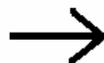
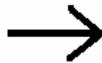


Portal Downtime System

DOWNTIME

JOB NAME None		PRESET: 0	OPERATOR Unknown	
		CYCLES: 2		
8/17/2004 7:33:27 PM DOWNTIME: 8				
NO MATERIAL	BAD MATERIAL	MATERIAL HANDLING	WAITING FOR FORKLIFT	
MECHANICAL TROUBLE	ELECTRICAL TROUBLE	TOOL TROUBLE	OTHER	
CHANGE GRIPPER BLOCKS	BLOCKS LOOSE	CHANGE BLOCKS	NOT USED	
CHANGE DIES	LOOSE HEAD	NO AIR PRESSURE	NOT USED	
BREAK	LUNCH	MEETING	NOT USED	
EDIT	COUNTER	QUALITY	DOWNTIME	MESSAGE SUPERVISOR

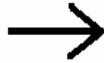
Report a DOWNTIME event by touching the green Reason Button containing the desired reason. This opens the DOWNTIME RESET panel. Touch the red RESET ALARM button to save this downtime event. Touch the grey CANCEL button to close the panel without saving the event.



Writes to Table: DOWNTIME

Portal Downtime System

CANCEL



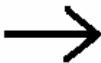
JOB NAME	PRESET: 0	OPERATOR			
None	CYCLES: 2	Unknown			
8/17/2004 7:33:27 PM DOWNTIME: 8					
NO MATERIAL	BAD MATERIAL	MATERIAL HANDLING	WAITING FOR FORKLIFT		
MECHANICAL TROUBLE	ELECTRICAL TROUBLE	TOOL TROUBLE	OTHER		
CHANGE GRIPPER BLOCKS	BLOCKS LOOSE	CHANGE BLOCKS	NOT USED		
CHANGE DIES	LOOSE HEAD	NO AIR PRESSURE	NOT USED		
BREAK	LUNCH	MEETING	NOT USED		
EDIT	COUNTER	QUALITY	DOWNTIME	MESSAGE	SUPERVISOR

Portal Downtime System

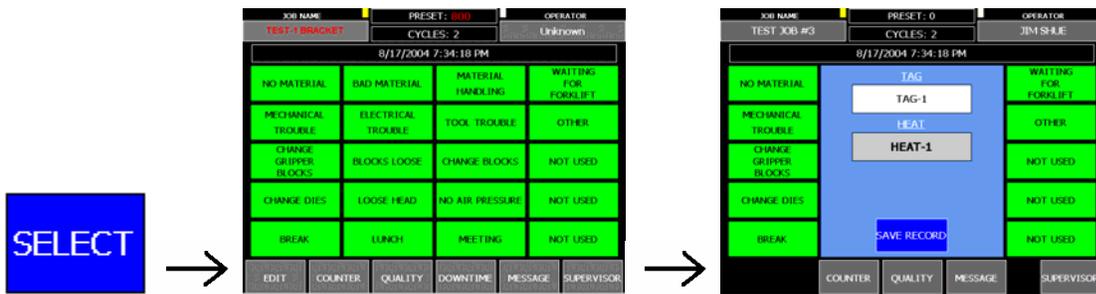
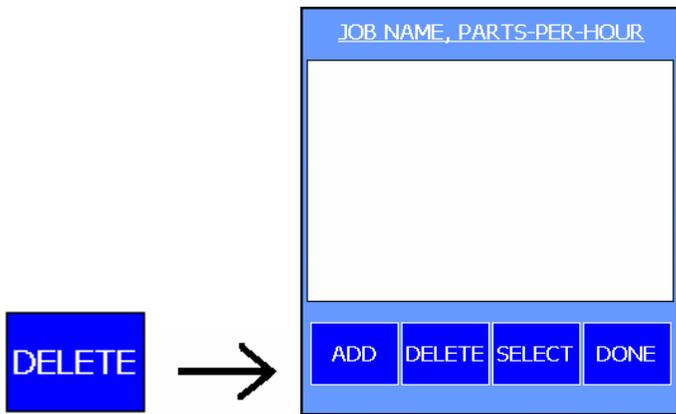
JOB

