Paper Machine Module

6.0 Overview

GENERAL

The Paper Machine produces jumbo reels at its dry end. The jumbo reels are sent to the Winder, where they are divided into sets of rolls. Jumbo reels are added to the inventory as they are produced. The paper machine operator keeps track of this.

PAPER MACHINE

The primary purpose of this workstation is to enter and collect jumbo reel information. All information entered at the Paper Machine (PM) can also be entered at the Winder workstation. This makes the PM station a non-critical workstation; however, the added convenience of having this station greatly reduces the possibility operator confusion and workload at the Winder.

Each jumbo reel is assigned a unique number (TAPPI number). The Central Mill Quality system creates a new jumbo reel record for each jumbo. These jumbo reel numbers match the mill's other system.

PAPER MACHINE LOSSES

TRAQ Manager collects slab losses. Slabbing refers to the removal of an amount of paper from the jumbo reel by slitting across the length of the reel to the required depth. This can be registered in inches of paper or kilograms of paper. The system records the actual width of the jumbo reel's produced in inches of paper. When slab losses are entered in inches, the system calculates the slab weight based on the basis weight and machine specifications. Machine parameters are programmable according to formulas provided by the mill.

The system can be programmed to determine what is and what is not accountable as PM losses. For instance, trim losses may or may not be assigned as a PM loss. The trim loss scheduled by the scheduler is not counted as a PM loss, but if the pattern is re-trimmed on the winder, the additional loss is a PM loss.[1]

JUMBO INVENTORY

TRAQ Manager maintains inventory of all jumbo reels on the machine room floor. The winders manage and track jumbo reel consumption. A jumbo reel's status is defined by TRAQ Manager as *Inactive, Active, Beatered, Partially Consumed* or *Consumed*. *Inactive* defines a reel that is waiting to be mounted on the Winder. *Active* reels are currently mounted on the Winder. Jumbos can be beatered if the whole jumbo does not meet grade specifications. Such jumbos are not deleted from the system, but are classified as *Pulp* (*Beatered*) loss. TM allows beatered jumbos to be recovered if a mistake was made. A reel's status changes to *Consumed* when it has been consumed at the Winder. The Configuration Manager deletes *Consumed* reels from

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[1]　The reel width can be collected from the MS-SQL database or manually entered at the Paper Machine workstation. If none is entered, the standard machine value will be used. Maximum Trim is a configuration parameter for the Paper Machine. Planned Trim is what the planner schedules. Actual Trim is the actual pattern being cut. TRAQ Manager will continually collect this loss information and report it.

inventory, and appropriate audit transactions are generated to keep track of the process. If for some reason a reel must be dismounted from the winder, its status is recorded as *Partially Consumed*. Such reels can be remounted and have their status returned to *Active*.

6.1 Running the Paper Machine Module

To begin a Paper Machine session {Double-Click} on the Paper Machine shortcut on your Widows 95 desktop. Follow the usual steps as described in the *Getting Started* part of this guide.

