



Océ 3050

User Manual





Océ-Technologies B.V.

This manual contains a description of the Océ 3050 and the microfilm scanning that can be done with it. The introduction (chapter 1) contains a general description of the working methods for using the microfilm scanner and it is recommended that you read at least this chapter.

This manual reflects the following software:
Océ 3050 Windows software version 4.2.

Overview of scannerparts on the covers

To assist you in finding parts of the scanner quickly, an illustration of the Océ 3050 microfilm scanner is presented on the inside back cover.

Safety information

This manual contains the following safety information:

- Appendix B lists 'Instructions for safe use'. You are advised to read this information before you start to actually use the scanner. Technical safety information such as safety data sheets can also be found in appendix B.
- Where applicable, cautions and warnings are used throughout this manual to draw your attention to safety precautions to be taken.

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Chapter 1

Introduction

- The Océ 3050 Microfilm Scanner 8
- General operation 9
 - Modes of operation 10

Chapter 2

System installation

- System requirements 12
 - Minimum PC requirements 12
- Software installation 13
 - Preparing the PC for printing 13
- Selecting a language 14
- Start/ stop the scanning procedure 15

Chapter 3

Scanning

- Loading cards 18
- The Control window 19
 - The option bar 19
 - The selection buttons 20
 - The Control window 21
- Scanning in Single mode 23
 - Cards with unknown Hollerith codes 23
 - Settings in the Control window 23
- Scanning in Batch mode 25
 - Quality mode 25
 - Settings in the Control window 26
- Scanning in Auto Feed mode 27
 - Cards without Hollerith punches 27
 - Settings in the Control window 27
- Scanning in Hollerith Check mode 29
 - Settings in the Control window 29
- The Run-Time Display window 30
- Choosing a display mode 34
 - Full Image 34
 - Enlarged 35
 - Dual 36
 - Zoom 37

Chapter 4

The Viewing mode

Viewing image files 40

The view screen 41

Chapter 5

Setting up the Océ 3050 Microfilm Scanner

The scanner setup 44

SCANNER SETUP / IMAGING 45

Drawing Size 50

General Hollerith information 55

Hollerith Control 58

Predefined File Name 68

Automatic Card Selection 70

The printer setup 72

Configuration 78

Chapter 6

File handling and administration

The file handling setup 82

Scan data path 82

Process queue path 82

File format 83

Data Type 83

Save Option 84

The Job Management Menu 85

Maximum File Size 85

Log File Usage 86

Log file and Reject File 86

Additional functions 87

Chapter 7

Maintenance and troubleshooting

Card jams 90

Cleaning the drum 92

Appendix A

Technical specifications

Technical specifications 94

Error messages 95

Appendix B

Safety information

Instructions for safe use 100

Safety data sheets 102

Safety data sheet Océ 3050 103

Appendix C

Defining user defined file format

User Defined file format 106

Header definition file 106

Header template file 108

Checking the user defined file format 109

Appendix D

Miscellaneous

Notation conventions 112

Reader's comment sheet 113

Index 115

Chapter 1

Introduction

*This chapter contains a general description of the
Océ 3050 Microfilm Scanner.*



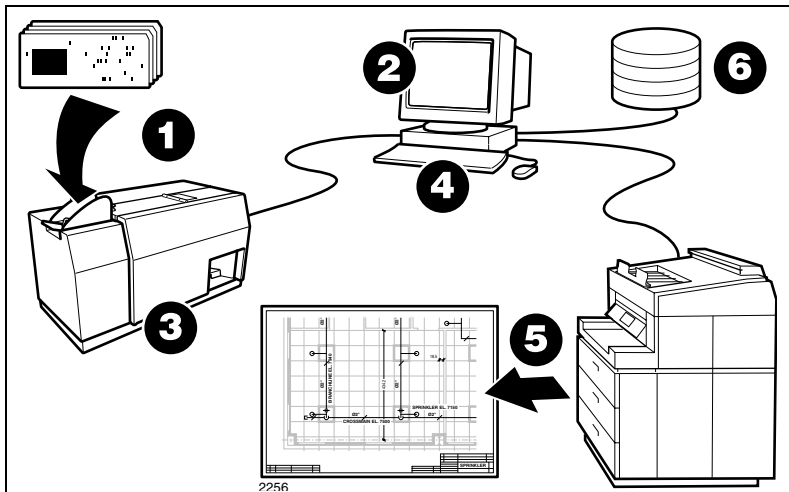
The Océ 3050 Microfilm Scanner

The Océ 3050 Microfilm Scanner is a table-top machine which is controlled by the Océ 3050 Windows software running in the controlling PC.

The figures on the inside of the cover of this manual show the main external features of the scanner.

General operation

A complete scanning and printing system comprises the Océ 3050 Microfilm Scanner, the controlling PC with the Océ 3050 Windows software and an Océ digital printer. The figure below shows an overview of the whole system.



[1] Scanning, printing and filing

The cards to be scanned are placed in the input hopper of the scanner (1). You start the scanning in the Control window of the Océ 3050 Windows software (2). The scanner then scans one card or a batch of cards (3). The images are displayed on the screen of the controlling PC as the cards are scanned. The controlling software provides a 'zoom and pan' facility to inspect the produced images carefully.

According to the control settings in the software (4), the Océ 3050 Microfilm Scanner allows you to produce prints of the scanned images using a digital printer (5). You can also produce data files of the scanned images to store into an image data directory. You can store the data files in the controlling PC, or link the PC to a network, so that image data files can be sent to and stored in any node of the network (6). All necessary controls for the scanning process are available in menus in the controlling PC.

The special Viewing mode allows you to display a scanned image data file that is stored in an image data directory. The 'zoom and pan' facility is available to check all details of the data file.

The configuration of the scanner and printer and the handling of files is controlled in various control menus.

The on-line help gives information on all aspects of the system operation.

Modes of operation

The system may be operated in the following modes:

- BATCH mode, which allows a batch of cards to be fed and scanned automatically without your intervention.
- SINGLE mode, which allows you to feed one card, inspect the image and if necessary re-scan the card after settings are changed. Use this mode for difficult microfilms or for setting up the scanning parameters before automatic scanning of a series of cards in BATCH mode.
- AUTO FEED mode. After a single card is fed and scanned as in SINGLE mode, the next card is automatically fed after pressing the Continue button. Use this mode for small numbers of cards that need special attention.
- HOLLERITH CHECK mode, which allows you to display and edit the Hollerith data on the scanned card.

The system provides four different output modes:

- PRINT mode, which allows you to make one or more prints of the scanned images on paper.
- FILE mode, which allows you to store the image data files into a specified data directory.
- PRINT/FILE mode, which is a combination of the two modes above. One or more paper copies and a data file are made.
- VIEW mode, which allows you to simply check the images on the screen of the controlling PC without making paper copies or storing data files.

For more detailed information on how to run a scanning session in the various modes (see 'Scanning' on page 17).

Chapter 2

System installation

*This chapter informs you how to install the Océ 3050
Microfilm Scanner and the Océ 3050 Windows software.*



System requirements

This section describes the hardware and software requirements for running the Océ 3050 Windows softwar, version 4.2.

Minimum PC requirements

Processor	Pentium 4 - 2.8GHz or equalivent
Memory	1 GByte RAM
Hard Disk	40 GBytes
Display	1024x768 pixels
Video Card	64 Mbytes RAM
Keyboard	
Mouse	
CD Drive	
Software	Windows XP SP2

Software installation

The Océ 3050 Window software is contained on one CD ROM.

The setup program performs the installation process automatically and sets all configuration parameters to their required values.

Note: *If you are using Windows NT, you must be logged in as ADMINISTRATOR before starting the installation procedure.*

- ▼ **To install the Océ 3050 software:**
 - 1 Insert the Océ 3050 installation CD ROM in the disk drive of the PC.
 - 2 Run 'setup.exe' from the CD ROM.
 - 3 Now follow the instructions on the screen.

Preparing the PC for printing

- ▼ **Preparing the PC for printing:**
 - 1 Open the Control Panel menu in Windows.
 - 2 Select the Printers icon.
 - 3 Add a Generic Printer (Text only) and assign the appropriate address (local on LPT1, 2, etc. or Network address).
 - 4 Specify the printer name: 'Centronics Printer'.

Note: *This name is case sensitive, and the space is required.*
 - 5 Do *not* send a test page to the printer.

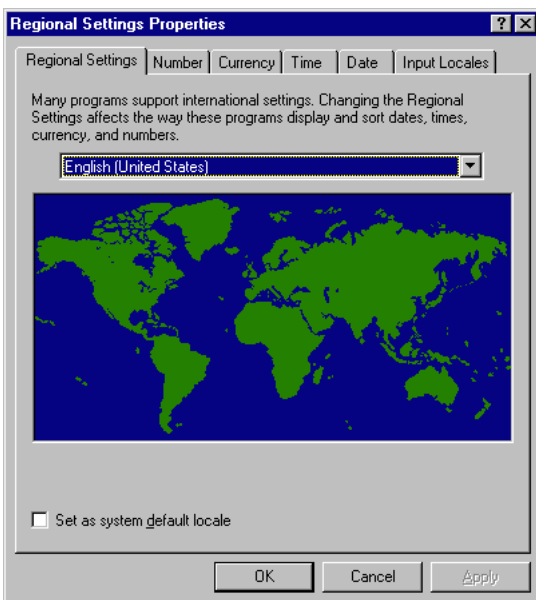
Selecting a language

You can specify the language in which the Océ 3050 Windows software is displayed on your screen. You can choose English, French, German or Italian.

▼ **To select a language:**

- 1 Open the Control Panel menu in Windows.
- 2 Select Regional Settings.
- 3 Specify the desired language in the Language selection box.

Note: *If you choose a language that is not supported, English will be selected as default language.*



[2] Language selection

- 4 Click OK to go back to the Control Panel window.
- 5 Exit the Control Panel window.

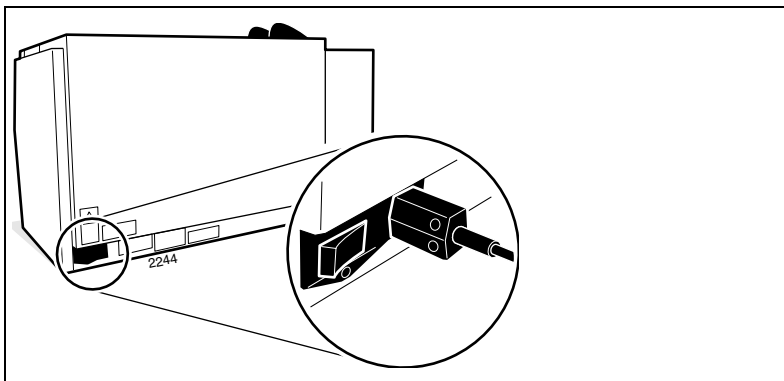
You can now start the Océ 3050 Microfilm scanner Windows application.

Start/ stop the scanning procedure

This section explains the procedure for start and stop the scanning, including switching on/off the scanner and the PC.

▼ To switch the scanner on:

- 1 Switch the ON/OFF switch on the rear of the Océ 3050 Microfilm Scanner to the 'I' (ON) position (see figure 3).



[3] The ON/OFF switch

▼ To start the window application:

- 1 Switch the controlling PC on.
- 2 Start Windows.
- 3 With Windows running, open the Océ 3050 Scanner Group.
- 4 Double click the Océ 3050 icon.

The system starts up and performs a self-test. When the calibrating procedure is finished (after about 30 seconds), the Control screen is displayed.

If the system is not to be used for several hours, switch the scanner system off.

▼ To stop the windows application:

- 1 Click System at the top of the screen.
- 2 Click Exit.
You may be asked if you want to save the current configuration.
- 3 Select the Shut Down option in Windows.

- 4 When the PC is shut down, switch the ON/OFF switch on the rear of the scanner to the 'O' (OFF) position.
- 5 Switch off the controlling PC (if not already switched off automatically).

Chapter 3

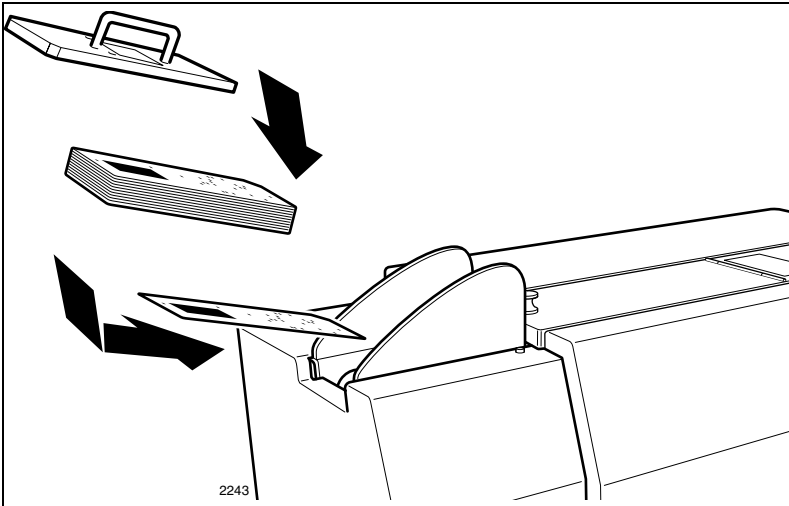
Scanning

This chapter gives an overview of the various parts of the Control window. It also provides all necessary information to run a scanning session in Batch, Single, Auto Feed and Hollerith Check mode.



Loading cards

A maximum of approximately 250 aperture cards can be loaded into the input hopper. A card press is placed on top of the batch of cards to assure a smooth throughput of cards. The cards are placed in the scanner as shown in the illustration below. Depending on the setting in the Configuration menu, you must load the cards face up or face down ((see 'Configuration' on page 78)).



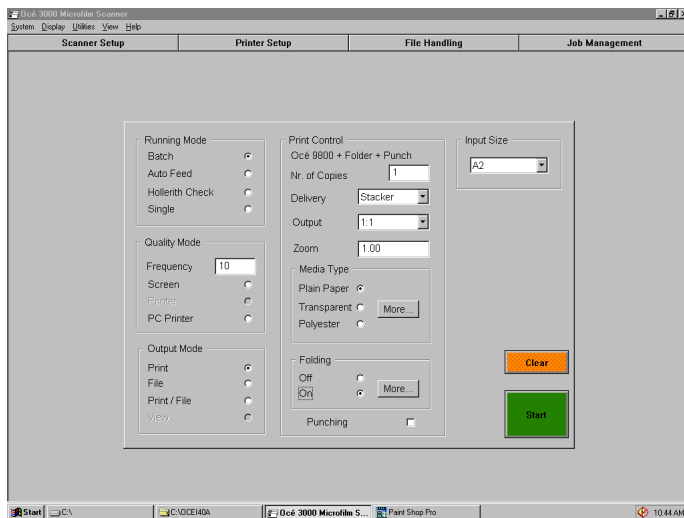
[4] Loading cards

▼ **To load a batch of cards:**

- 1 Place the first card of the batch in the input hopper, sliding it a bit forwards to make sure the card is gliding under the card guide plate.
- 2 Place the rest of the cards on top.
- 3 Put the card press on top of the batch of cards.

The Control window

When the Océ 3050 Microfilm Scanner Windows application is activated, the Control window appears on the screen. The following figure displays the default Control window.

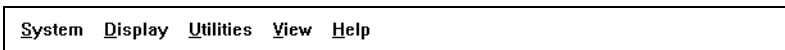


[5] Default Control window

The different parts of this window are described in the following paragraphs.

The option bar

The option bar provides five pull down menus.



[6] The option bar

System This is a pull down menu which contains the exit route for terminating a scanning session.

Display This pull down menu selects one of the three possible display modes. All display modes are available during the scanning process and during the

viewing (browsing) after drawings have been scanned. The different display modes are described in detail in ‘Choosing a display mode’ on page 34.

Utilities This pull down menu provides the Configuration and Clean Drum options. The Configuration option is described in ‘Configuration’ on page 78. Clean Drum is described in ‘Cleaning the drum’ on page 92.