JOB NAME None		PRESET: 0 CYCLES: 2	OPERATOR Unknown		
8/17/2004 7:34:18 PM					
NO MATERIAL	BAD MATERIAL	MATERIAL HANDLING	WAITING FOR FORKLIFT		
MECHANICAL TROUBLE	ELECTRICAL TROUBLE	TOOL TROUBLE	OTHER		
CHANGE GRIPPER BLOCKS	BLOCKS LOOSE	CHANGE BLOCKS	NOT USED		
CHANGE DIES	LOOSE HEAD	NO AIR PRESSURE	NOT USED		
BREAK	LUNCH	MEETING	NOT USED		
EDIT	COUNTER	QUALITY	DOWNTIME	MESSAGE	SUPERVISOR

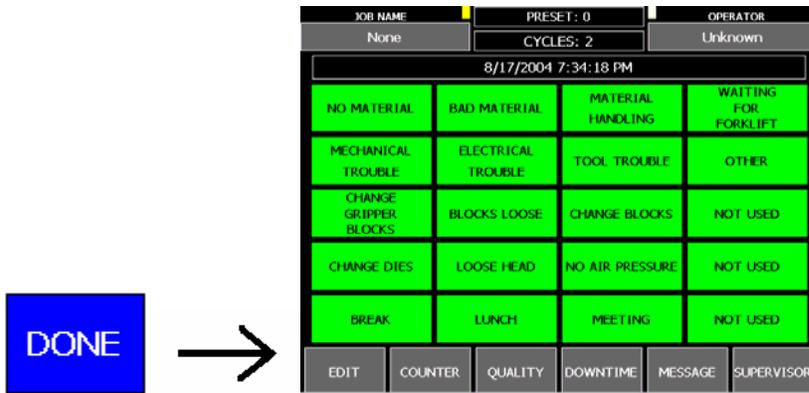
Touch the JOB NAME button to display the JOB SELECTION panel. Use ADD to create a job. Use DELETE to remove a job. Activate a job by choosing touching the desired job name and then touching SELECT. Touch the DONE button to close the panel.



Portal Downtime System



Writes to Table: JOBHISTORY

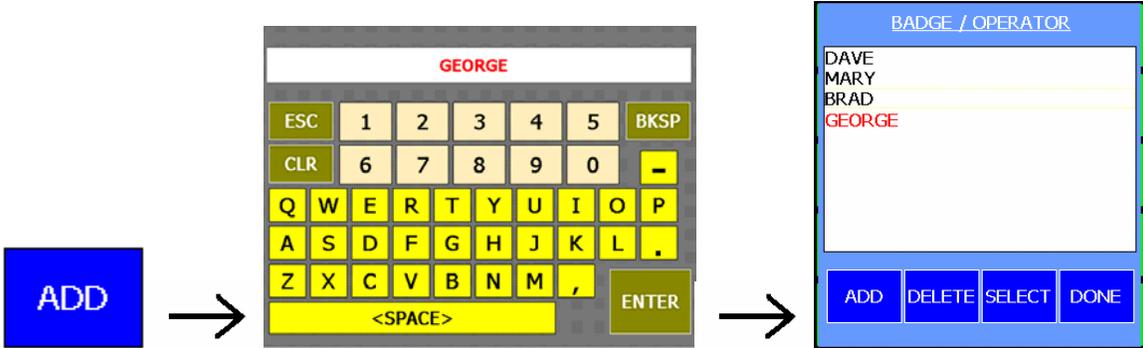
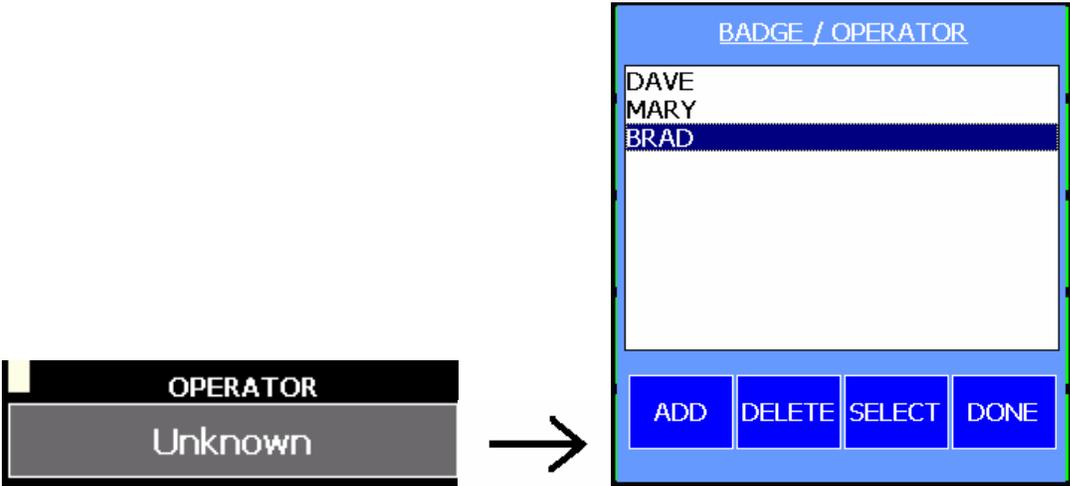