The Paper Machine module is now ready to use.
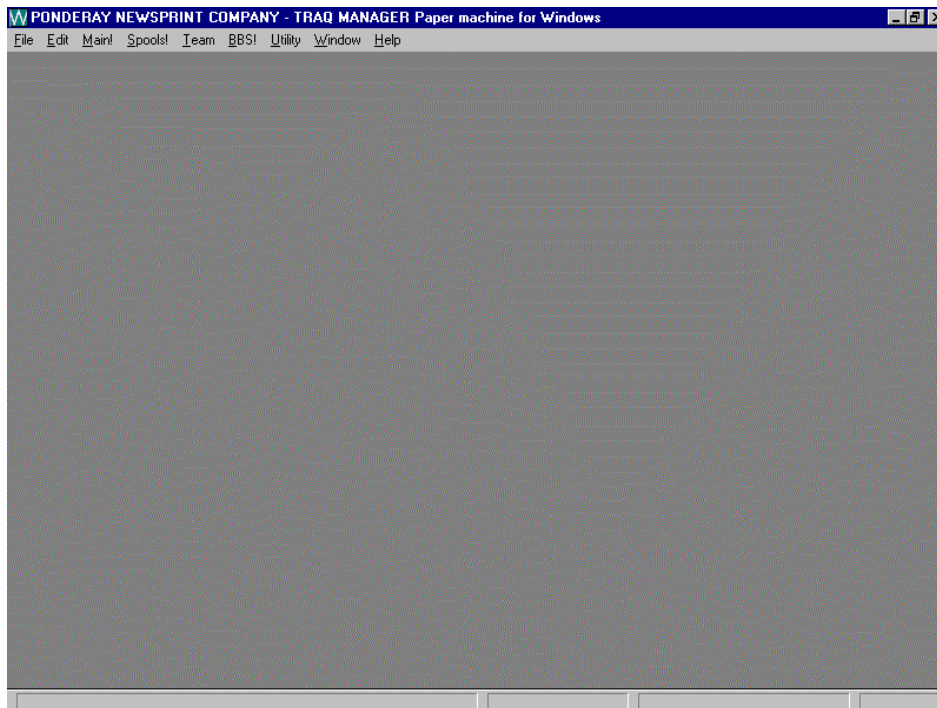
Note: *The Paper Machine window offers the generic Windows options* **File**, **Edit**, **Window** *and* **Help***, as well as the TM options* **Team** *and* **BBS***. Please refer to Parts 4 and 5 of the guide on how to use TM's* **Team** *and* **BBS** *facilities.*

6.2 Main!

Selecting the ***Main!*** menu option opens the *Jumbo Reels Table*. The *Jumbo Reels Table* lists the jumbo reels that have been produced, allows you to edit any information concerning them, and lets you insert a new record for each reel you create.

The table lists reels starting with those most recently created. The information box below the table displays details for the highlighted reel.

Command buttons at the bottom of the window allow you to insert and edit reel data.

Following is a display of the *Jumbo Reels Table*.

This screen includes the list of jumbo reels and editing function command buttons. Invoke all functions using regular Windows features.[2]

Following is a list of commands.

> ***Change***   Select a jumbo reel on the table and {Click} on ***Change*** to edit the data for that jumbo reel (that is, all information except for the reel date, turn-up time and sequence number). This command opens the jumbo reel's record, which is used to edit the information in the *Jumbo Reels Table* columns. If you wish to edit the reel's date, time or sequence number, you must delete the reel from inventory and create a new reel with the correct information

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[2] For more information on Widows generic features, please refer to the Introduction to this guide.

```
Record will be Changed                                    ⊠

  Paper machine  PMA01              Reel Date:    9/7/1997 ...
                                  Turn-up time:     15:00
                               Reel Sequence no:    02

   Basis Weight:  00488    ...    ┌Quality─────────────────┐
                                  │  ◉ Good       ○ Cull   │
   Recycled Fiber:   2.0  %       │                        │
                                  │  Reason code: [      ] ...│
                                  └────────────────────────┘

   Reel Width:  330     [ in ]    Spool No:   02    ...
   Reel Radius: 45      [ in ]   ┌Sentry───────────────────┐
                                 │  Reel Weight:  [      ]  │
   Reel Weight:   26,000  [ kg ] │  Basis Weight: [      ]  │
   Reel Lenght:   238,000 [ LF ] └──────────────────────────┘

       Estimated sets:  7      Produced sets: [    ]

                                      OK          Cancel
```

Please refer to Measurements *in the* Getting Started *part of this guide for more information on how to enter field values.*

Insert	The ***Insert*** command allows you to enter all information for the current jumbo reel. The same record form as seen with the ***Change*** button opens, only now all the form fields are enabled. Complete the fields with the appropriate information according to your production order. Enter actual reel statistics where required. A reel ticket will be printed automatically. All fields are required except for ***Recycled Fiber***, ***Reel Length***, ***Sentry*** fields and ***Produced Sets***. A reason code is required if *Cull* quality is selected.
Reel Date	Enter the reel's production date. This date will become part of the jumbo reel TAPPI number. The current date appears as the default date in this field. {Clicking} on the ***Ellipsis*** command button beside this field opens the pop-up calendar that can be used to select another date.