View This is a pull down menu allows you to view a selected image data file. The Viewing mode is described in chapter 4.

Help The Help option provides on-line context sensitive help on all aspects of the system operation. Clicking the Help option during operation will display information concerning the process (this option is not available below version 3.1).

The selection buttons

There are four main selection buttons which are placed at the top of the Control window. Each of these opens a setup dialogue box.



[7] The selection buttons

Scanner setup Clicking the Scanner Setup button brings up the Scanner Setup window. It provides all the setup tools related to the scanner. You can find more information in ‘The scanner setup’ on page 44.

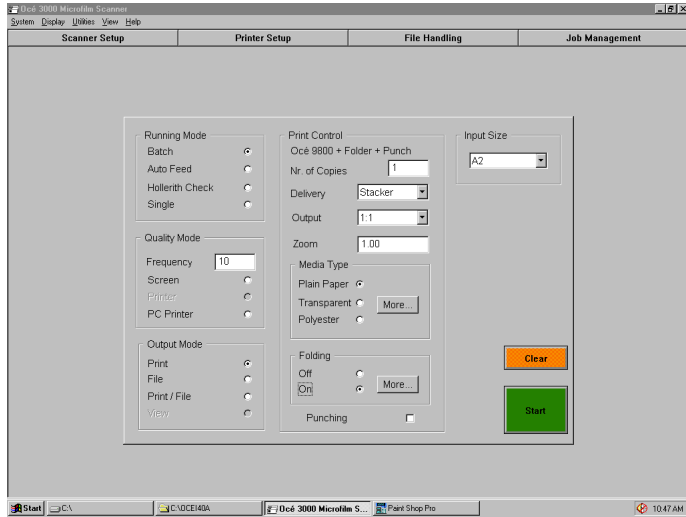
Printer setup Clicking the Printer Setup button brings up the Printer Setup window. It provides all the setup tools related to the printers. You can find more information in section ‘The printer setup’ on page 72.

File Handling Clicking the File Handling button brings up the File Setup window. It allows setting up the details of the output files, file naming etc. More information is in ‘The file handling setup’ on page 82.

Job Management Clicking the Job Management button brings up the Job Management window. It allows setting up the log file and file size limits for the job. More information is in ‘The Job Management Menu’ on page 85.

The Control window

The Control window contains five entry boxes to set parameters for the scanning session and two control buttons for starting the job or clearing the scanner.



[8] The control window

Running Mode The Running Mode entry box contains four radio buttons, allowing you to choose from the various scanning modes: Batch, Auto Feed, Single and Hollerith check.

Quality Mode The Quality Mode entry box is only accessible in Batch running mode. This mode allows you to automatically pause the scanner after a preset number of scanned cards, and to check the quality of the scanned images. You can set the frequency of the Quality Mode and three radio buttons allow you to choose from the various output settings: Screen, Printer or PC Printer.

Output Mode The Output Mode entry box provides four radio buttons to select the output: Print, File, Print/File or View.

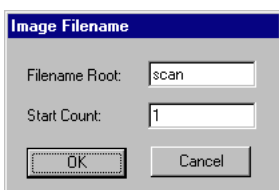
Input Size The Input Size entry box allows you to specify the size of the image on the microfilm, or to select Hollerith sizing.

Print Control The Print Control entry box allows you to specify the desired settings for the selected printer output: the number of copies, the size of the output print, etc. The look of the Print Control entry box depends on the selected printer. You can find more information in ‘The printer setup’ on page 72.

Clear Use this button to clear cards which may be trapped in the scanner.

Start This button starts the Océ 3050 Microfilm Scanner process as selected (batch or single).

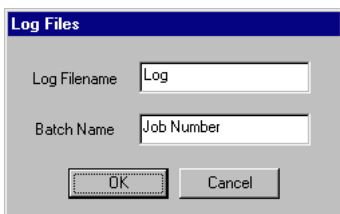
If Hollerith Naming is off, depending of your choice File or Print/File, the following window appears before scanning starts:



[9] Image file name

This window allows you to define the root of the name for the scanned image files, and the counter start number. In the example above, the first image file is ‘scan0001’, the second image file is scan0002’ and so on.

If Log File Usage is on, the following window appears before scanning starts:



[10] Log file

This window allows you to set the name for the log file.

After defining log file and file naming, the scanning starts and the window changes to the Run-Time Display window (see figure 12 on page 30).

Scanning in Single mode

The Océ 3050 Microfilm Scanner feeds, scans and displays one card and waits for your command to print, file, reject or rescan the image. After the image has been accepted, the card is ejected into the output hopper.

The image of each card is displayed on the run-time display window. The machine pauses and you can inspect the image. You can now change the scanning parameters and then rescan the card until you obtain a satisfactory image. When you are satisfied with the displayed image, you can accept the image and send it to the required output. If the output mode is set to print, file or print/file, the system automatically produces the desired output. In the View mode, no output is generated.

Cards with unknown Hollerith codes

In Single and Auto Feed mode, you can add a string of Hollerith data to cards without Hollerith punches or with unknown Hollerith codes. The special ‘Hollerith Add Mode’ in the Configuration menu is designed for this purpose (see ‘Configuration’ on page 78). When ‘Hollerith Add Mode’ is on, the software generates a string of Hollerith data for a card. This string of data is displayed on the Run-Time Display window, placed in the header of the image data file and stored in the LOG file, if activated.

Settings in the Control window

Before activating the scanning process, you set the scanning control in the Control window.

- ▼ **To start a scanning session in Single mode:**
- 1 Click the Single button in the Running Mode entry box.
 - 2 Select the Input Size or select Hollerith Sizing.
 - 3 In Configuration of the Utilities pull down menu, set Hollerith Add Mode on or off as required.
 - 4 Select the desired Output Mode.
 - 5 If the output mode is set to Print or Print/File, set the Print Control settings as required.

- 6 Place the aperture card in the input hopper of the scanner.
- 7 Click the Start button to start the scanning.
- 8 If required, set the names for image files and log file (see figures 9 and 10 on page 22).

The system switches to the Run-Time Display window (see figure 12 on page 30).

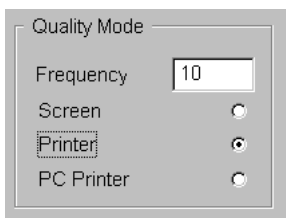
Scanning in Batch mode

The Océ 3050 Microfilm Scanner automatically feeds and scans a batch of cards placed in the input hopper of the scanner. After a card has been ejected into the output hopper, the scanner automatically feeds the next card.

The image of each card is displayed on the Run-Time Display window as the batch process proceeds. When the output mode is set to Print, File or Print/File, the system automatically produces paper copies and/or data files for each card scanned.

All the necessary controls and functions are provided in the Control window of the Océ 3050 Windows software so that scanning can be performed automatically, requiring your intervention only for loading and unloading stacks of cards.

Quality mode



[11] Quality mode

When using the Quality mode feature, scanning proceeds automatically for a predefined number of cards. This number is the 'frequency' of the Quality mode (between 1 and 250). If you set the frequency to 10, for example, the scanner automatically scans and generates outputs for 9 cards. A special output can be created for every tenth card, allowing you to check the quality of the images.

The following output options are available for the Quality mode:

- Screen: you can view every tenth card on the window.
- Printer: you can make a print of every tenth card on the selected printer.
- PC Printer: you can make a print of every tenth card on a local Windows printer.

Note: *The Printer and PC Printer options are not available when the Output mode is set to Print or Print/File. The PC Printer option is also not available when the PC printer is set as default printer.*

Settings in the Control window

Before starting the scanner, you set the scanning controls in the Control window.

- ▼ **To start a scanning session in Batch mode:**
- 1 Click the Batch button in the Running Mode entry box.
 - 2 Enter the frequency for the Quality mode. Select the desired output mode of the Quality mode. If you do not want a quality check, take care the options buttons are empty (not black - not on).
 - 3 Select the Input Size or select Hollerith sizing.
 - 4 Choose the desired output mode in the Output Mode entry box.
 - 5 If the output mode is Print or Print/File, set the Print Control settings as required.
 - 6 Place the batch of aperture cards in the input hopper of the scanner.
 - 7 Click the Start button to start the scanning session.
 - 8 If required, set the names for image files and log file (see figure 9 on page 22) and (see figure 10 on page 22).

The system switches to the Run-Time Display window (see figure 12 on page 30).

Scanning in Auto Feed mode

The Océ Microfilm Scanner feeds, scans and displays one card at a time and awaits your command to print, file, reject or rescan the card. After the image has been accepted, the card is ejected into the output hopper of the scanner. The system automatically feeds and scans the next card and displays the image on the screen.

The image of each card is displayed on the Run-Time Display window. The scanner pauses and you can inspect the image. You can now change the scanning parameters and then rescan the card until you obtain a satisfactory image. When you are satisfied with the displayed image, you can accept the image and send it to the required output. If the output mode is set to Print, File or Print/File, the system then automatically produces the desired output. In the View mode, no output is generated.

Cards without Hollerith punches

In Single and Auto Feed mode, you can add a string of Hollerith data to cards without Hollerith punches. The special 'Hollerith Add Mode' in Configuration of the Utilities pull down menu is designed for this purpose (see 'Configuration' on page 78). When 'Hollerith Add Mode' is on, the software generates a string of Hollerith data for a card. This string of data is displayed on the Run-Time Display window, placed in the header of the image data file and stored in the LOG file if activated.

Settings in the Control window

Before starting the scanner, you set the scanning controls in the Control window.

- ▼ **To start a scanning session in Auto Feed mode:**
- 1 Click the Auto Feed button in the Running Mode entry box.
 - 2 Select the Input Size or select Hollerith Sizing.
 - 3 In Configuration of the Utilities pull down menu, set Hollerith Add Mode on or off as required.
 - 4 Select the required Output Mode.

- 5 If the output mode is set to Print or Print/File, set the Print Control settings as required.
- 6 Place the aperture cards in the input hopper.
- 7 Click the Start button to start the scanning session.
- 8 If required, set the names for image files and log file (see figures 9 and 10 on page 22).

The system switches to the Run-Time Display window (see figure 12 on page 30).

Scanning in Hollerith Check mode

The Océ 3050 Microfilm Scanner feeds a card, scans the card and displays the Hollerith data in the Run-Time Display window. Errors in the Hollerith coding can be corrected with edit in the Run-Time Display window.

Note: *This mode is not useful when the aperture cards are not punched.*

Settings in the Control window

Before starting the scanner, you set the scanning controls in the Control window.

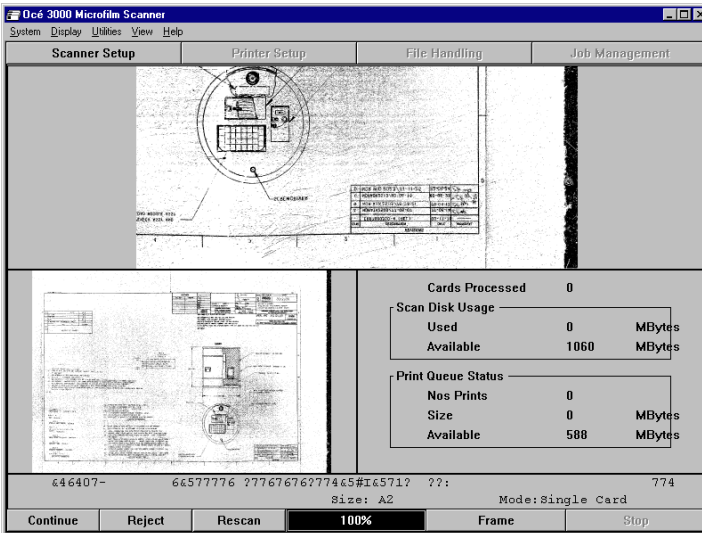
▼ **To start a scanning session in Hollerith Check mode:**

- 1 Click the Hollerith Check button in the Running Mode entry box.
- 2 Select the Hollerith in the Input Size entry box.
- 3 Select the required Output Mode.
- 4 If the output mode is set to Print or Print/File, set the Print Control settings as required.
- 5 Place the aperture cards in the input hopper.
- 6 Click the Start button to start the scanning session.
- 7 If required, set the names for image files and log file (see figures 9 and 10 on page 22).

The system switches to the Run-Time Display window (see figure 12 on page 30).

The Run-Time Display window

The Run-Time Display window appears when you click on the Start button on the Control window. The display mode depends on the setting in the Display menu. The illustration below shows an example of a Run-Time Display window in Batch mode.



[12] Run-Time Display window (Dual Mode)

While scanning is paused, the Scanner Setup window can be called to change the imaging parameters and the drawing size of the scan. In case a different display mode is preferred, you can choose full, enlarged or dual. To change the display mode see section 'Choosing a display mode' on page 34.

The button bar at the bottom of the window allows you to control the scanning session. The layout of the button bar depends on the running mode and the output mode. The following buttons can appear:

- File/Print/Print+File
- Continue
- Reject
- Rescan
- Accept

- Edit
- Frame
- Pause
- Stop

More detailed information on the buttons is given below:

File/Print/Print+File This button will appear, when on the Control window in the Running Mode entry box Single, Hollerith Check or Auto Feed, is selected. The button allows you to accept the scanned image and generate the desired output. The card is ejected into the output hopper and the system returns to the Control window.

Continue This button will appear in three cases:

- 1 when on the Control window in the Running Mode entry box Batch is selected
- 2 when on the Control window in the Output Mode entry box View is selected
- 3 after selecting pause in stead of File/Print/Print+File

Reject This button rejects the scanned image. No output is generated and the system returns to the Control window. The card is ejected from the scanner.

Rescan Should the image not be optimal from the first time, you can change the imaging parameters and scanning resolution and then rescan the card to obtain a better result.

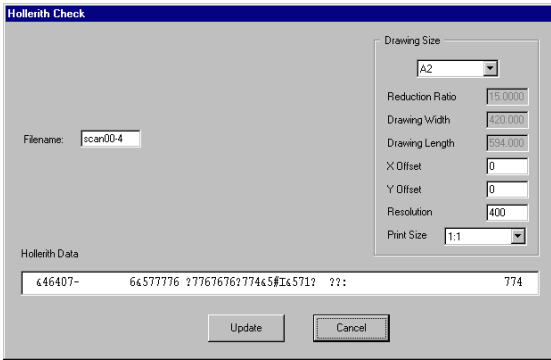
Accept In Hollerith Check mode, this button is used to accept the displayed Hollerith code.

Edit This button allows you to correct errors in the Hollerith coding. The Hollerith Check window will appear to make the corrections.

▼ **To edit the Hollerith data:**

- 1 Click Edit in the Run-Time Display window. The Hollerith data string as read from the card is displayed. You can edit the name for the scanned file and the drawing size settings in the entry fields.

A window similar to the following example pops up:



[13] Hollerith editing

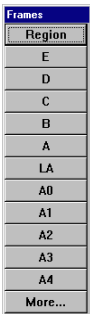
- 2 If required, change the file name and the drawing size settings.
- 3 Click Update and the scanning proceeds with the changed settings.

Frame The Frame option can be used to rescan the image, defining the scanning area yourself.



Defining a new scanning area, using the Frame option

- 1 Click the Frame button at the bottom of the screen.
The following window will appear:



[14] Frames window

- 2 Click on a standard frame size, or select Region to draw your own frame.
Note: If you need a predefined frame size that is not shown in the Frames window, click More to get a list of all known sizes.
- 3 If you have selected a standard frame size, click the left mouse button, move the frame to the required position, and release the button.

- 4 If you have selected Region, move the mouse to a corner of the frame you want to draw. Press and hold the left mouse button, move the mouse to draw the frame, and release the button.
- 5 Click Rescan at the bottom of the screen.
The area inside the defined frame will be rescanned.

Note: *To go back to the original image, click Frame again. The Frames window will disappear. Then click Rescan to get the original image.*

Pause This button pauses the scanning and enables the continue button.