Portal Downtime System

OPERATOR

JOB NAME		PRESET: 0		OPERATOR	
None		CYCLES: 2		Unknown	
8/17/2004 7:34:18 PM					
NO MATERIAL	BAD MATERIAL	MATERIAL HANDLING	WAITING FOR FORKLIFT		
MECHANICAL TROUBLE	ELECTRICAL TROUBLE	TOOL TROUBLE	OTHER		
CHANGE GRIPPER BLOCKS	BLOCKS LOOSE	CHANGE BLOCKS	NOT USED		
CHANGE DIES	LOOSE HEAD	NO AIR PRESSURE	NOT USED		
BREAK	LUNCH	MEETING	NOT USED		
EDIT	COUNTER	QUALITY	DOWNTIME	MESSAGE	SUPERVISOR

Touch the OPERATOR button to display the OPERATOR SELECTION panel. Use ADD to enter a new operator name. Use DELETE to remove a name. Activate a new operator by choosing touching the desired name and then touching SELECT. Touch the DONE button to close the panel.



Portal Downtime System

BADGE / OPERATOR

DAVE
MARY

DELETE →

ADD DELETE SELECT DONE

SELECT →

JOB NAME	PRESET: 0	OPERATOR	
None	CYCLES: 2	BRAD	
8/17/2004 7:34:18 PM			
NO MATERIAL	BAD MATERIAL	MATERIAL HANDLING	WAITING FOR FORKLIFT
MECHANICAL TROUBLE	ELECTRICAL TROUBLE	TOOL TROUBLE	OTHER
CHANGE GRIPPER BLOCKS	BLOCKS LOOSE	CHANGE BLOCKS	NOT USED
CHANGE DIES	LOOSE HEAD	NO AIR PRESSURE	NOT USED
BREAK	LUNCH	MEETING	NOT USED
EDIT	COUNTER	QUALITY	DOWNTIME
MESSAGE	SUPERVISOR		