Turn-up Time	Enter the time of the reel's production. The time entry format is 00:00 to 23:59.

> *Note: Be sure that your cursor is at the extreme right of this field, else the time may not be entered properly. Use the {End} key to be sure, or just use {Tab} to move from the date field to this field. This sets the cursor to the end of the line automatically.*

Reel Sequence No.	Enter the production sequence number (that is, the reel's sequence in the order of production during the day). This field will update automatically each time you insert a subsequent reel.

> *Note: If you are running the* Jumbo Reels Table *from a module other than the Paper Machine, you will have to enter the Reel Sequence number manually for each reel inserted. Also, if you disrupt the sequence in the Paper Machine module, the numbering pattern will not return to its original sequence on its own. You will have to type in the next available sequence number manually to continue from where you were before the disruption.*

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Basis Weight	Enter the basis weight if known, or use the ellipsis button to open the *Basis Weight List* and select a code from there.
Rec. Fiber	Enter the percentage of recycled fiber. This is not a required field.
Quality	{Click} on the ***Good*** option button to produce a jumbo reel with an *Inactive* status, or ***Cull*** to record the reel as *Cull* status. If you choose ***Cull*** you will need to enter a reason. Type in the reason code or {Click} on the ***Ellipsis*** button to select a reason from the *Jumbo Reel Cull / Slab Reasons List*.
Reel Width, Radius, Weight and ***Length***	Complete these fields with the appropriate data. Errors may be corrected using the ***Change*** command as described above.
Spool No.	This field allows you to key in a spool number, or selects one from the *Spools* lookup list using the ellipsis button. Only available spools are listed. Spools are returned to the list as the Winder consumes the jumbos.
Sentry	Enter the ***Reel*** and ***Basis Weight*** values from the sentry data in these fields.
Estimated Sets	Enter the number of sets which will most probably be produced from the current jumbo. You may edit this later with the ***Change*** button, or the Winder operator will make

adjustments as needed. The number of estimated sets
determines the reel's status as it is consumed at the Winder.
As long as the number of sets produced during consumption
does not match the estimated number, the reel remains
Active. Once matched, it becomes *Consumed*.

Produced Sets   This field cannot be edited. It is updated automatically as
rolls are produced from *Active* reels at the Winder.

Inserting a new reel will automatically update the *Jumbo Reels Table* and create all the
appropriate transactions. If you accidentally duplicate an existing part of the production
sequence (a duplicate sequence number, for example) when inserting a new reel, you
will be notified with an error message. Simply press *OK* in the message box and the
system will return you to the form section where the duplication error exists. Enter the
correct information.
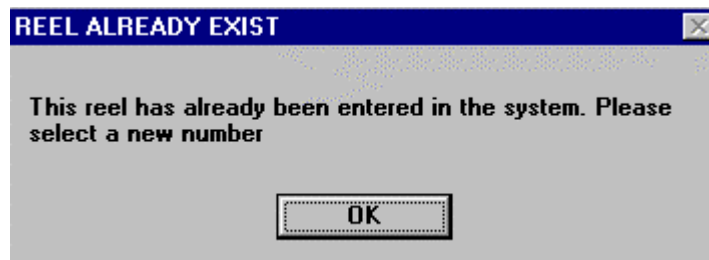
If you leave out any information, your cursor will also be returned to the missing field.