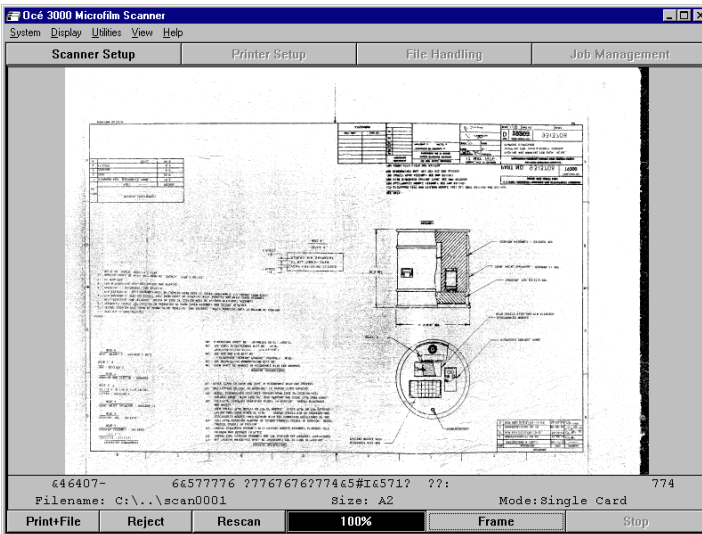
Stop This button stops the scanning and returns to the Control window. No output is generated. The card is ejected from the scanner.

Choosing a display mode

Either during the scanning process or during the file viewing (browsing) after drawings have been scanned, you can display the images in three different modes. The three display modes are available in the Display pull down menu. They are described below.

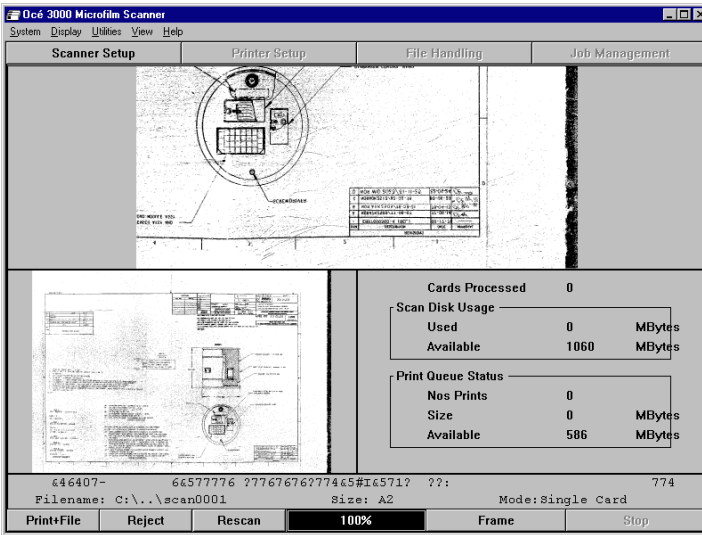
Full Image

This option provides a full screen display of the whole image, scaled to fit the available space in the window. The 'zoom and pan' facility is not available in this mode.



[15] Run-Time Display window with a Full Image

This option provides a mixed screen display with three parts.



[17] Run-Time Display window with a Dual Image

The first part shows an enlarged section of the image in the upper part of the screen. The second part displays the full image scaled to fit the bottom left part of the screen. The third part is the bottom right part of the screen. It displays the status of the scanning session during the scanning process. It is empty in Viewing mode.

The status section of the Dual display consists of three subjects:

- Cards Processed shows the number of cards already scanned in the batch and autofeed mode.
- Scan Disk Usage is giving the disk capacity used and free capacity in MB. The scan disk is the disk on which image data files are stored.
- Print Queue Status shows the number of prints in queue, the total used capacity and free capacity in MB of the print spooling disk.

The image displayed in the upper part of the window, may be scaled and zoomed by the 'zoom and pan' facility. The display area and zoom factor are retained for the duration of the current scanning session so that the same area of other drawings using the Dual Display mode will be displayed. On

switching the Océ 3050 Microfilm Scanner on, the zoomed display is set to the bottom right hand corner of the image by default.

Zoom

In Enlarged or Dual Display mode, the zoom and pan facility allows you to take a closer look on a defined area of the image displayed on the screen. This facility is available both during scanning and during browsing.

Zooming Clicking the left mouse button defines the top left corner of the area to enlarge. Dragging the mouse with the button still depressed defines a rectangular area. The aspect ratio of this rectangle is the same as for the display window.

Releasing the left mouse button again displays the defined area.

Clicking the right mouse button toggles between the enlarged image and the full image display. An alternative method is to use the F6 key.

When zoomed, the displayed area may be moved on the screen using the scroll bars or the cursor keys.

An alternative method of zooming is to use the “+” and “-” keys on the numeric keypad. In this case, the area in the centre of the display window is enlarged.

Chapter 4

The Viewing mode

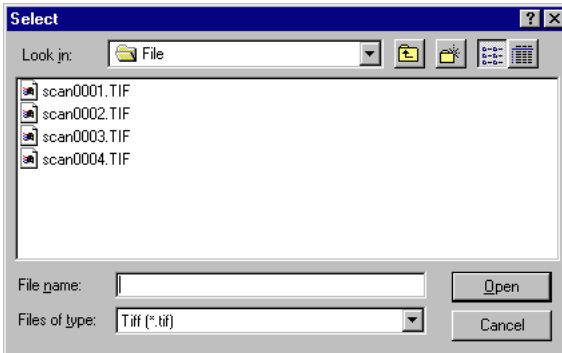


Viewing image files

The Viewing mode is a special mode for viewing scanned image files that are stored in an image directory.

Click the View button in the option bar to enter the viewing function.

Click the Select option in the View pull down menu to open a file selection box showing all the file names of a specified type in the current data directory:

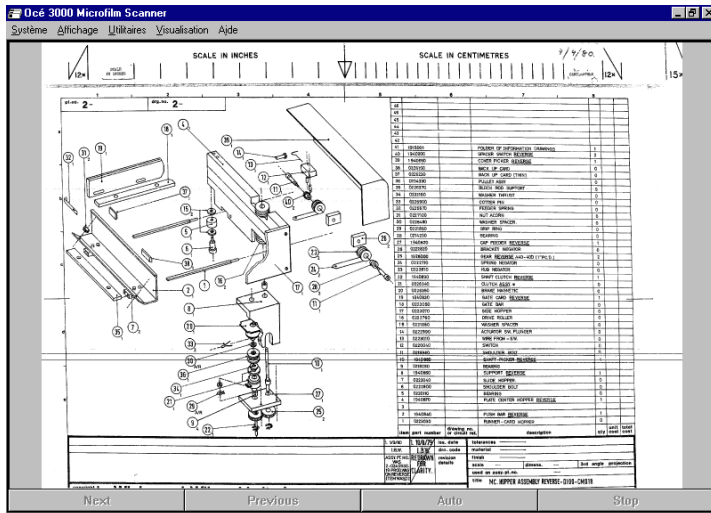


[18] File selection

You select a file by double clicking the file name or you can select more files at once (see page 41).

The view screen

Once a file has been selected for viewing, it is displayed on the screen. You can change the Display mode in the Display pull down menu. The following illustration is an example of a View screen:



[19] The View screen

If more than one file is selected, you can scroll to:

- the next image
- the previous image
- auto: after approx. 3 seconds the next image appears automatically on the screen
- stop: the stop button is to stop the automatic scrolling (this button is only enabled, when 'Auto' is in use)

Printing in View mode You can print the image on the screen, by selecting one of the print options in the View pull down menu:

- **Print**

- The whole image will be printed without zoom factor.

- **Print Enlarged**

- Only the selected frame will be printed, using a zoom factor to fill up the chosen paper format.

Leaving the View mode You leave the View mode by selecting Exit view in the View pull down menu.

Chapter 5

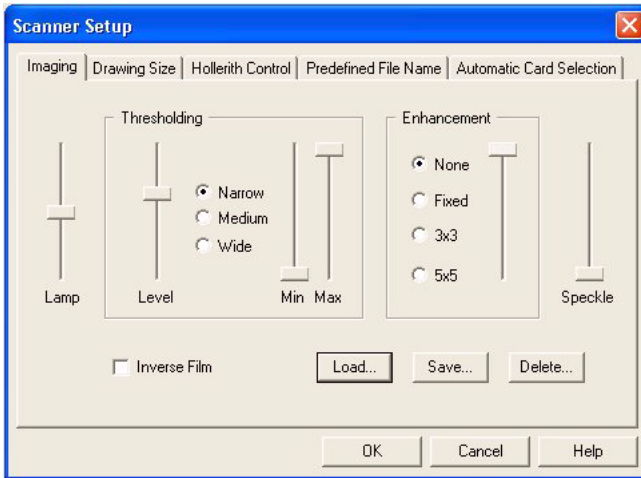
Setting up the Océ 3050 Microfilm Scanner

This chapter explains how to set the configuration of the Océ 3050 Microfilm Scanner and peripherals.



The scanner setup

Click the Scanner Setup button to display the Scanner Setup window. The Scanner Setup window contains entry boxes for all parameters necessary to obtain scanned images of high quality. The Scanner Setup window is shown in the illustration below:



[20] Scanner Setup

The window consists of five different cards:

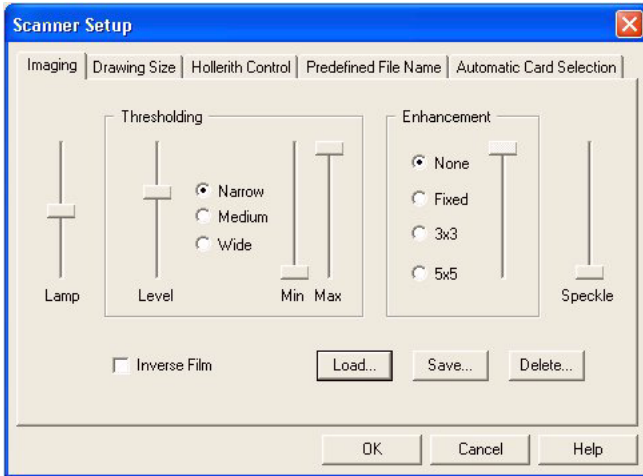
- Imaging
- Drawing Size
- Hollerith Control
- Predefined File Name
- Automatic Card selection

Each card can be selected by clicking its label. Besides these entry boxes, the window also contains an on-line help button and two control buttons:

- The **OK** button allows you to update the scanner setup after changing the parameters.
- The **Cancel** button allows you to exit the Scanner Setup window without updating the parameters.
- The **Help** button allows you to enter the help screen of the Scanner setup.

SCANNER SETUP / IMAGING

The Imaging card sets up suitable image processing parameters for the type of cards to be scanned. You can define a group of parameters and save it in a template for future use. Up to nine different templates can be predefined for future use.



[21] Imaging

The setting of the imaging parameters is described in detail below.

LAMP The Lamp slider allows the lamp intensity to be boosted above its normal calibrated setting. The normal setting is the optimum for all batch scanning and most other scanning but setting the LAMP BOOST parameter to a higher level increases the illumination on the film and will give improved scanning of images which have been improperly filmed and in which the foreground data (lines) is dark (a high density) over the whole image.

It is important to realise that boosting the lamp is likely to cause the imaging signal from the CCD to become saturated on normal density images and hence it is important to return the LAMP BOOST setting to normal (zero) afterwards by resetting it to zero or by reselecting the NORMAL template.

THRESHOLDING The thresholding setup screen is the most important of the "Imaging Scanner Setup" screen, allowing separate adjustment of the track area, tracking limits and thresholding levels together with half tone and polarity settings. Together, these determine how "Image Processing" analyses the image density data it obtains during the scan and uses this to threshold the incoming data. The output of the thresholding operation is preserved as greyscale information representing the difference between the data signal level and the computed threshold value and it is used for further extraction processing which is described below.

THRESHOLDING / TRACKING LIMITS This control has two sliders MAX and MIN which set the maximum and minimum limits, which together define the range of film density within which the automatic tracking system of "Image Processing" is allowed to work. For automatic batch operation these limits will need to be very wide, so that image data can be retrieved from frames having widely varying background densities and frames which have variations of background density within the same image.

An inherent consequence of tracking the background density is that there is no means of distinguishing a large area of intentional foreground, such as a logo block or inverse image area, from a real change in background density. In order to make such a distinction, it is necessary to use other information, such as the absolute density value, to identify the feature as foreground data. The TRACKING LIMITS settings allow this to be done by defining a limit to the dynamic range of the tracking system. Reducing the MAX limit will prevent the tracking system from eliminating the centres of intentional solid areas. Conversely, raising the MIN limit will prevent the tracking system from trying to detect changes in the background when it is really required that they are suppressed. A typical use of this would be to suppress the detection of changes in background as the scan crosses from one sheet to another sheet on a multipage image.

It is anticipated that adjustment of the tracking limits will be used in a second pass on specific (and normally a very small percentage) of images which have this type of feature. This second scan would be an optional choice for the customer since the information content is still present on the first scan. What is being provided is a means of improving the appearance of the image rather than detecting extra information.

THRESHOLDING / TRACK AREA This control selects the size of the area surrounding each pixel of interest over which the background tracking system examines the image to establish the maximum and minimum film densities and to set the MAX and MIN tracking levels. The control has three possible values - NARROW, MEDIUM and WIDE which are accessed in turn by clicking on the control icon. The NARROW setting is the default and allows tracking of rapid changes in either foreground or background densities and will prove very useful in poor quality images, multipage images, and the like. For images having very thick lines or solid areas, it may be preferable to use the MEDIUM or WIDE settings as a means of preventing the tracking out of solid foreground data.

INVERSE FILM This control can be set to either NEGATIVE or POSITIVE. The vast majority of microfilm images are negative and the default NEGATIVE setting will be correct. Positive images require that the image enhancement functions recognise high density as foreground and low density as background and setting the POLARITY control to POSITIVE enables Image processing to work with positive images just as well as with negative images. Switching to POSITIVE also inverts data on the image display screens so that they appear correctly as black lines on a white background.

ENHANCEMENT The enhancement controls can be used to sharpen the scanned image. The mode of the enhancement can be set to fixed / 3X3 / 5X5 and the amount of enhancement controlled by a slider.

ENHANCEMENT / NONE No filter applied (default).

ENHANCEMENT / FIXED SHARPEN This applies a "gentle" sharpening filter to the image. This filter is fixed and can not be adjusted

ENHANCEMENT / CUSTOM 3x3 Applies a 3x3 sharpening filter to the image. The effect of the filter can be adjusted by the slider to increase or decrease the effect of the filter.

ENHANCEMENT / CUSTOM 5x5 Applies a 5x5 sharpening filter to the image. The effect of the filter can be adjusted by the slider to increase or decrease the effect of the filter.

SPECKLE Moving this control increases the amount of speckle removal

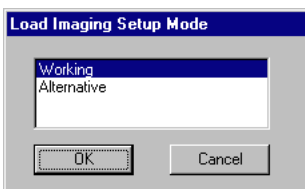
LOAD This enables a previously defined set of parameters to be recalled for use. On pressing this button another window is displayed within which the name of the Template to load can be selected.

SAVE This enables the currently defined set of parameters to be saved for future use. On pressing this button another window is displayed within which the name of the current Template is shown along with a request to enter the name for the new Template to save the current values.

DELETE This enables a previously defined set of parameters to be deleted. On pressing this button another window is displayed within which the name of the Template to delete can be selected.

▼ **To load a predefined imaging setup:**

- 1 Open the Scanner Setup window.
- 2 Select the Imaging card.
- 3 Click the Load button at the bottom of the Imaging card.
On pressing this button, the following window is displayed:



[22] Loading an imaging setup

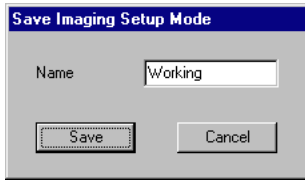
All predefined setups are listed. The example above displays two options. 'Working' stands for the setup as it is currently defined in the Imaging entry box. Selecting this option leaves the imaging setup unchanged.