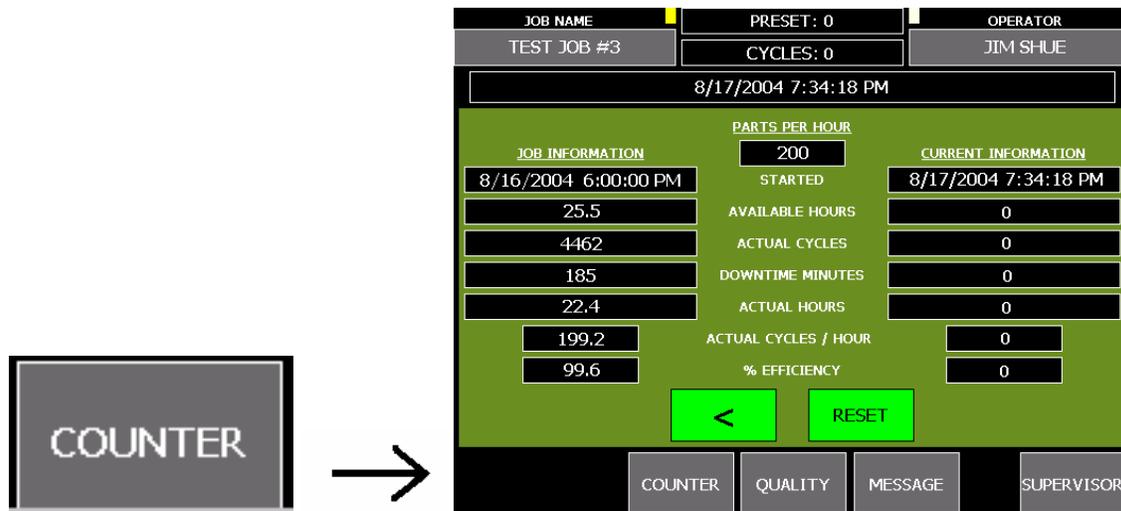
DONE →

JOB NAME	PRESET: 0	OPERATOR	
None	CYCLES: 2	Unknown	
8/17/2004 7:34:18 PM			
NO MATERIAL	BAD MATERIAL	MATERIAL HANDLING	WAITING FOR FORKLIFT
MECHANICAL TROUBLE	ELECTRICAL TROUBLE	TOOL TROUBLE	OTHER
CHANGE GRIPPER BLOCKS	BLOCKS LOOSE	CHANGE BLOCKS	NOT USED
CHANGE DIES	LOOSE HEAD	NO AIR PRESSURE	NOT USED
BREAK	LUNCH	MEETING	NOT USED
EDIT	COUNTER	QUALITY	DOWNTIME
MESSAGE	SUPERVISOR		

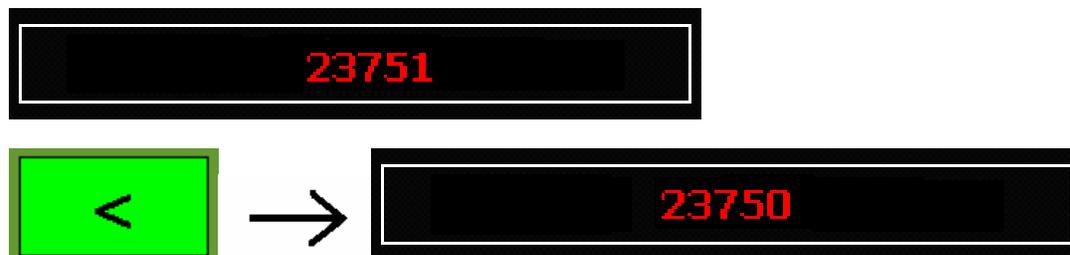
Portal Downtime System

COUNTER

Touch the COUNTER button to display or hide the COUNTER panel.



Use the "<" button to decrease the Cycles Counter when desired.



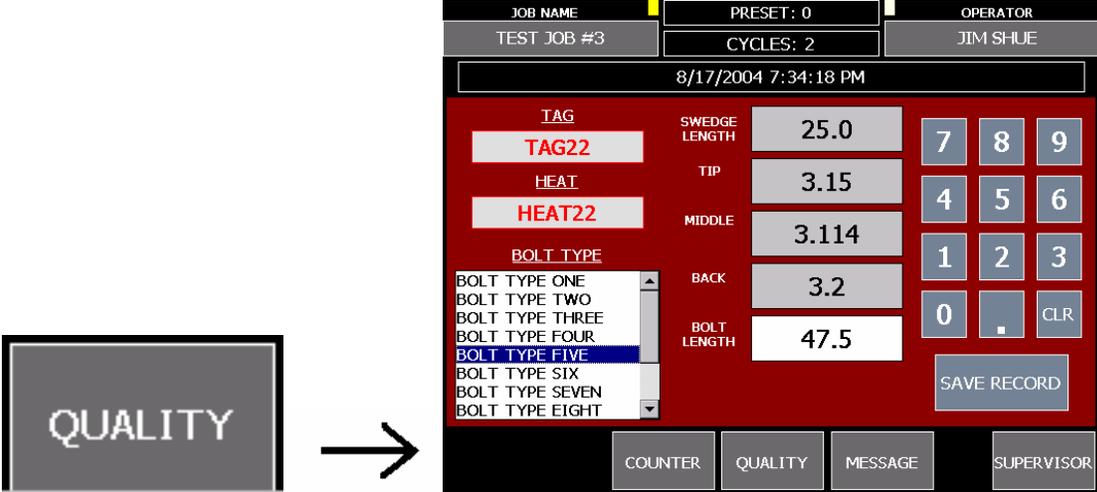
Touching RESET zeros the Parts Counter and clears all CURRENT values.