Delete   This command deletes a selected jumbo reel from the list. A
confirmation box opens to verify your action. Use this to
delete a reel if you have entered the wrong date, turn-up time,
or sequence number. All other changes can be made using
Change. Only reels with an *Inactive* status may be deleted.
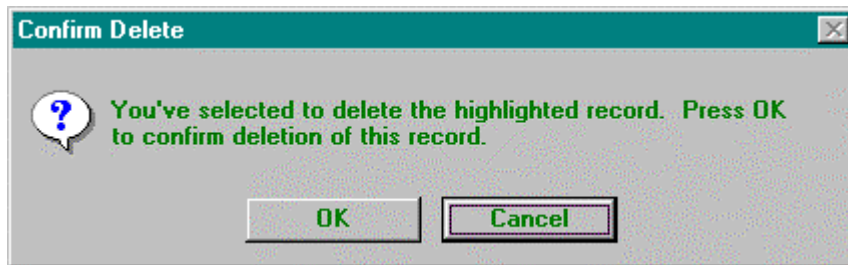
*Note: The Configuration Manager (administrative office) should manage deleting old data and
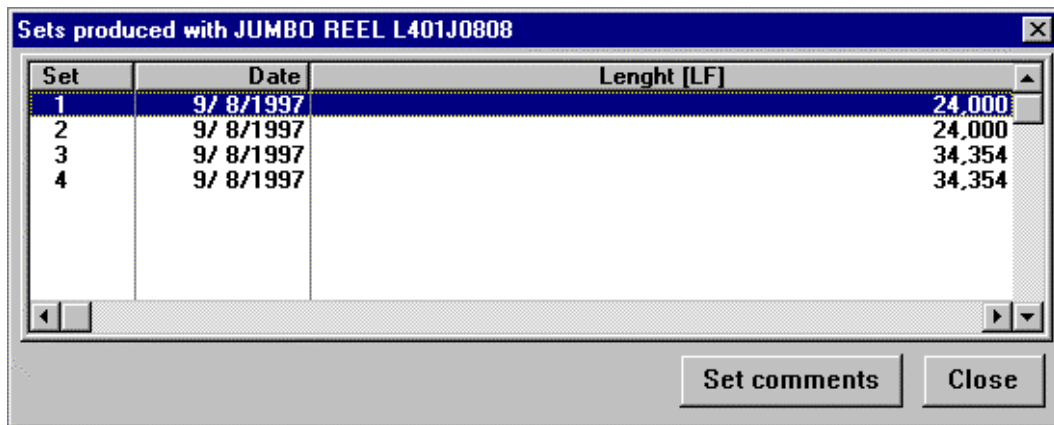consumed reels. Machine operators do not handle this clean-up.*

Comments   The *Comment Box* opens with this command. This allows the
operator to type in comments about the selected jumbo reel.
If comments exist, two asterisks will appear next to the reel
number in the **Reel No.** column. These comments may be
read at other stations and will appear on production reports.

Operator comments on REEL L401K0726

SHEET BREAK

Ok   Cancel
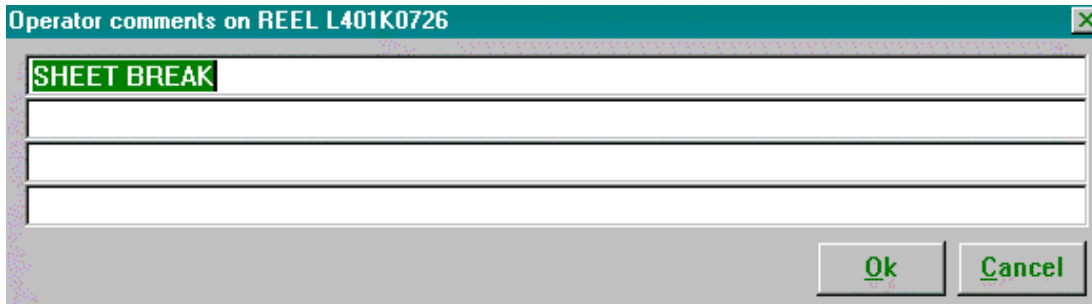
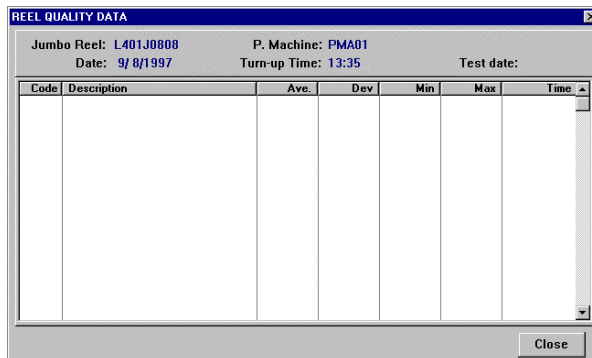|	
Show Set	The ***Show Set*** command opens a view-only window that allows you to view the statistics of the sets produced from the selected jumbo reel at the Winder. This command is only available for reels *Active, Part. Consumed,* or *Consumed*.