- 4 Click the desired setup.
- 5 Click OK.

The parameters defined in the setup are automatically fitted in the Imaging window.

▼ **To save an imaging setup:**

- 1 Open the Scanner Setup window.
- 2 Select the Imaging card.
- 3 Set the parameters as required in the Imaging card.
Set the illumination level, Film Inverse, ABC and Mode to the required settings.
- 4 Click the Save button.
The following window appears on the screen:



[23] Saving an imaging setup

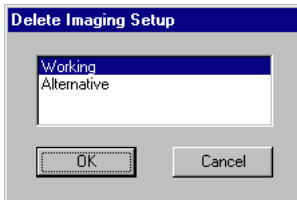
- 5 Type the name of the new setup in the Name entry box.
- 6 Click the Save button to add the new setup to the list.



To delete an imaging setup:

- 1 Open the Scanner Setup window.
- 2 Select the Imaging card.
- 3 Click the Delete button.

The following window appears on the screen:

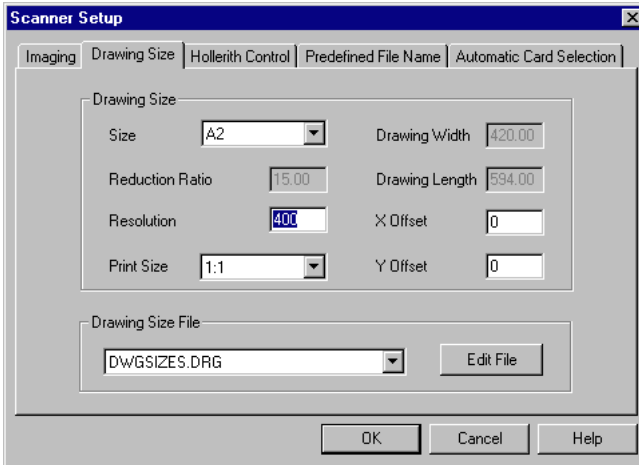


[24] Deleting an imaging setup

- 4 Click the setup you want to delete.
- 5 Click OK to delete the setup.

Drawing Size

In the Drawing Size card you can set the parameters related to the drawings to be scanned or printed as defined in the drawing size file.



[25] Drawing Size

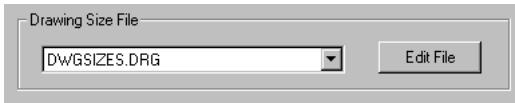
The details of the Drawing Size card are described in detail below.

Drawing size Here you can select a specific drawing size from the drawing size file.

When selecting one of the drawing sizes, the values for reduction ratio, drawing width and drawing length are filled in automatically and they are dimmed. To edit the drawing size (see page 51).

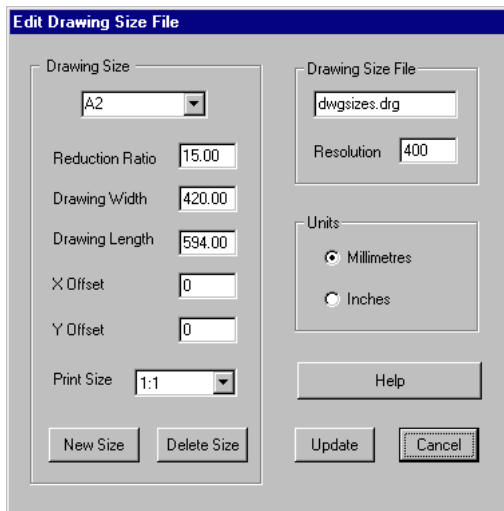
In the software one file with standard definition of file sizes is available (DWGSIZES.DRG).

Edit drawing Size File You can create drawing size files, other than the standard drawing sizes listed in the DWGSIZES.DRG file. You can define the input size, reduction ratio, drawing width and length and print size for your personal requirements.



[26] Drawing Size File

After clicking the Edit File button in the 'Drawing Size File' entry box, the following window will appear.



[27] Edit Drawing Size File window

This window contains four main parts:

- Drawing Size
- Drawing Size File
- Units
- Control buttons.

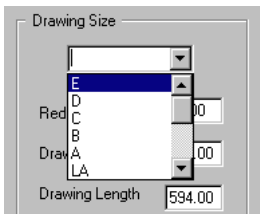
Drawing Size This part of the window defines the name of the drawing size, the reduction ratio, the drawing width and length, the X and Y offset and the print size. Any name up to 8 characters will do.

▼ **To add a new drawing size:**

- 1 Open the Scanner Setup window.
- 2 Select the Drawing Size card
- 3 Click the Edit File button to open the Edit Drawing Size File window.
- 4 Click New Size.
- 5 Enter a name for the new size in the upper right entry box.
- 6 Choose the units to work with.
- 7 Enter the values for reduction ratio, drawing width and drawing length in the appropriate entry boxes.
- 8 Click Update to add the drawing size to the Drawing Size File.

▼ **To delete a drawing size:**

- 1 Open the Scanner Setup window.
- 2 Click the Edit File button to open the Edit Drawing Size File window.
- 3 Select the size to delete in the size list.



[28] Deleting a drawing size

- 4 Click Delete Size.
- 5 Click Update.

Reduction ratio For standard drawing sizes, the reduction ratio value is taken from the Drawing Size File. This parameter can be altered manually when this value deviates from the standard reduction factor. The reduction ratio may be set in the range of 5.00 to 36.00.

Drawing width This is the width of the image on the microfilm, in millimetres or inches, according to the setting in the Drawing Size File. This parameter may only be altered manually when NON-STD size has been selected.

Drawing length This is the length of the image on the microfilm, in millimeters or inches, according to the setting in the Drawing Size File. The drawing length may only be altered manually when the NON-STD size has been selected.

X and Y offsets This is the number of microns by which the image in the microfilm on the card is known to be off the centre of the film.

Note: *These windows are available in the Run-Time Display.*

Unless the image is grossly or deliberately offset from its normal centralised position, it is better to use the Rescan option rather than changing the position of the scan window. If the scan window position does need to be changed, you can alter the X and Y offset values. Both offsets can be adjusted between - 5000 and + 5000.

Print size The print size is the size used for printing the scanned image. When selecting the size of the original image on the microfilm, the system automatically sets the print size to the same size. You can select a print size other than the drawing size if required. The size A4 or E can exist as portrait.

Drawing Size File This part of the window defines the name of the Drawing Size File and the current scanning resolution for all drawing sizes in this file. Any name up to 8 characters will do.

Resolution The resolution may be set to any value between 100 dpi and 400 dpi.

Units In this part of the window you can enter values in millimetres or inches.

Control buttons

Update The Update button stores the edited drawing size in the drawing size file.

Cancel The Cancel button allows you to exit the window without making any changes.

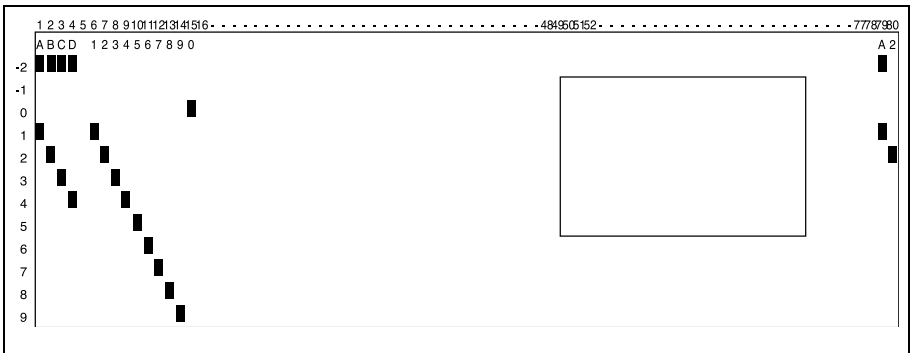
General Hollerith information

The hollerith reader possibilities of the Océ 3050 Microfilm scanner are experienced to be the most complicated part of the product.

Basic hollerith explanation Many organisations punch their cards to easy their identification. Punched hollerith cards have the big advantage that they can be recognized by hollerith readers. The Océ 3050 Microfilm scanner has an intelligent built-in hollerith reader.

The hollerith punches in the card represent numbers or characters. These numbers/characters refer often to the drawing number and the original format of the drawing. Also other information can be coded via the punches.

To understand the interpretation of the holes in the cards both the punches in the vertical direction (column) as in horizontal direction (row) must be explained (see figure 29).

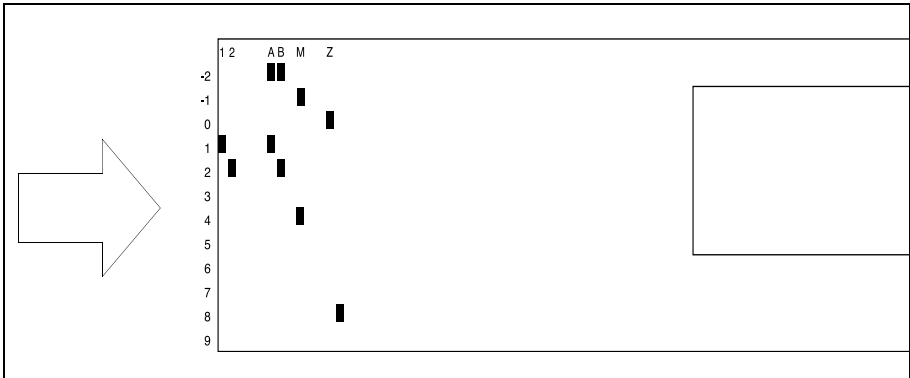


[29] Hollerith card

The punches in the vertical direction (column) The height of the card and the size of the punch itself is limited to 12 possible positions of the punch in the vertical direction.

Numbers are represented by the specific position of ONE punch in the vertical direction. Characters are represented by the specific position of TWO or THREE punches in the vertical direction. The position of the punch or punches in the vertical direction are based on world-wide standards. This means that the 1 is always punched in row 1, the 2 in row 2 etc. The A is always punched in row -2 and row 1. The B is always punched in row -2 and row 2 etc. (see figure

34). The M, for example is always in row -1 and row 4, the Z in row 0 and row 8.



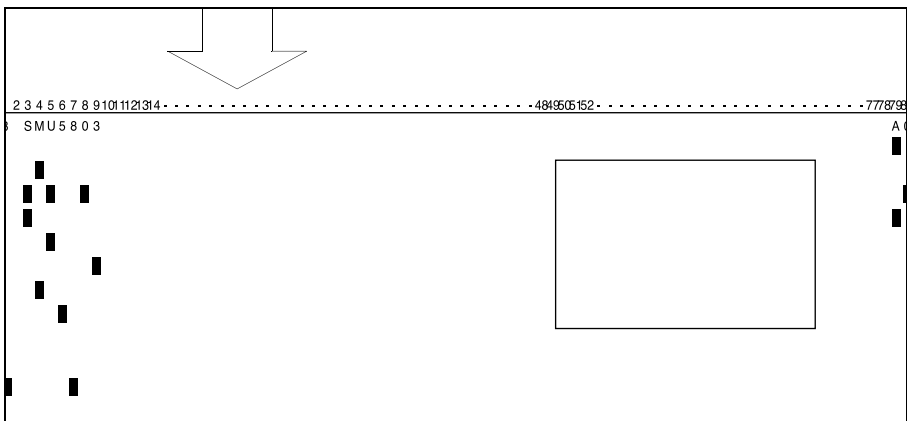
[30] Hollerith punches in vertical direction

The correct identification of the punches is already programmed in the hardware of the hollerith reader in the scanner and needs no further attention.

The punches in the horizontal direction (row) The interpretation of the numbers and characters in the horizontal direction (row) is company or project specific. Every company had made the structure of the punched information in the horizontal direction according to their specific (internal) demands.

Sometimes more than one structure exists:

- because also cards from other companies/subcontractors are in use
- because in time the card structure changed to meet new demands



[31] Hollerith punches in horizontal direction

In this example the 8 is the card key, SMU5803 is the drawing number and A0 is the original drawing format. In total these 55 to 60 punches represent information directly related to the filmed drawing on the card. This could be everything. The drawing number (eventually with a release number) and the size of the original drawing are the most important ones.

Hollerith codes in the Océ 3050 To benefit from the punched info the Océ 3050 Windows application needs to be set up to interpret the hollerith punches. Since this information will be stored in a so called Hollerith control file, programming of it has to be done once:

- how a company/project specific card can be identified (the so called 'card key')
- on which positions the drawing number can be read ('file name')
- on which positions and how the drawing format can be identified and interpreted ('size key')

Company employees, directly responsible for the indexing or coding of the MF-cards must be able to clarify the way the cards are punched.

The card key is important because when scanning the Océ 3050 scanner needs to detect automatically the correct position of the drawing number and/or drawing format of that specific card.

If all cards are punched in the same way the card key is not necessary. In this case type ALL_CARDS where normally the card key is inserted. This will switch off the card key function (see figure 38 on page 62).

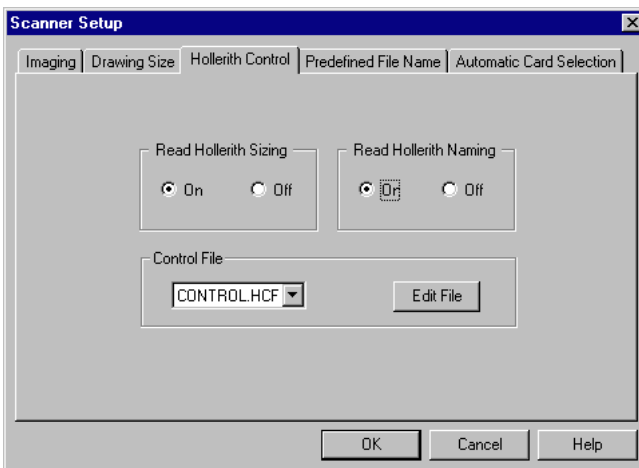
Hollerith Control

Hollerith control allows you to fetch the information for size and file name for the scanned images from the cards.

Approximate 1000 Hollerith files can be generated. It is possible to define up to approximate 1000 different Hollerith file structures within 1 Hollerith file which can be activated at the same time.

The Hollerith Control card consists of three main parts:

- Hollerith sizing
- Hollerith naming
- Control File.



[32] Hollerith Control card

Hollerith sizing When this option is on, the Hollerith reader in the scanner reads the information for the size of the scanned images from the cards, in accordance with the selected Hollerith Control File.

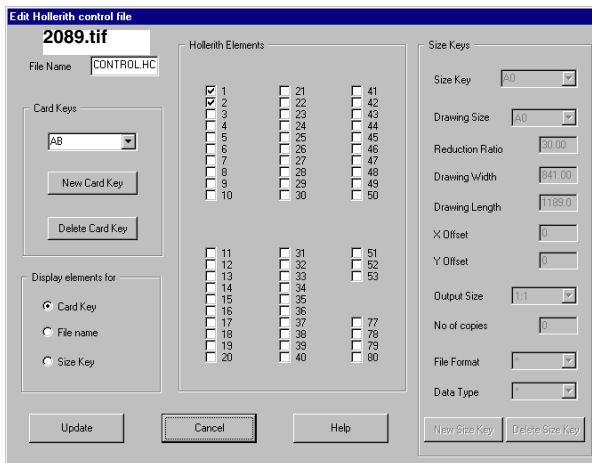
When this option is off, you select the appropriate sizes in the Edit Drawing Size File window, or in the Control window before starting a scanning session.

Hollerith naming When this option is on, the Hollerith reader in the scanner reads the name for the data files for scanned images from the cards, in accordance with the selected Hollerith Control File.

When this option is off, the system prompts you to enter a name for the scanned images files when starting the scanning session.

Note: When you select 'Hollerith' as input size in the Control window, the option 'Hollerith sizing' is automatically switched on. 'Hollerith Naming' however remains off.

Editing the Hollerith Control File When you click the Edit File button in the Hollerith Control entry box, the Edit Hollerith Control File window will appear.