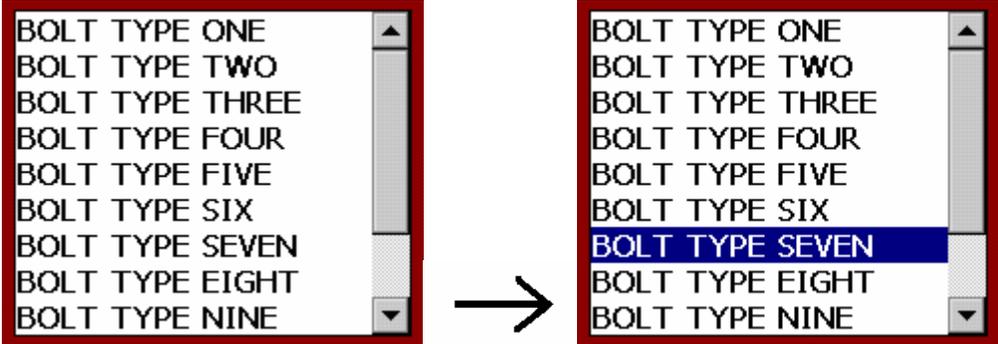
Portal Downtime System

QUALITY

Touch the QUALITY button to display or hide the Quality Panel.



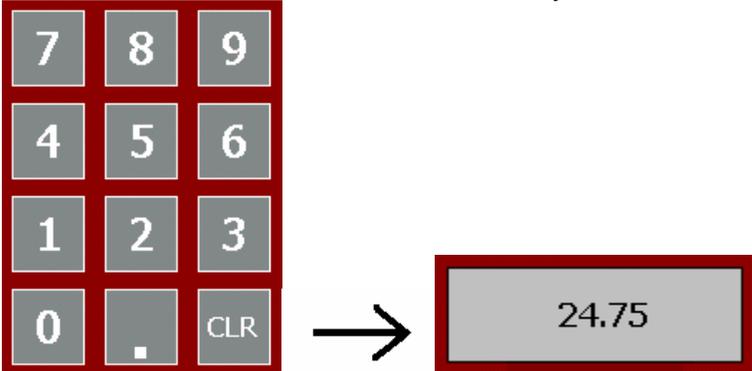
Touch the BOLT TYPE list to select a bolt name.



Touching a QUALITY button clears its value.



Use the KEYPAD to enter a new Quality Value.



Portal Downtime System

The SAVE RECORD button will record the Quality Record if all values have been entered. You must complete all quality fields and select a Bolt Type.

SAVE RECORD

→

JOB NAME None		PRESET: 0 CYCLES: 2	OPERATOR Unknown		
8/17/2004 7:34:18 PM					
NO MATERIAL	BAD MATERIAL	MATERIAL HANDLING	WAITING FOR FORKLIFT		
MECHANICAL TROUBLE	ELECTRICAL TROUBLE	TOOL TROUBLE	OTHER		
CHANGE GRIPPER BLOCKS	BLOCKS LOOSE	CHANGE BLOCKS	NOT USED		
CHANGE DIES	LOOSE HEAD	NO AIR PRESSURE	NOT USED		
BREAK	LUNCH	MEETING	NOT USED		
EDIT	COUNTER	QUALITY	DOWNTIME	MESSAGE	SUPERVISOR

THREADER

JOB NAME TEST JOB #3		PRESET: 0 CYCLES: 2	OPERATOR JIM SHUE		
8/17/2004 7:34:18 PM					
TAG	BOLT LENGTH	45.0	7	8	9
HEAT	THREAD GAUGE	1.22	4	5	6
BOLT TYPE	THREAD LENGTH	12.5	1	2	3
BOLT TYPE ONE BOLT TYPE TWO BOLT TYPE THREE BOLT TYPE FOUR BOLT TYPE FIVE BOLT TYPE SIX BOLT TYPE SEVEN BOLT TYPE EIGHT	TIP SIZE	1.44	0	.	CLR
	MIDDLE SIZE	1.43	SAVE RECORD		
	BACK SIZE	1.5			
COUNTER		QUALITY	MESSAGE	SUPERVISOR	