Sets produced with JUMBO REEL L401J0808

Set	Date	Lenght [LF]
1	9/ 8/1997	24,000
2	9/ 8/1997	24,000
3	9/ 8/1997	34,354
4	9/ 8/1997	34,354

Set comments   Close

Two command buttons are available in this box: ***Set Comments*** and ***Close***. The ***Set Comments*** command opens a comment box where the operator can view set notes. Asterisks will appear next to those sets that contain notes. No comments may be entered. The ***Close*** command closes the dialogue box and returns to the main screen.

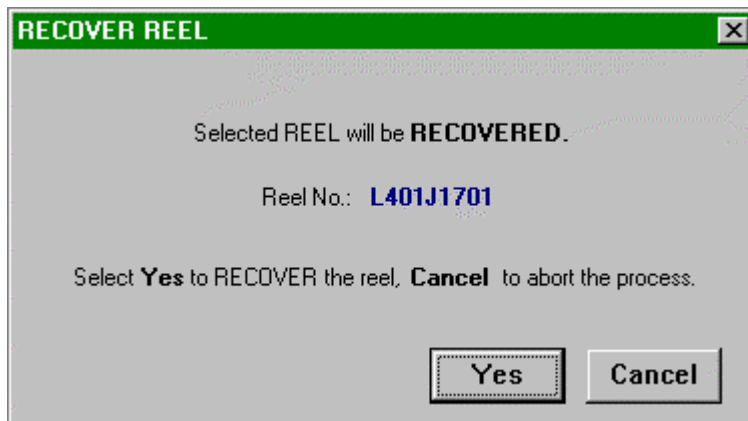|	
Quality	This allows you to see the quality control tests which are to be run on the selected reel. {Clicking} on this command button opens the *Reel Quality Data* list.

REEL QUALITY DATA

Jumbo Reel: L401J0808   P. Machine: PMA01
Date: 9/ 8/1997   Turn-up Time: 13:35   Test date:

Code	Description	Ave.	Dev	Min	Max	Time

Close

Beater the reel   This command changes the reel status to *Beatered*. Use this button if a reel needs to be rejected and culled. Selecting this command button opens a confirmation dialogue box. In it you are prompted to enter a reason code. Type in the code if known, or {Click} on the ***Ellipsis*** command button to open the reason list and select a code. Only reels with an *Inactive* status can be beatered.

BEATER REEL

Selected REEL will be **BEATERED**.

Reel No: **L401H0801**

Reason code: [   ] [...]

Select **Ok** to beater this reel, **Cancel** to abort the process.

[Ok]   [Cancel]

Recover   This command is available only for beatered reels. Choose this command to recover accidentally beatered reels. Selecting this command will open a confirmation dialogue box. Select *Yes* to recover.

RECOVER REEL

Selected REEL will be **RECOVERED**.

Reel No.: **L401J1701**

Select **Yes** to RECOVER the reel, **Cancel** to abort the process.

[Yes]   [Cancel]

Slab   This command opens a record which allows you to enter the details for slab losses. There are two tabs: ***Slab Reel*** and ***Paper Machine Slab***.