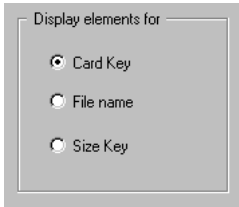


[33] The Edit Hollerith Control File window

This window has the following parts:

- The name of the Hollerith Control File
- Card Keys
- Filename
- Size Keys
- A table to switch on/off the Hollerith elements

- A number of selections and control buttons.



[34] Display elements entry box

The radio buttons in the Display elements entry box select which Hollerith elements are displayed in the Hollerith Elements window: the elements containing the card key information, the name of the image or the size information.

▼ **To define a Hollerith Control File:**

To store the Hollerith elements in a file, first a filename for the Hollerith control must be defined.

- 1 Insert the filename (max. 8 characters) and the extension .hcf in the filename entry box. In this example the filename is control.hcf.



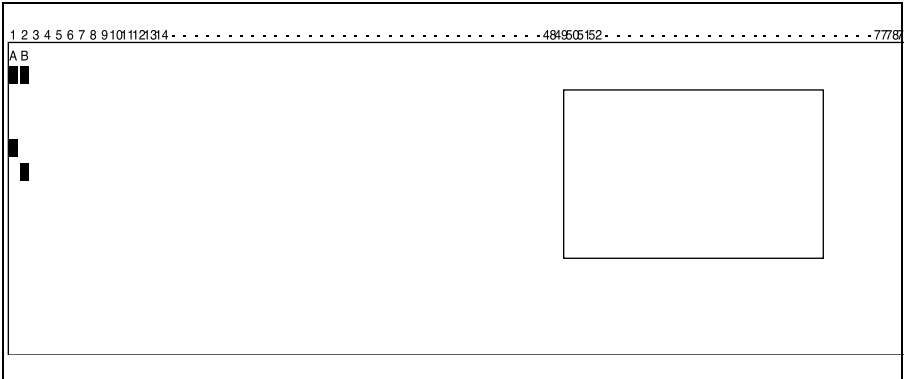
[35] The name of the Hollerith Control File

- 2 To save the filename click update to go back to the Scanner setup.
 - 3 Choose the new created Control filename in the Hollerith Control entry box of the Scanner Setup window to return to the Edit Hollerith Control File window.
- Note:** *Up to a 1000 different Hollerith Control Files can be defined.*



To add a new Card Key:

If the Hollerith structure per card or group of cards differ, a card key can be identified so the Hollerith reader can recognize the various Hollerith structures with regard to the drawing number and drawing format (size key). If only one Hollerith structure is applicable (all the cards are punched in the same way) type ALL_CARDS (see figure 36).



[36] The card key in this example is represented by A & B in column 1 & 2

To insert the place the Hollerith elements, representing the key, you have to follow this procedure.

- 1 Click the Card Key radio button in the Display elements entry box (see figure 33 on page 59) or (see figure 34).
- 2 Click New Card Key in the Card Key window.



[37] To create a New Card Key

- 3 Type the name (the key of a specific hollerith structure) of the Card Key in the entry field (in this example Type A and B). In the Hollerith Elements window, select the elements that contain the new Card Key (in this example click Hollerith element 1 and 2 in the Edit Hollerith Control File screen, (see figure 33).

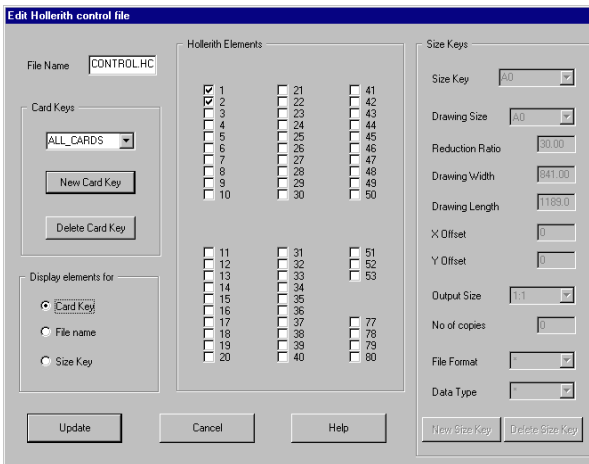
The number of Hollerith elements must equal the number of characters in the name of the Card Key (The length of the card key is not limited).

- Click Update to confirm and go back to the Scanner Setup window. If you want to edit more in this window click Update later on.

Note: *Up to a 1000 different Card Keys can be defined within one Hollerith Control File.*

▼ **No Card Key (ALL_CARDS):**

If no card key is used type ALL_CARDS in the Card Keys entry box. Beware that all Hollerith elements are switched off. Continue with inserting the filename and the size keys. The card key function is now disabled. This setting can be stored under any Hollerith control filename (*****.hcf).

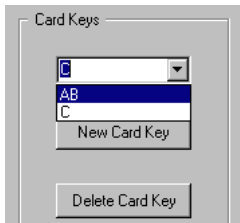


[38] View of the Edit Hollerith Control File window in case no card key is active



To delete a Card Key:

- 1 Click the Card Key radio button in the Display window (see figure 38).
- 2 In the Card Key list, select the key you want to delete.



[39] Deleting a Card Key

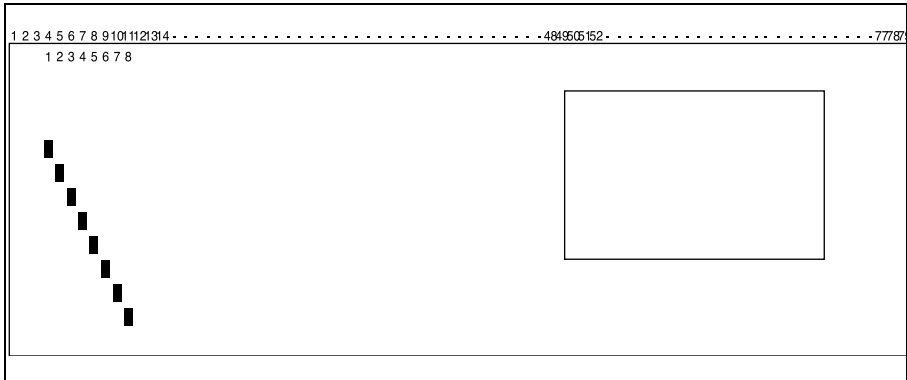
- 3 Click Delete Card Key in the Card Keys window.
- 4 Click Update to confirm and go back to the Scanner Setup window. If you want to edit more in this window click Update later on.

Note: *You can not delete the last card key.*



To edit the File Name:

To read the file name automatically from the card, the place of the file name must be defined.

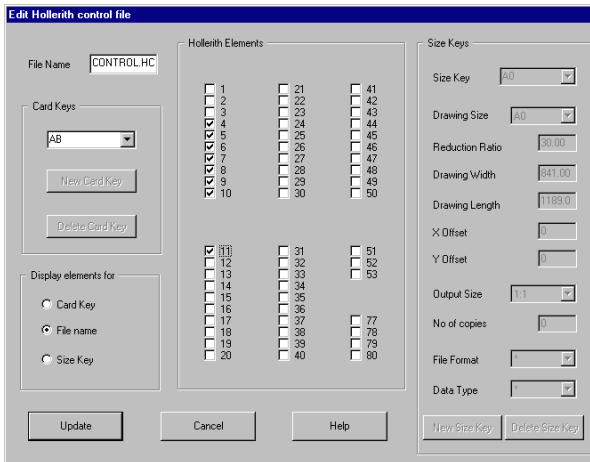


[40] The filename in this example is represented by the Hollerith elements 4 to 11

Figure 40 shows an example of a card with the Hollerith elements representing the drawing number 12345678 of the microfilmed drawing in position 4 to 11.

To insert the place of the Hollerith Elements of the filename (mostly the drawing number) follow the next procedure.

- 1 Click the File Name radio button in the Display elements entry box in the Edit Hollerith Control File window.



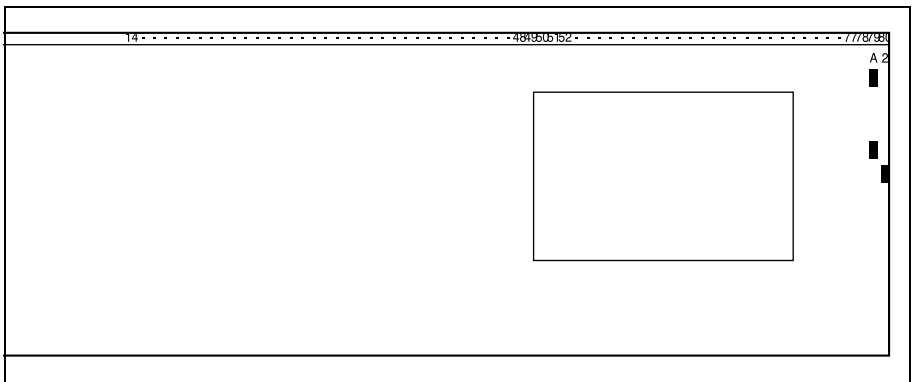
[41] In this example the filename will be read in the Hollerith elements 4 to 11

- 2 In the Hollerith Elements entry box, select the elements that contain the file name. In this case click the Hollerith Elements 4 to 11 in the Edit Hollerith Control File window (see figure 41 on page 64). As a DOS-file name can contain maximum 8 characters, you can select a maximum of 8 Hollerith elements for the file name.
- 3 Click Update to confirm and go back to the Scanner Setup window. If you want to edit more in this window click Update later on.



To add a new Size Key:

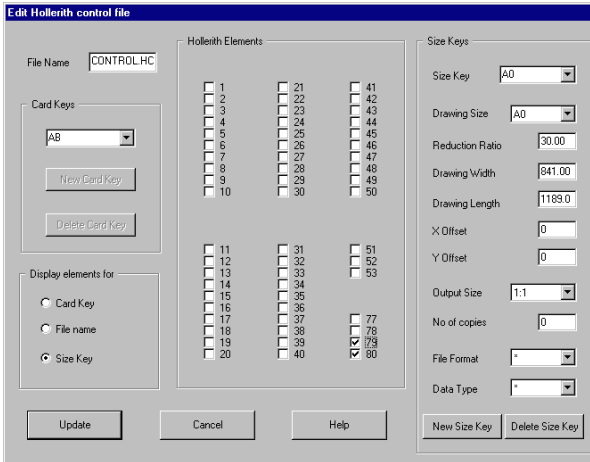
Within a specific Hollerith structure different drawing formats are common. The size key function will identify the various formats of cards within the same hollerith structure.



[42] The size key in this example is represented by the hollerith elements 79 and 80. Any drawing size can be interpreted

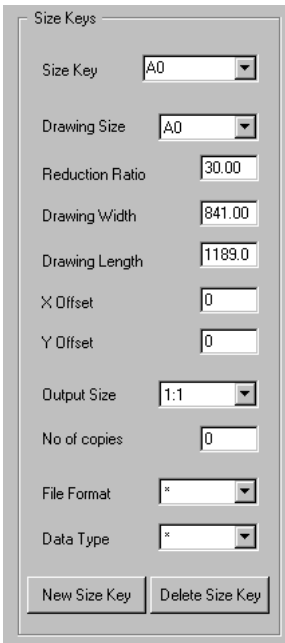
Figure 42 shows an example of a card with the Hollerith elements representing the format of the microfilmed drawing in position 79 and 80. In this example an A2. To insert the place of the Hollerith Elements of the size keys (drawing formats) follow the next procedure.

- 1 Click the Size Key radio button in the Display elements entry box:



[43] Hollerith Control File: editing size keys

- 2 Click the New Size Key in the Size Keys entry box, in this case type or look for A2.
- 3 Choose in the Drawing Size a size which represents the size key.



[44] The Size Keys settings

- 4 In the Hollerith Elements window, click the elements that contain the new Size Key. In this example click the elements 79 and 80 (see figure 43).

Note: *The number of Hollerith elements must equal the number of characters in the name of the Size Key.*

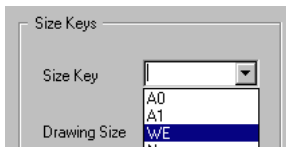
Note: *If '0' is chosen for the number of copies the number of copies in the control screen is free. If another number than '0' is chosen this number will overrule the number of copies in the control screen.*

Note: *The activated drawing size file in the Scanner Setup menu is the one which will be activated here. To change resolutions or add specific drawing formats you first have to edit the drawing size file (see section "Edit drawing Size File" on page 51).*
- 5 Select the other drawing format related elements in the Size Keys entry box (similar to procedure of the editing in the Drawing Size entry box in the Scanner Setup window, see section "Drawing Size" on page 50).
- 6 Click Update to confirm and go back to the Scanner Setup window. If you want to edit more in this window click Update later on.



To delete a Size Key

- 1 Click the Size Key radio button in the Display window.
- 2 In the Key list, select the Size Key you want to delete.



[45] Deleting a Size Key

- 3 Click Delete Size Key.
- 4 Click Update to confirm and go back to the Scanner Setup window. If you want to edit more in this window click Update later on.

Note: *You cannot delete the last size key.*

Predefined File Name

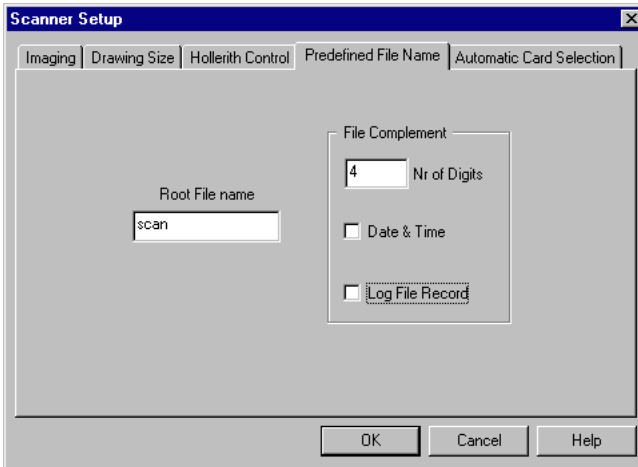
You can specify under which name the scanned image is to be saved in a file:

- Hollerith naming

If you selected 'Read Hollerith Naming' (see 'Hollerith Control' on page 58), the name of the file will be determined by the hollerith information.

- Predefined File Name

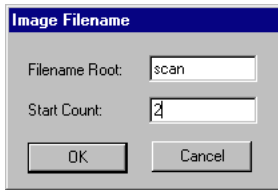
If you have not selected Hollerith Naming, you can specify the file name yourself as explained in this section.



[46] Predefined File Name card of the Scanner Setup menu

A predefined file name consists of a root name, followed by a variable part:

Numeric Count The root name will be followed by a number that will be incremented automatically for each new image. You can specify the number of digits. Every time you start to scan, the following window will appear:



[47] Image file name window

If required you can change the Filename Root and the number that will be used for the first image.

Date & Time If you select this option, the root name will be followed by the numeric count, the time and the date of scanning.

Log File Record If you select this option, the root name will be followed by the complete Log File Record (see 'Log File Usage' on page 86). Other options cannot be selected at the same time.



Specifying a Predefined File Name

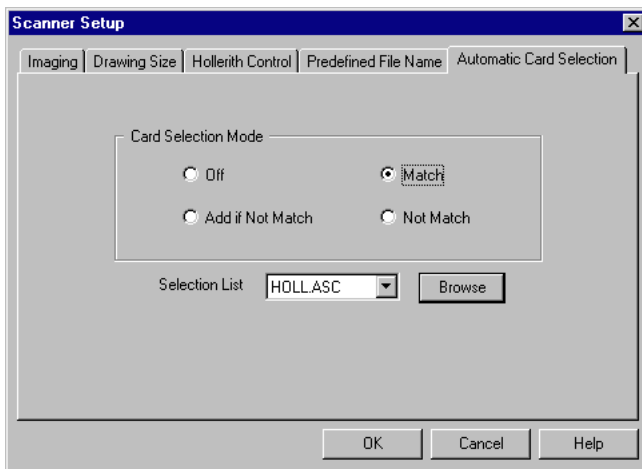
- 1 Open the Scanner Setup window.
- 2 Select the Predefined File Name card.
- 3 Fill in the root file name, and select one of the complements:
 - Numeric Count (specify the number of digits)
 - Date&Time
 - Log File Record
- 4 Click OK

Automatic Card Selection

The Océ 3050 can automatically decide to scan or not to scan a card, depending on its Hollerith string. If you activated Automatic Card Selection, the Hollerith string of each card will be compared with a list of Hollerith strings in a specified ASCII file.