SHEAR

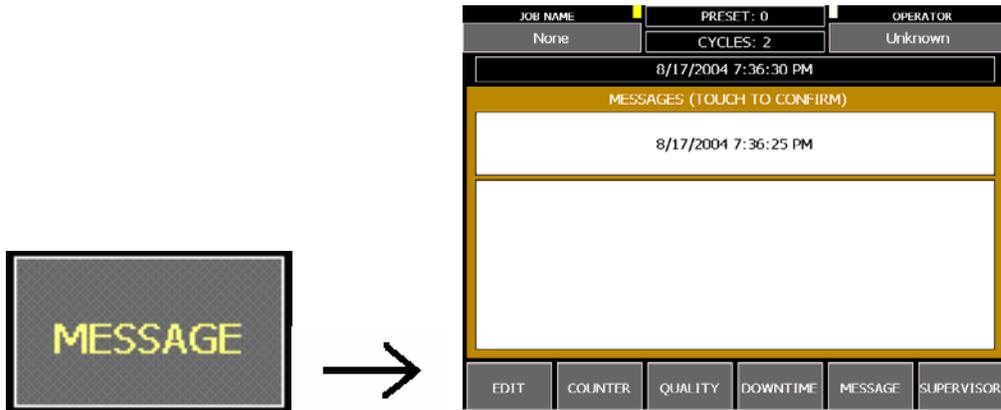
Portal Downtime System

JOB NAME	PRESET: 0	OPERATOR
TEST JOB #3	CYCLES: 2	JIM SHUE
8/17/2004 7:34:18 PM		
TAG	BOLT LENGTH	1.5
TAG-1		7 8 9
HEAT		4 5 6
HEAT-1		1 2 3
BOLT TYPE		0 . CLR
BOLT TYPE ONE		
BOLT TYPE TWO		
BOLT TYPE THREE		
BOLT TYPE FOUR		
BOLT TYPE FIVE		
BOLT TYPE SIX		
BOLT TYPE SEVEN		
BOLT TYPE EIGHT		
SAVE RECORD		
COUNTER	QUALITY	MESSAGE
SUPERVISOR		

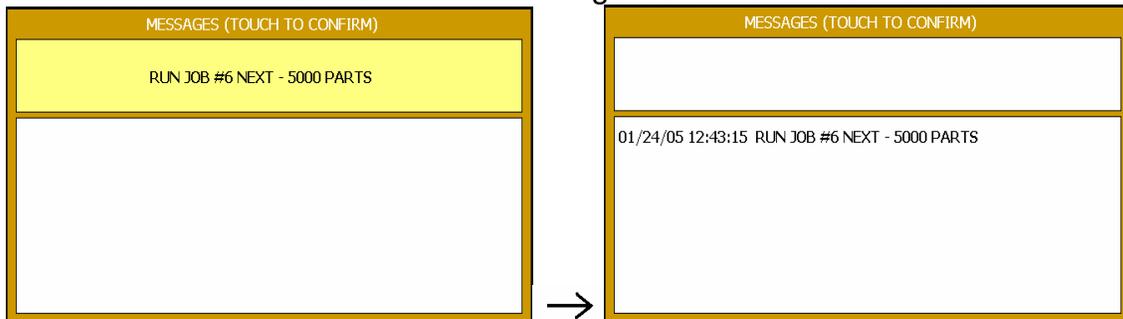
Portal Downtime System

MESSAGE

Touch the MESSAGE button to display or hide the Message Panel. The MESSAGE button will turn BROWN when a new message has been received. A new message is displayed at the top of the panel and recent messages are shown in on the lower display.