                                On the ***Slab Reel*** page enter the radius at which the slab will begin, and the number of inches to slab. The new reel radius is calculated automatically. You will be prompted for a reason code. If you know the code, type it in; if not, use the ***Ellipsis*** command button to open the *Cull / Slab* reasons list and select the appropriate code from there..
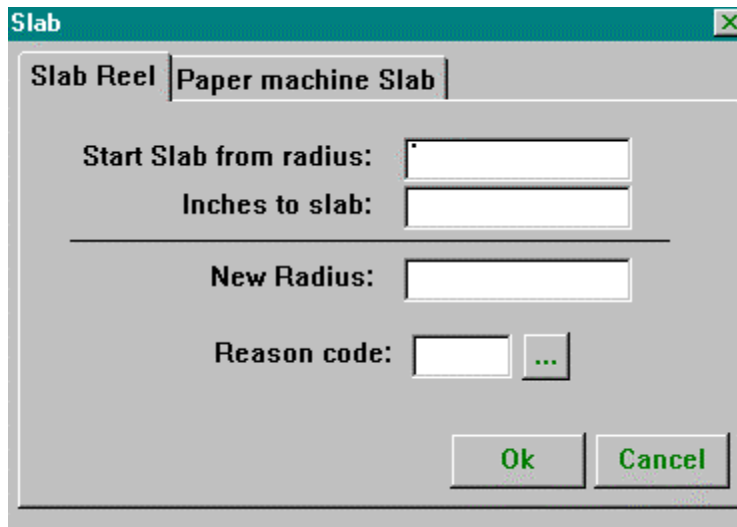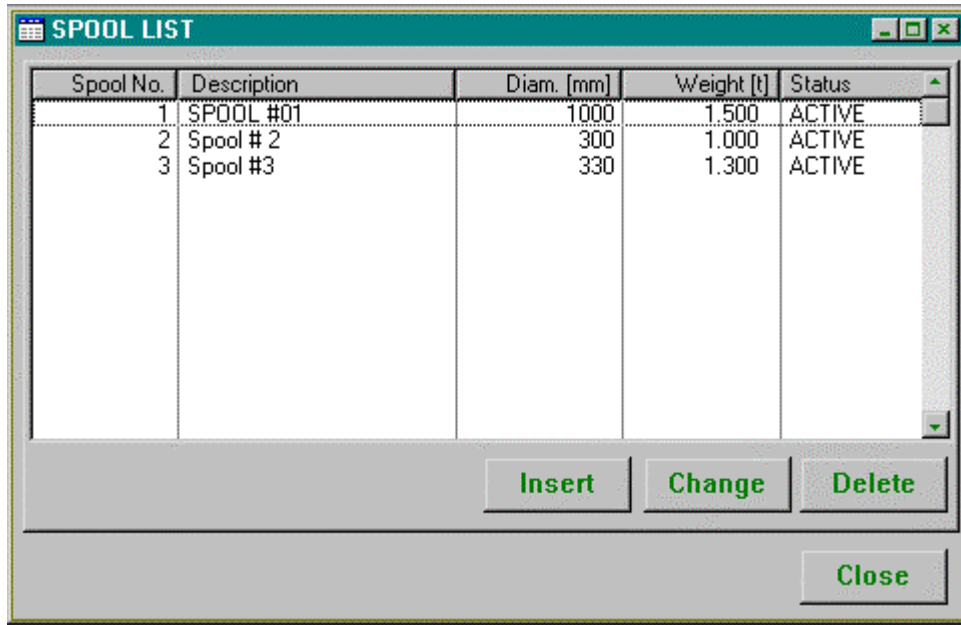
Use the ***Paper Machine Slab*** page to record spool losses due to sheet breaks, etc. Record the number of inches slabbed from the spool, the grade, and reason code. Use the ***Ellipsis*** command buttons to open lookup lists as necessary.
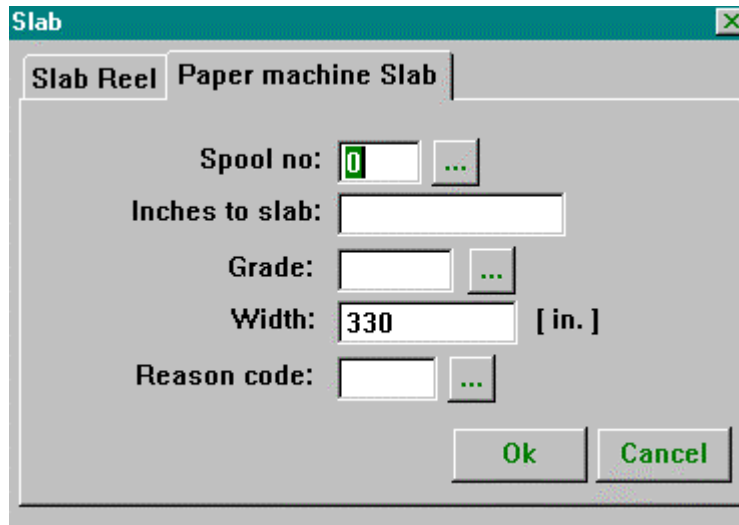
Ticket	This will allow you to re-print a ticket for the selected reel. (Remember: tickets are printed automatically when you insert a new reel).
BBS	The ***BBS*** button allows access to the internal message system. Please refer to Part 4 of this manual for detailed information.
Close	This command closes the *Jumbo Reels Table*.