Note: *The ASCII file may not exceed 100 Kilobytes.*

Note: *Using a large ASCII file may reduce the throughput of the scanning process.*



[48] Automatic Card Selection card of the Scanner Setup window

You can select the following operating modes:

Off All cards will be scanned.

Match Only if the Hollerith string of the card matches one of the strings in the specified file, the card will be scanned.

Not Match Only if the Hollerith string of the card does not match one of the strings in the specified file, the card will be scanned.

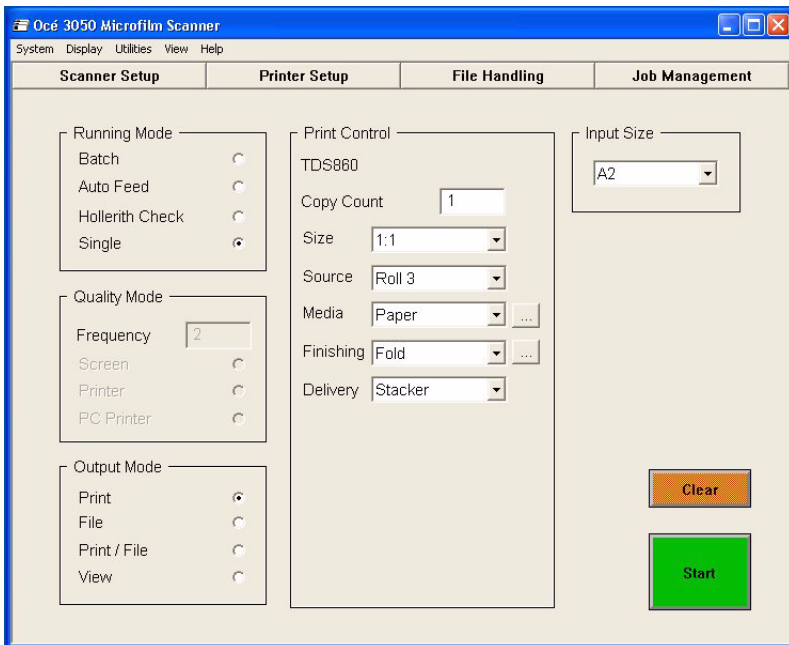
Add if Not Match If the Hollerith string of the card does not match one of the strings in the specified file, the string will be added to the file and the card will be scanned.

▼ **Specifying Automatic Card Selection**

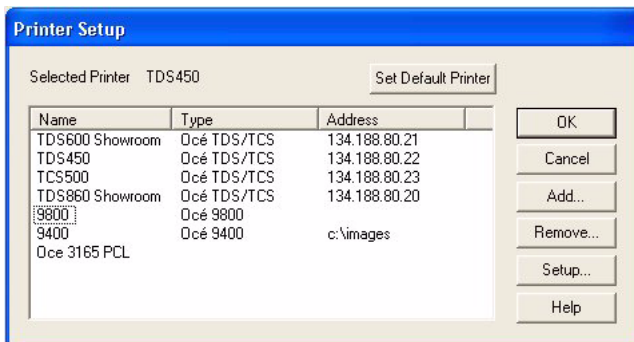
- 1 Open the Scanner Setup window.
- 2 Select the Automatic Card Selection card.
- 3 Specify one of the operating modes, and select the ASCII file with Hollerith strings that is to be used.
- 4 Click OK.

The printer setup

- 1 Click 'Printer setup' to set a new default printer.
The printer setup dialogue appears.
- 2 Select a printer from the list.
- 3 Click 'Set Default Printer'.
The name of the selected printer appears in the Default Printer box in the top of the Printer Setup window.
- 4 Click 'OK' to confirm your selection.
The printer setup dialogue disappears and in the Print Control you will find the selected printer.



[49] Main Window

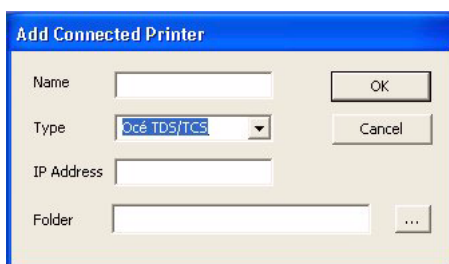


[50] Printer Setup

Note: *Local installed Windows Printers are always displayed in the "Printer Setup Dialog"*

ADD:

- Press on Add to add a printer



[51] Add Connected Printer

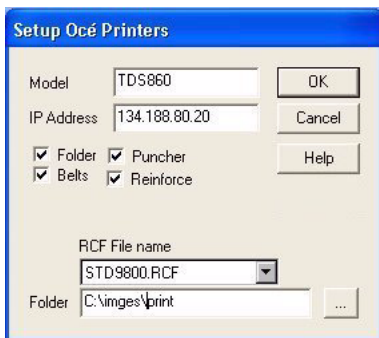
- Type in the "Name"-field a (free) name, which will be displayed in your "Printer Setup Dialog"
- Select from the Pulldown-"Type"-field the printer type belonging to the by Printer-name.
- Enter in the "IP-Address"-field the IP-address where the printer is connected. When no IP-Address is entered the "Folder"-field will be used as output-destination.
- Enter in the "Folder"-field a local folder destination when you would like to store the scanned image to disk.
- Press Ok to confirm or Cancel to cancel Add-Printer.

REMOVE:

- Click the name of the printer in the list of installed printers your would like to delete.
- Press Remove and the printer will be removed.

SETUP: Océ 9xxx series

- Whenever you select a printer of the Océ 9xxx series:



[52] Setup Océ 9xxx series Printers

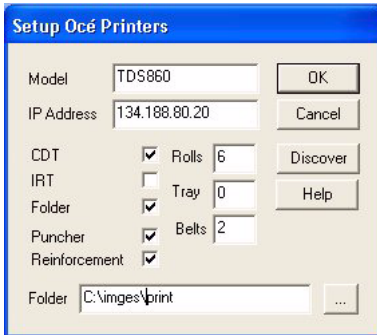
- The initial entered "Name" can be changed in the "Model"-field
- Enter in the "IP-Address"-field the IP-address where the printer is connected. When no IP-Address is entered the "Folder"-field will be used as output-destination.
- Enable the options the printer supports
- Enter in the "RCF File name" field the Standard RCF file which will be sent together with the scanned image to the printer.
- Enter in the "Folder"-field a local folder destination when you would like to store the scanned image to disk.
- Press Ok to confirm or Cancel to cancel Add-Printer

Note: *Printer settings in the Main Window will overrule the settings in the RCF file.*

Note: *Whenever an IP-address is entered the "Folder"-field will not be used.*

SETUP: Océ TDS/TCS series

- Whenever you select a printer of the Océ TDS/TCS series:



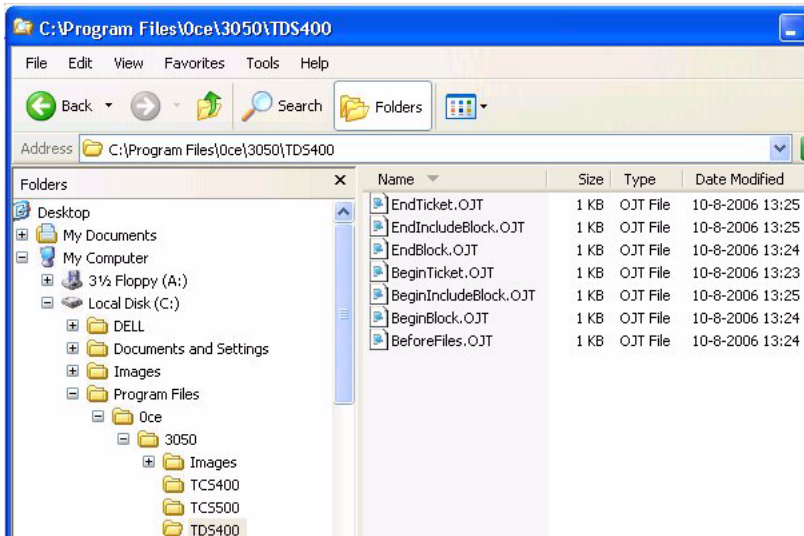
[53] Setup Océ TDS/TCS series Printers

- The initial entered "Name" can be changed in the "Model"-field
- Enter in the "IP-Address"-field the IP-address where the printer is connected. When no IP-Address is entered the "Folder"-field will be used as output-destination.
- Press on "Discover" to retrieve the options of the at "IP-Address" connected TDS/TCS printer. Also the TDS/TCS Printer Type will be retrieved then.
- One is always able to overrule the retrieved information by en/disabling the options the printer supports.
- Enter in the "Folder"-field a local folder destination when you would like to store the scanned image to disk.
- Press Ok to confirm or Cancel to cancel Add-Printer.

Note: *Whenever the retrieved Printer type is a TCS device, the scanned image will set the device in monochrome mode.*

Note: *Whenever an IP-address is entered the "Folder"-field will not be used*

Note: *At the moment a TDS/TCS Printer is created also, in the program-directory of the microfilm scanner, a folder is created having the same "Name" as the added printer has. In this folder OJT files can be found which will be included in the OJT header to enable OJT-support for those options which cannot be addressed in the UI of the microfilm scanner.*



[54] OJT inclusions blocks

When the microfilm scanner submits a file to the TCS or TDS additional OJT commands may be added to the OJT header by using simple text files. These files must exist in a sub-folder with printer name of the main installation folder. These file may not be greater than 1024 characters in length, must consist of valid OJT commands, and must be named exactly as specified. The contents of these files are added as-is into the specified locations of the OJT stream as indicated below. Use at your own risk.

BeginTicket.OJT	The contents of this file are inserted immediately after the BeginTicket command.
BeforeFiles.OJT	The contents of this file are inserted immediately before the first BeginBlock command.
BeginBlock.OJT	The contents of this file are inserted immediately after the InputSegment command.
EndBlock.OJT	The contents of this file are inserted immediately before the EndBlock command.
BeginInclude-Block.OJT	The contents of this file are inserted immediately after each IncludeBlock command.
EndIncludeBlock.OJT	The contents of this file are inserted immediately before each EndBlock command.
EndTicket.OJT	The contents of this file are inserted immediately before EndTicket command.

Sample OJT stream (the lines in all caps denote the location where the contents of the associated file will be inserted:

*OceJobBegin

BeginTicket 2.0

BEGINTICKET.OJT

JobName "Job1"

JobCopies 1

JobCollate on

AccountId 0

UserId 0

BEFOREFILES.OJT

BeginBlock 1

InputSegment 1

BEGINBLOCK.OJT

Emulation auto

ENDBLOCK.OJT

EndBlock

BeginOutput

IncludeBlock 1

BEGININCLUDEBLOCK.OJT

MediaType paper

MediaSource auto

AddStrip leading 0 trailing 0

MediaFeed exact

AdjustShift upperleft

MediaDeposit stacker 2

CutMethod synchro

AdjustRotate Auto

Fold off

ENDINCLUDEBLOCK.OJT

EndOutput

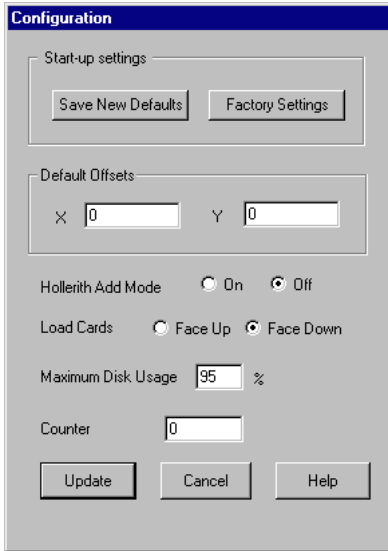
ENDTICKET.OJT

EndTicket

*OceJobData

Configuration

When clicking the Configuration option in the Utilities pull down menu, the following window appears.



[55] The Configuration Window

The Configuration Window displays a number of entry boxes which enable various system and hardware parameters to be set, and provides a means of setting values which are normally fixed for a given installation.

- The **Start-Up settings**: you can choose the factory settings for the system to start up, or define your own start-up settings.
- The **Machine Offsets**: the machine offsets are used to calibrate the machine to correct for the manufacturing tolerances within the optical system. The values are measured in microns, and the correct values are determined at the factory during manufacture.
- **Hollerith Add Mode**: in Single and Auto Feed modes, you can add a 'Hollerith code' to cards without Hollerith punches. The code is automatically added to the image file when an output is generated.

- **Load Cards:** you can select how you want to load cards: face up or face down (default). Depending on your printer configuration, one of these options enables the printer to deliver printed copies in the same sequence as the pack of cards: the card on top will be printed on top.
- The **Maximum Disk Usage:** you can keep a part of the hard disk of the controlling PC available for other tasks than scanning. Before scanning a card, the system estimates the required space to generate the disk file. If this space exceeds the defined percentage use, scanning and filing is paused until there is enough space made free on the disk to contain the image file.
- The **counter:** this counter can be reset to start from any number within the range 0 to 9999999.

Proceed as follows to select the required start-up settings:

▼ **To set your own start-up settings:**

- 1 Set the parameters as required in the following menus:
 - the Scanner Setup
 - the Printer Setup
 - File Handling
 - Job Management
 - Control Window
- 2 Click Utilities in the Control screen.
- 3 Click Configuration in the pull down menu.
- 4 Set the parameters in the Configuration menu.
- 5 Click Save New Defaults.
- 6 Click Update.

The next time the system is started, the new default setting will be used.

▼ **To set the factory default settings:**

- 1 Click Utilities in the Control screen.
- 2 Click Configuration in the pull down menu.
- 3 Click Factory Settings.
- 4 Click Update.

The next time the system is started, the factory default settings will be used.

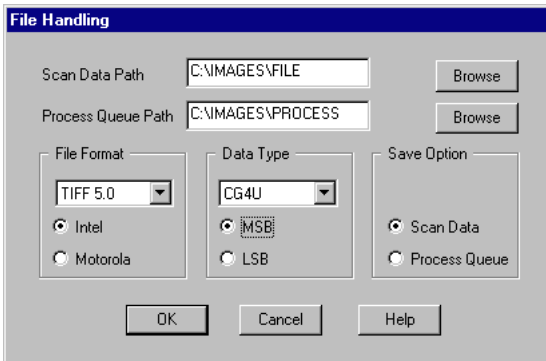
Chapter 6

File handling and administration



The file handling setup

This menu allows entries for the path of the scanned data files and the format of these files. Click the File Handling button to call up the File Handling setup window:



[56] File Handling setup

This example shows the factory default settings for file handling. The various parts of the File Handling Menu are described in detail below.

Scan data path

In the Scan Data Path window you enter the path to the disk and directory for storing image data files. They can be stored either locally in the controlling PC or on a different system in a network. The path must already exist.

Process queue path

The Process queue path is only to be used if the stored files are to be processed automatically, by a separate application program. In the Process Queue Path window you enter the path to the disk and directory for storing image data files. They can be stored either locally in the controlling PC or on a different system in a network. The path must already exist.

File format

Each of the file format options causes a different header type to be placed at the beginning of the file, and –where applicable– selects the image data type to be used within the image file.

File Format This pull down menu allows you to select one of the 5 available file formats:

- TIFF 4.0, 5.0 and 6.0
- CALS type 1
- User (see appendix ‘Defining user defined file format’ on page 105).

Intel or Motorola With the Intel option set, the most significant byte of the binary header data is written in the higher memory address. Use this option for PC. With the Motorola option set, the most significant byte of the binary header data is written in the lower memory address. Use this option for Macintosh.

