in this case 24684118 , with eye size 52, DBL 18. Oberon then looks for a file _246841185218.OMA in the Oberon directory, when it finds it, it copies it to a new file N992.OMA (in the Oberon directory) that is then used for production of this job.

This feature would normally be used with former traced frames (rimless).

Importing Jobs to *Oberon* / *OMAServ*.

Files created by other 3rd party software can be imported into *Oberon*. This is done by agreeing a shared folder into which the data for the jobs to import is located.

Oberon will scan this folder every 10 seconds and any files in this folder will be processed, and then deleted. The data within the file will be imported into Oberon. This process may be activated by scanning a barcode when the job enters the glazing department which will trigger the creation of the file.

Since *Oberon* handles the OMA protocol, it is possible to pass over OMA files and these will be incorporated into *Oberon*. However, in order to allow third parties to create simple files rather than the grappling with the full OMA protocol, the following file format will also be accepted.

File Format.

The file is a text file and is in INI file format with four sections: General, Right, Left, Frame.

For example

[General]

Job=1234

[Right]

Sph=+1.00

Cyl=-0.50

Axis=90

Add=2.25

Lensname=CR39 D28

Lens Index=1.498

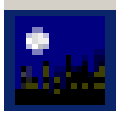
Lens Material=Plastic

Lenstype=FT

DistPD=32

NearPD=30

Height=18



OBERON – OMASERV Machine Interface



HtDir=Above Rim
[Left]
Sph=+1.25
Cyl=-0.25
Axis=85
Add=2.25
Lensname=CR39 D28
Lens Index=1.498
Lens Material=Plastic
Lenstype=FT
DistPD=32
NearPD=30
Height=18
HtDir=Above Rim
[Frame]
Glazingtype=Metal
DBL=16
Framematerial=Metal
Frame=SIL1234
Eye=52

Definition of the fields required:

JOB= the reference that the job will be stored as and called up on the glazing machines

Lensname= free text value.

LensIndex= index of the lens material

LensMaterial= Plastic,Glass,Polycarbonate

LensType = SV,FT,CT,RS,EX,LT,PR
for Single Vision, Flat top, Curve top, Round Seg, Executive, Lenticular, Progressive
respectively.

DistPD= monocular PD value

NearPD= monocular value of the reading seg

Height=

HtDir= Above Rim, Above HCL, Below HCL, Below Rim, On HCL

GlazingType= Plastic, Metal, Rimless, Supra

DBL= obtained from the frame trace.

If it is not obtainable e.g. Lens former was traced then the value passed here will be used.



OBERON – OMASERV Machine Interface

FrameMaterial= Plastic or Metal.

Eye= quoted eyesize of the frame.

Frame= frame name.

Please note that software will store library shapes under the combination of frame, eyesize and DBL so all three values must be passed to use the library