6.3 Spools!

This menu option opens the *Spools List*. With this option you may add, change or delete spool records. This is a typical lookup list. The command buttons create or access simple data records.[3]

6.4 Team and BBS

The ***Team*** menu option allows access to the Team utility. This utility is covered at length in Part 5 of this manual. Please refer to it for detailed information. Use ***Team*** to look up team, shift and employee information, as well as to change the current team.

Remember: The Select Team *dialogue box pops up automatically at the beginning of every shift. Select your team and {Click} on* **OK**.

The ***BBS*** button allows access to the internal message system. Please refer to Part 4 of this manual for detailed information.

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[3] Please see the Introduction to this guide for information on how to use Lookup Lists.

6.5 Utility
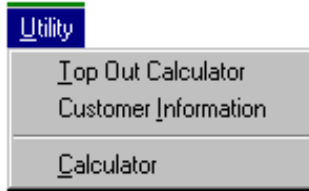
The *Utility* menu option offers three handy tools: the *Top Out Calculator*, *Customer Information*, and *Calculator*. The *Calculator* is common to all modules, and is covered in the *Getting Started* part of this guide. Please refer there for information.

Top Out Calculator

This option opens a handy top out calculator.

Customer Information

This option opens the Customer Information window. This is a view-only window that allows you to see customer quality control information for each of the customer's products.

Quality tests and notes, Winder and Wrapper notes and other information may be viewed on separate tabs. Tabs are enabled only if they contain information.

Use the *Codeword* field to enter the customer's codeword, or use the *Ellipsis* command button to open a lookup list of codewords. Select a codeword for, and the basis weight that applies to, the selected customer. This displays all regular tests for that customer. Asterisks indicate standard tests. If there is no asterisk beside a test, it means that the test requirements differ from the standard.

Please see Part 2, *Getting Started*, for additional information on Quality Control screens.

6.5 Closing the Paper Machine Module

You may close the PM module at any time; however, if you have any unsaved information you will be prompted to save it first. I general, you should leave the machine running permanently.

2.6 Quality Conversion Module

A silent partner to the Paper Machine module can be found behind your Paper Machine Module screen. This is the *Quality Conversion Module*. Its job is to import and monitor the conversion of quality data from the Robolab. You can switch to view the Quality Conversion module using {Alt+Tab}. You may also see this module if you shut down the Paper Machine module.

There is nothing for you to do with the Quality Conversion module. It just does its job automatically in the background. If for some reason, however, you must switch off the computer at the Paper Machine station, be sure that the Quality Conversion Module restarts along with the Paper Machine. If it is not running, {Click} on **Start** on the taskbar, go up to **Programs** and

slide through the cascading menus to the right until you see the Quality Conversion module. {Click} on it to start it.