Data Type

There are 6 different image data types used in the files:

- CG4U
- CG4S
- CG3/1DS and /2DS
- CG3/1D and /2D
- CG4T (for TIFF 6.0 only)

If you use the TIFF files in other Windows applications used for raster editing, you may need to specify whether the first pixel of image data is contained in the highest significant bit or in the lowest significant bit.

Set the MSB option when the highest order bit contains the first pixel of image data.

Set the LSB option when the lowest order bit contains the first pixel of image data.

Attention: *When the File Format or Data Type settings are incorrect, the images may either be printed incorrectly, or not printed at all. An error message can appear on the display of the printer. See the manual of your print system for more information.*

Save Option

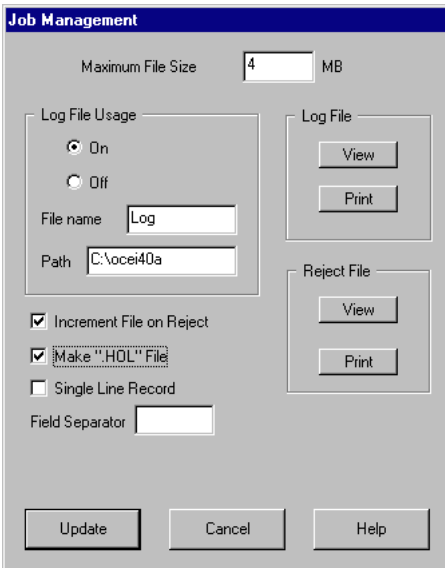
You can select one of the following save options:

Scan Data If you want to store your images on disk, select Scan Data. All images will be stored in the directory that is specified as 'Scan Data Path' at the top of the window.

Process Queue Only if you want the stored files to be processed automatically by a separate application program, select Process Queue. All images will be stored in the directory that is specified as 'Process Queue Path' at the top of the window. After storing the image, it can be processed by a separate program.

The Job Management Menu

The Job Management Menu allows the setup of the log file, the file size limits for the scanning job, and additional options concerning rejected cards and generating separate Hollerith files. Click the Job Management button to open the menu:



[57] The Job Management menu

Maximum File Size

This option sets the maximum size of a data file in MB. If the specified file size is exceeded, the card is automatically rejected if in Batch mode. In Single or Auto Feed mode, an error message is displayed. If rejected, an entry is automatically made in the REJECT LOG file as well as in the normal LOG FILE, but no image is saved.

Note: *If you have 16 MB of internal RAM, the maximum file size cannot be larger than 4 MB. If you need larger files, you will need to install more RAM.*

Log File Usage

Log files are a list of all scanning jobs you have performed since starting the scanner. The LOG FILE contains a list of all scans, the REJECT LOG contains all rejected scans. When log file is ON, you are prompted for a log file name whenever a new scanning session is started.

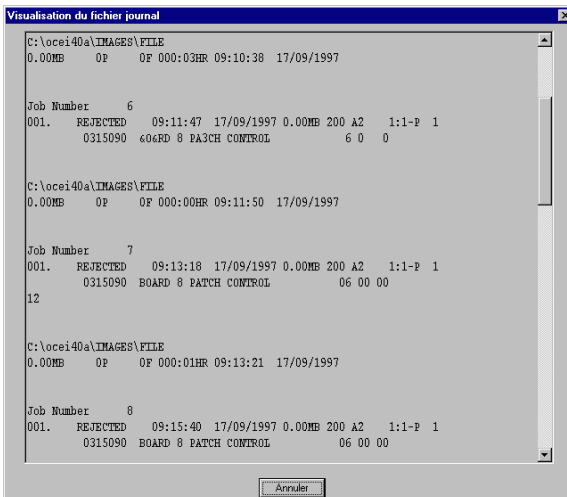
File Name This entry defines the log file name.

Path This entry defines the log file path.

Note: *The log file path as specified above must exist.*

Log file and Reject File

View Clicking this button displays the LOG FILE or the REJECT FILE on the screen. The following illustration shows an example of a LOG FILE.



[58] The LOG FILE

The scroll bar on the right allows you to scroll through the whole log file. The log file shows the following information:

- the job number
- the file name
- the date and time at which the scan was made
- the size of the image file
- the scan resolution
- the scanned format
- the number of prints made
- the Hollerith data.

For every job, the following additional information is displayed:

- the directory in which the files are stored
- the total file size
- the total number of files and prints made
- the time needed for the job.

The REJECT FILE display contains the same information, but for rejected scans only.

Print Clicking this button prints the LOG FILE or the REJECT FILE currently specified. In order to print the contents of the *.LOG file or *.REJ file, the files may not be larger than 64 kB.

You can print your LOG FILE or REJECT FILE on any Windows printer to be selected via printers in the control panel group within the program manager of Windows.

Additional functions

You can select one of the following additional functions:

Increment File on Reject If you select this option and you have specified a predefined file name with a numeric count, the number will be incremented if a card is rejected. If you have selected 'Make .HOL file', the Hollerith information of the rejected card will be saved in a separate file.

Make “.HOL” file If you select this option, a separate file will be generated for each scanned card, containing the Hollerith information of the card. The name of this file will be the same as the name of the image file, but the extension will be ‘.HOL’.

Single Line Record If you select this option, all information of each card will be contained in one line of the Log File. All items will be separated by a Field Separator, which you can specify yourself.

Chapter 7

Maintenance and troubleshooting

This chapter contains all information on clearing card jams. It also explains how to clean the scanner drum.



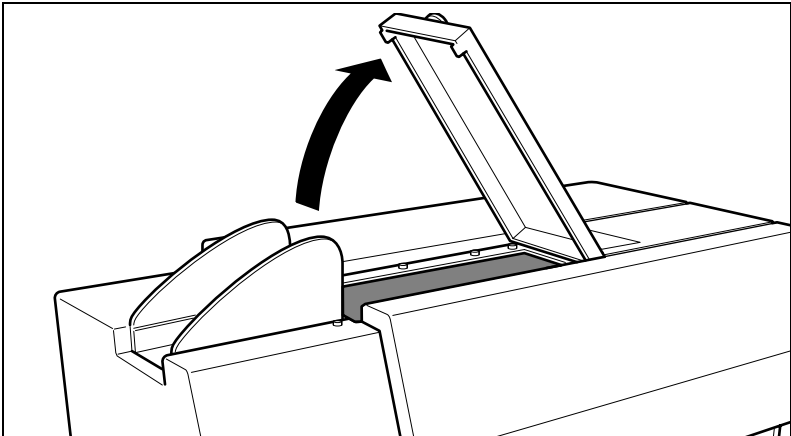
Card jams

When a card jams, there are two ways of clearing the jam. You can try to clear the card jam by clicking the Clear button in the Control screen. Scanning can proceed if the card is ejected into the output hopper. If this does not work, you should remove the card manually. Proceed as follows to do so.



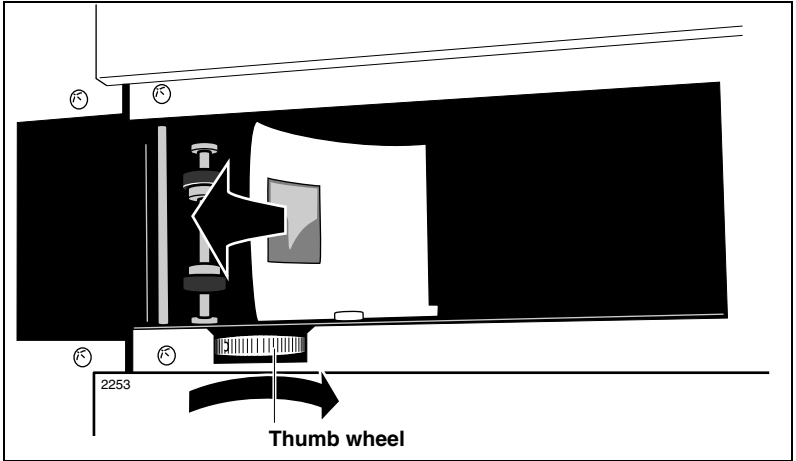
To clear a card jam:

- 1 Open the Scanner access door.



[59] Scanner access door

- Carefully turn the thumb-wheel clockwise to remove the card.
The position of the thumb-wheel is shown in the illustration below.



[60] Thumb-wheel

The card slides upwards as you turn the wheel in the direction indicated by the arrow.

- Close the scanner access door.
- Resume scanning.

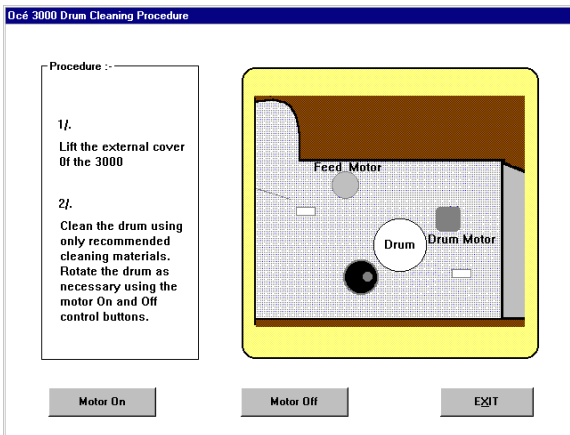
Cleaning the drum

The scanning drum needs regular cleaning. Use isopropyl alcohol and a cloth that does not give off fluff.

▼ **To clean the drum:**

- 1 Open the Utilities pull down menu in the option bar.
- 2 Click Clean Drum in the pull down menu.

The Drum Cleaning Procedure window appears on the screen.



[61] Clean Drum

- 3 Open the scanner access door.

Caution: *Make sure your tie or hair is not hanging over the scanner, as it may get caught when the drum starts rotating.*

- 4 Click Motor On on the screen.
The drum starts rotating.
- 5 Put some isopropyl alcohol on the cloth.
- 6 Hold the cloth with isopropyl alcohol against the drum as it rotates.
- 7 When the drum is clean, click Motor Off on the screen.
The drum stops rotating.
- 8 Close the scanner access door.

Appendix A

Technical specifications



Technical specifications

Model Number	Océ 3050
Resolution	100-400
Speed, cards per hour	
200 dpi bitonal A2 (C size)	375 (A1 in 200 dpi) / 420 (A2 in 200 dpi)
400 dpi bitonal A2 (C size)	250 (A1 in 400 dpi) / 300 (A2 in 400 dpi)
Image Processing	SMARTCODE
AGI Greyscale	No
Hoppers	
Input type	Auto
Input capacity	250
Output - Accept	250
Output - Review	No
Output - Reject	No
Digital Microfilm Printing	No
Production Tools	
Framing - manual	Yes
Cropping - manual	Yes
Deskew - manual*	Yes
Deskew - automatic*	No
Centering - automatic*	No
Log file capability	Yes
SMART Assist	Yes (Oce help)
GENERAL SPECIFICATION	
Card generation	odd/even
Hollerith reading	IBM, MIL STD 804B
Film types	silver/diazo negative/positive
Reduction ratio	7.5x to 36x (variable)

Display	2 modes with zoom and pan
Drawing sizes	user defined within the limits of the tape window
Scaling accuracy	+/- 0.5%
File formats - bitonal	TIFF and CALS
File formats- greyscale	none (no greyscale)
Check print capability	Yes
Viewing facility	Yes
Internal graphical diagnostics	Yes
Agency approvals	CE, TUV, UL, cUL
EMC	CE, FCC
Voltage (two ranges)	90V - 132V or 180V - 264V
Operating system	Windows XP SP2
Design	Océ Label / Océ Colours / Océ User Interface
Scan-to-Print Drivers	Embedded drivers for TDS400/450/600/700/800/860
	Embedded drivers for TCS400/500
	Embedded drivers for 9400/9600/9700/9800

Error messages

The following table provides an alphabetic list of error messages.

<i>Error code</i>	<i>Error message</i>
BTN_RUNFRAME	Frame
IDS_MSG10	Failed to start the low level machine driver program.
IDS_MSG11	Maximum image line length of 32000 has been exceeded.
IDS_MSG12	Maximum pixel line length of 15200 has been exceeded.
IDS_MSG13	Scanner failed to initialise. Please ensure the scanner is switched on and in working order. Press OK to return to Windows.
IDS_MSG14	No write privilege for this directory. Press OK to continue with this directory or Cancel to return to the Printer Connect dialogue box.
IDS_MSG15	The specified directory does not exist. Press OK to continue with this directory or Cancel to return to the Printer Connect dialogue box.
IDS_MSG16	Printer Setup cannot be changed during scanning.
IDS_MSG17	File Handling parameters cannot be changed during scanning.
IDS_MSG18	Specified scan file directory does not exist. Please try a new directory.
IDS_MSG19	Anamorphic zoom range is 5% to 2000%. Please enter a value in range.
IDS_MSG20	Network printer spool directory does not exist. Please enter a valid drive and path.
IDS_MSG21	Printer Queue directory is invalid. Please enter a valid drive and path.
IDS_MSG22	SCSI address must be in the range 0 to 7. Please enter the required address.
IDS_MSG23	No macro responses found. The 'OCE.INI' either does not exist or has been corrupted.
IDS_MSG24	No macro commands found. The 'OCE.INI' is either missing or corrupt.
IDS_MSG25	New file name already exists. Please try again.
IDS_MSG26	Scan resolution is from 100 - 400 dpi. Please enter a value in this range.

[62] Error messages

<i>Error code</i>	<i>Error message</i>
IDS_MSG27	This combination of width, reduction ratio and Y offset is outside the operating region of the scanner.
IDS_MSG28	This combination of length, reduction ratio and X offset is outside the operating region of the scanner.
IDS_MSG29	Image width * resolution is outside the range 600 to 16000 pixels. Please modify either the width or resolution values.
IDS_MSG30	Key name must equal the number of Hollerith elements from which it is read. Please enter a matching name.
IDS_MSG31	Cannot have a file name greater than 8 or less than 1 character. Please modify the number of checked Hollerith File name elements to between 1 and 8.
IDS_MSG32	Format code must match the number of Hollerith elements from which it is read. Please enter a matching code.
IDS_MSG1101	Input hopper empty. Please fill the Input Hopper and press Retry to continue. Cancel returns to the Control screen.
IDS_MSG1102	Card misfeed. Please fan the cards in the Input Hopper and press Retry to continue. cancel returns to the Control screen.
IDS_MSG1103	Card edge detection failure.
IDS_MSG1104	Card failed to feed out of the machine.
IDS_MSG1106	Card failed to scan.
IDS_MSG1107	Unable to find a valid Hollerith format code. Image rejected, no data written to disk.
IDS_MSG1108	Maximum file length cannot exceed 8 characters. Please modify the filename or the initial count.
IDS_MSG1109	Unable to identify a valid image size. Image rejected, no data written to disk.
IDS_MSG1110	No templates left to delete. Press OK to continue.
IDS_MSG1111	The current template has been selected for deletion. Press YES to delete the template.
IDS_MSG1112	Image data buffer overflow. Insufficient memory is available to buffer this image. Please change the imaging parameters or increase the amount of PC memory.
IDS_MSG1113	Image data transfer to PC has stopped. Check the PC to Scanner cable connection.
IDS_MSG1114	Compressed image data buffer overflow. Try closing other applications, adjusting the imaging threshold parameters or fitting more memory.

[62] Error messages

<i>Error code</i>	<i>Error message</i>
IDS_MSG1115	Unable to open or create Job Management Log files. Please ensure the Log file directory exists and this PC has write permission.
IDS_MSG1116	Log file is limited to between one and eight characters. Please try again.
IDS_MSG1117	Unable to start SCSI printer driver. Printing to a SCSI printer port will not be possible.
IDS_MSG1118	Unable to communicate with SCSI printer. Please ensure the printer is switched on and has the correct address.
IDS_MSG1119	No Windows printer currently installed. Use the Control Panel Utility to install the required printer driver.
IDS_MSG1120	X Machine Offset is in microns and must be in the range 15000 to 45000.
IDS_MSG1121	Y Machine Offset is in microns and must be in the range - 2000 to 2000.
IDS_MSG1122	QA Frequency count must be in the range 1 to 250.
IDS_MSG1123	Image data filename exists in the filing directory. The current image will not be saved. Please try a different filename or path.
IDS_MSG1124	Image data file failed to open. Please check the filing directory.
IDS_MSG1125	Disk usage exceeded. The filing hard disk or the print spool directories have reached the percentage usage specified in the configuration dialogue box.
IDS_MSG1126	Maximum file out of range.
IDS_MSG1127	Disk % usage exceeded. Press Retry if more disk space is available or Cancel to stop scanning.
IDS_MSG1128	Image filename exists in the image file directory.
IDS_MSG1129	Failed to open image filename. Please check if the image file directory name is valid and available.
IDS_MSG1130	Scanner initialisation and calibration in progress. Please wait 20 seconds....
IDS_MSG1131	The minimum print copy count is 1.
IDS_MSG1132	The maximum copy count for a 7700 printer when using the sorter is 10 times the number of sorters. The copy count has been set to the maximum possible for the current configuration.
IDS_MSG1133	Hollerith text is present in the window area of the card. Press OK to erase the window area text and continue. Press Cancel to edit the Hollerith text.
IDS_MSG1134	Unable to display the current image.

[62] Error messages

<i>Error code</i>	<i>Error message</i>
IDS_MSG1135	Number of print copies must be in the range 1 to 99.
IDS_MSG1136	Count must be greater or equal to 0.
IDS_REJVIEW	Reject file viewer
IDS_SBOX_AVAIL	Available
IDS_SBOX_CARDS	Cards Processed
IDS_SBOX_MB	MBytes
IDS_SBOX_NOS	Nos Prints
IDS_SBOX_PRINT	Print Queue Status
IDS_SBOX_SCAN	Scan Disk Usage
IDS_SBOX_SIZE	Size
IDS_SBOX_USED	Used
IDS_STATUS_AUTOFEED	Autofeed
D	
IDS_STATUS_BATCH	Batch
IDS_STATUS_FILENAME	Filename
E	
IDS_STATUS_HOLLCHECK	Hollerith Check
IDS_STATUS_MODE	Mode
IDS_STATUS_SINGLE	Single Card
IDS_STATUS_SIZE	Size

[62] Error messages

Appendix B

Safety information



Instructions for safe use

Océ designed products have been tested in accordance with the strictest international safety standards. To help assure safe working with these products it is important that you observe the following safety rules:

Maintenance

- Do not remove any screws from fixed panels.
- Do not carry out maintenance activities except for the parts and maintenance materials mentioned in this manual.
- Do not place any liquids on the machine.
- Use maintenance materials or other materials for their original purpose only. Keep maintenance materials away from children.
- Do not mix cleaning fluids or other substances.
- To avoid the risk of introducing hazards, all modifications to Océ equipment are strictly reserved to properly qualified and trained service technicians.

Connection

- If for some reason you have to move the machine yourself, please make sure that the mains power point has the right fuse capacity. See the Océ 3050 safety data sheet in this appendix for information about maximum current.
- Do not bridge any mechanical or electrical circuit breakers.
- Do not use an extension lead to connect the machine.
- This equipment has not been designed for connection to an IT power system. (An IT power system is a voltage network in which the neutral wire is not connected to earth).
- For equipment connected via a wall socket: locate the machine close to a wall socket that is easily accessible.
- For equipment connected via a fixed connection to the electricity grid: the disconnect device in the fixed connection should be easily accessible.

Surroundings

- Do not block the ventilation openings of the machine.
- Ensure that the machine is placed on a level, horizontal surface of sufficient strength. See the Océ 3050 safety data sheet in this appendix for information about the weight of the equipment.
- Ensure there is sufficient space around the machine. This facilitates reloading materials as well as maintenance.
- Do not place the machine in rooms which are subject to excessive vibration.

- Do not place the machine in rooms which are too small and insufficiently ventilated. See the Océ 3050 safety data sheet in this appendix for information about space and ventilation requirements.

General

- Always use materials recommended by Océ and developed for this Océ machine. Materials not approved by Océ may result in faults in your machine.
- Do not use the machine when it is emitting unusual sounds. Remove the plug from the power socket or switch off the fixed connection to the electricity grid and contact Customer Service.

Safety data sheets

The disclaimer below is valid for all safety data sheets in this manual. For questions about Océ products regarding health, safety and environment, please contact your Océ organisation; you can find the address in the last appendix of this manual.

Disclaimer The safety data sheets in this manual have been compiled to the best of our knowledge as a compact guide to safe handling of this product. We reserve the right to revise safety data sheets as new information becomes available. It is the user's responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary and to contact the company to make sure that the sheet is the latest one issued. If and in so far as limitation of liability is permitted under the applicable laws, we do not accept liability for any inaccuracy that may occur in this information.



Safety data sheet Océ 3050

PRODUCT SAFETY DATA SHEET

Océ (UK) Ltd



Number E-638-b-UK
Date October 1997

Model	Océ 3000	
Description	MicroPIm aperture card scanner	
Max. process speed	10 A4/min; 4 A0/min	
Dimensions	Width	747 mm
	Depth	370 mm
	Height	450 mm
Weight		33 kg
Voltage	230 V	
Frequency	50 Hz	
Current	1 A	
Power consumption, operation	100 W	
Power consumption, standby	100 W	
Mains connection	Cable with plug	
Safety class	I (IEC 536) Protective earth connection	
Protection class	IP 20 (IEC 529)	
Sound pressure level	At operator position: standby 40 dB(A); in operation 54 dB(A); impulse $\Delta L_1 = 10$ dB(A)	
Sound power level	Standby 49 dB(A); in operation 62 dB(A)	
Radio interference	Complies with Directive 89/336/EEC	
Radiation	Not applicable	
Heat emission	Standby 100 W; in operation 100 W	
Ozone emission	Not applicable	
Room volume	Recommendation: min. 5 m ³	
Room ventilation	Recommendation: min. 2,5 m ³ /h (natural ventilation)	
Consumables	None	
Marking	CE-Compliance Approved according to Low Voltage Directive 73/23/EEC	
	 	
Additional safety information	None	

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The content of this safety data sheet is subject to the disclaimer of liability on page 102 of this manual.

Appendix C

Defining user defined file format

This appendix gives an description of the procedure to define the User Defined file format. It informs you about the contents of the Header Definition file and the Header Template file.



User Defined file format

In the File Handling dialog box the data type is always a compressed data type of CCITT group 3/4. You can select one option. You can also select a File Format. One of the file format options is the User option. This option selects the user defined header type to be placed at the beginning of the file. User defined headers give you a very powerful tool for constructing almost any file header format.

Note: *Because of the flexibility of setting up the User option, this needs to be carried out by a qualified person. This person must be able to work with a file editor. This file editor must be suitable for displaying and editing printable and non printable characters and measuring byte offsets to the records being edited.*

The actual image file header created by the User Defined option is defined by two files.

- 1 a Header Definition file which defines the image dependent data records to be written into each image file header. The Header Definition file will always be called USER.DEF. It will always be found in the directory where you can find the OCE.EXE to start the 3050 software with (c:\ocei40a).
- 2 a Header Template file containing a template for the image file header which provides the constant data or text to be used in every image header. The name and path of the Header Template file can be anything and is one of the parameters defined in the Header Definition file.

Header definition file

The Header Definition file is an ASCII text file which is always named USER.DEF. Such file has the following format:

[File]

Default Header=<file name and path of the Header Template file>

Header Length=<total number of bytes in the image file header>

Extension=<extension to use for the image file>

Number of records=<total of records to be inserted in the image file header>

Note: *The Header length is the length of the Header Template file. The extension can be any. As default .USR is used.*

Record The following data must exist for each header record:

[Record_N]

Padding character=<space|zero|any ASCII character>

Data Format=<integer|string>

Length=<length of the data field in bytes>

Offset=<offset from the start of the image file>

Data=<one of the parameter names>

Note: *Record_N is the record number in the image file header. It is starting at zero and increases depending on the number of records you used.*

Note: *As default Padding Character 'space' is used.*

Note: *As default Data Format 'string' is used.*

Note: *Constant from the corresponding record in the Header Template file.*

Note: *Pointer in bytes to the start of this record.*

Note: *The parameter is one of the following parameter names:*

image size	the compressed data size in bytes
file name	the file name of the image
resolution	the resolution of the file
drawing size	the size of the paper (A4, E, etc.)
reduction	the reduction ratio used on the film
width	the image width in pixels
length	the image length in pixels
hollerith	the hollerith code read from the card (or edited)
date and time	system date and system time

Example of a Header definition file Here is an example of a Header definition file with 4 records.

```
[File]
Header Template=C:\IMAGES\EXP.TPL
Header Length=126
Extension=USR
Number of records=4
```

```
[Record_0]
Padding Character=space
Data Format=string
Length=57
Offset=13
Data=hollerith
```

```
[Record_1]
Padding Character=0
Data Format=string
Length=6
Offset=82
Data=length
```

```
[Record_2]
Padding Character=0
Data Format=string
Length=6
Offset=99
Data=width
```

```
[Record_3]
Padding Character=0
Data Format=string
Length=3
Offset=121
Data=resolution
```

Header template file

The Header Template file is a file which can have any valid DOS file name. This file has the same construction as the required image file header.

Note: As default the extension *.TPL* is used.

Each record which has been specified in the Header Definition file is inserted into the header. It is overwriting the characters in the Header Template file which are in the position for that record as specified by its Offset entry.

The layout of the header is completely unrestricted. A given file entry may be simply left unmodified as the text in the Header Template file or it may have any number of records overlaid into it.

Example of a Header Template file This example of a Header Template file is for generating a simple text header. For clarity it uses only printable characters and <CR> <LF> characters. However non printable characters may also be used. Separator characters may be used or omitted depending on the user's requirements.

```
Hollerith is
123456789012345678901234567890123456789012345678901234567
Length is 123456
Width is 123456
Resolution is 123
```

```
Hollerith is A.TEST.CARD.HOLLERITH
                                     Length is 00
3324 Width is 002264 Resolution is 200
```

[63] Example of a Header

Example of an image file An image file created using the above Header Definition file and Header Template file would be:

```
Hollerith is A.TEST.CARD.HOLLERITH.....
Length is 003324
Width is 002264
Resolution is 200
This will be followed by the compressed image data.
```

Checking the user defined file format

When you defined the User Defined file format with an error the software does not show an error message. The software is doing what you have defined in the

Header Definition file. To ensure there are no errors in the Header Definition file you need to check the created file.

▼ **Checking the created Header Definition file**

- 1 Start the Océ 3050 application.
- 2 Scan a Hollerith card to file.
- 3 Open an editor.
- 4 Open the scanned file with the defined extension in the editor (in this example the file name is c:\image*.usr)
- 5 Check the header.
- 6 Repeat this procedure until the header is how it supposed to be.

Appendix D

Miscellaneous



Notation conventions

There are a number of notation conventions used in this manual. This consistent style enables you to quickly become conversant with the use of this manual and consequently the Océ 3050.

Description Each section or subsection contains a description of the feature or operation identified in the title. It might also include possible applications, as well as any guidelines that you should bear in mind.

Procedures A description is followed by a procedure. A procedure always begins with a phrase which briefly describes the procedure (for example, Changing paper:) followed by a series of numbered steps that take you, step by step, through all phases of performing the operation.

Figures and tables Figures and tables are titled and numbered sequentially throughout this manual. Figures include pictures of product components, examples, and diagrams of concepts discussed in the description.

Attention getters There are several types of information to which we draw your attention. This information is classified as follows:

Note: *In a 'Note', information is given about matters which ensure the proper functioning of the system, but useful advice concerning its operation may also be given.*

Attention: *The information that follows 'Attention' is given to avoid the product being damaged.*

Caution: *The information that follows 'Caution' is given to prevent you suffering personal injury.*

Reader's comment sheet

Have you found this manual to be accurate?

- Yes
- No

Could you operate the product after reading this manual?

- Yes
- No

Does this manual provide enough background information?

- Yes
- No

Is the format of this manual convenient in size, readability and arrangement (page layout, chapter order, etc.)?

- Yes
- No

Could you find the information you were looking for?

- Always
- Most of the times
- Sometimes
- Not at all

What did you use to find the required information?

- Table of contents
- List of figures and/or tables
- List of procedures
- Index

Are you satisfied with this manual?

- Yes
- No

Thank you for evaluating this manual.

If you have other comments or concerns, please explain or suggest improvements overleaf or on a separate sheet.

7136546

Comments:

Date:

This reader's comment sheet is completed by:
(Even if you prefer to remain anonymous, please fill in your occupation)

Name:

Occupation:

Company:

Phone:

Address:

City:

Country:

Please return this sheet to:

Océ-Technologies B.V.
To the attention of ITC-User Documentation.
P.O. Box 101,
5900 MA Venlo
The Netherlands

Index

A

ALL_CARDS 57
AREA, SCANNING - 32
AUTOMATIC CARD SELECTION 70

C

CALS, FILE FORMAT 83
CARD JAMS 90
CARD KEY 59
CARD PRESS 18
CARD SELECTION, AUTOMATIC - 70
CLEANING THE DRUM 92
CONFIGURATION 78
CONFIGURATION 20
CONTROL SCREEN 19
COUNTER 79

D

DATE & TIME, FILE NAME 69
DEFAULT STARTUP SETTINGS 79
DIRECTORY
 IMAGE DATA FILE 82
DISK
 MAXIMUM DISK USAGE 79
 SCAN DISK USAGE 36
DISPLAY 19
DRAWING SIZE 50

E

EDITING
 HOLLERITH CONTROL FILE 61- 67
 HOLLERITH DATA 31
 NEW DRAWING SIZE 52
ERROR MESSAGES 95

EXIT 19

F

FILE FORMAT 83
FILE NAME, PREDEFINED - 68
FORMAT, FILE - 83
FRAME 32
FREQUENCY. SEE QUALITY MODE

H

HEADER DEFINITION FILE 106
HEADER DEFINITION FILE 106
HEADER TEMPLATE FILE 106
HEADER TEMPLATE FILE 108
HOLLERITH ADD MODE 78
HOLLERITH NAME 58
HOLLERITH SIZE 58

I

IMAGING 45
 DELETE SETUP 49
 LOAD SETUP 48
 SAVE SETUP 48
INSTALLING SOFTWARE 13

L

LOADING CARDS 18
 CONFIGURE FACE DOWN - FACE UP 79
LOG FILE 86
 REJECT 86
LOG FILE RECORD, FILE NAME 69

M

MAINTENANCE 89
MATCH, CARD SELECTION 70

N

NAME, PREDEFINED FILE - 68
NOTATION CONVENTIONS 112
NUMERIC COUNT, FILENAME 69

O

OFFSETS 78, 79
OUTPUT MODE 10
 QUALITY MODE 25

P

PREDEFINED FILE NAME 68
PRINT CONTROL 22
PRINT ENLARGED 42
PRINT QUEUE 36

Q

QUALITY MODE 25

R

READER'S COMMENT SHEET 113
REJECT 31
RESCAN 31
RUNNING MODE 21
RUN-TIME DISPLAY 30

S

SAFETY DATA SHEETS 102
SAFETY INFORMATION 100
SCAN WINDOW 53
SCANNING
 AUTO FEED MODE 27
 BATCH MODE 26
 HOLLERITH CHECK MODE 29
 SINGLE MODE 23

SCANNING AREA 32
SELECTION, AUTOMATIC CARD - 70
SIZE

 INPUT 21
 MAXIMUM FILE SIZE 85
SIZE KEY 60
SPECIFICATIONS 94
SWITCH OFF 16
SWITCH ON 15
SYSTEM OVERVIEW 9
SYSTEM REQUIREMENTS 12

T

TECHNICAL SPECIFICATIONS 94
TIFF, FILE FORMAT 83
TROUBLESHOOTING 89

U

USER 106
USER DEFINED FILE FORMAT 105
USER DEFINED HEADER TYPE 83, 106
UTILITIES MENU 78

V

VIEWING MODE 40