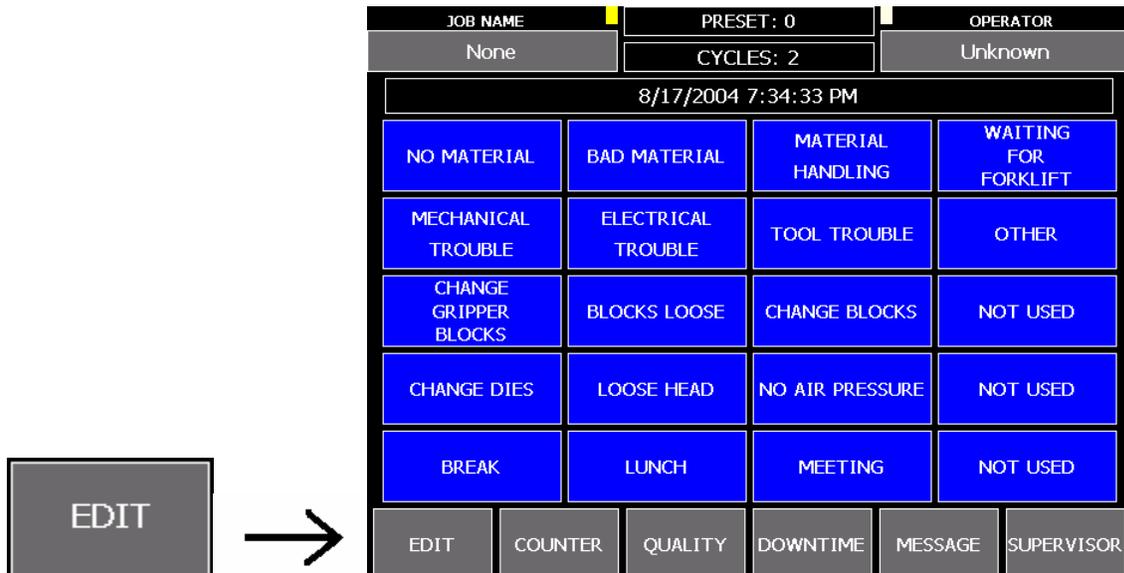


Touch the NEW MESSAGE to acknowledge it and move it to the list box.

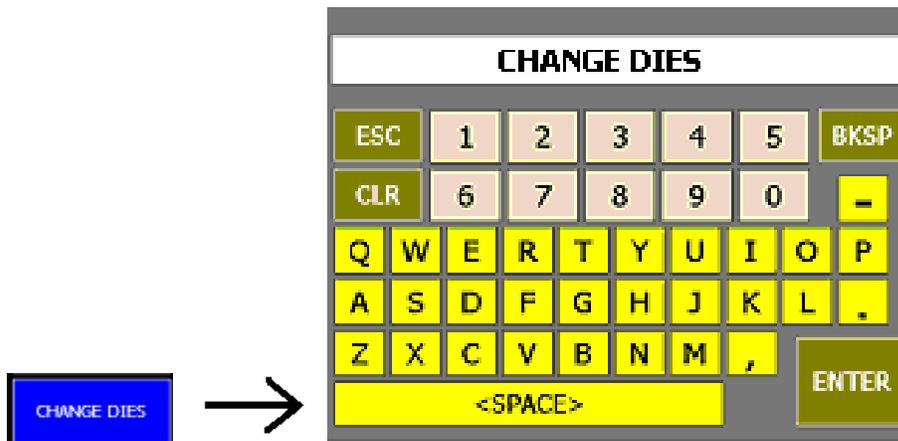


Portal Downtime System

EDIT DOWNTIME REASONS



Touching the EDIT button, when visible, **locks all other buttons**, turns the **DOWNTIME REASON** blue and allows you to edit the reasons.



Touch a blue downtime button to open the keyboard and enter the new reason.

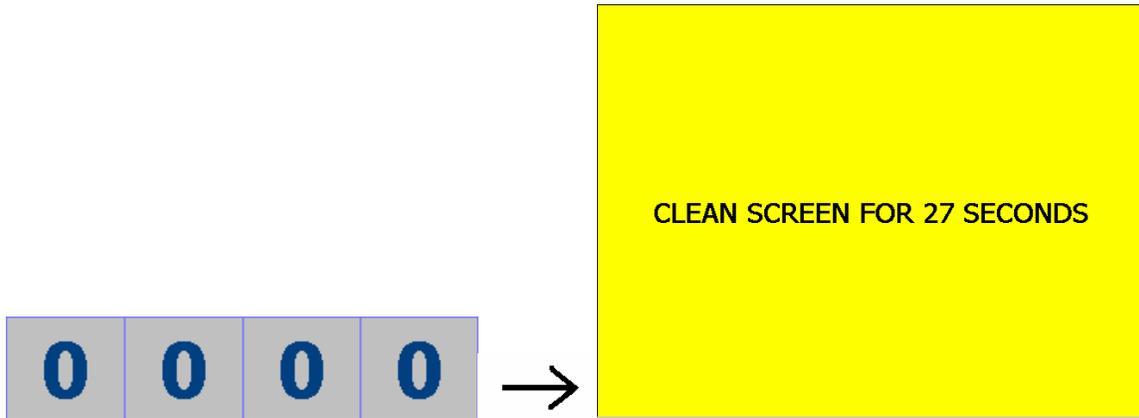
Portal Downtime System

SUPERVISOR KEYPAD

JOB NAME		PRESET: 0	OPERATOR		
None		CYCLES: 0	BRAD		
8/17/2004 7:47:50 PM					
NO MATERIAL	BAD MATERIAL	MATERIAL HANDLING	7	8	9
MECHANICAL TROUBLE	ELECTRICAL TROUBLE	TOOL TROUBLE	4	5	6
CHANGE GRIPPER BLOCKS	BLOCKS LOOSE	CHANGE BLOCKS	1	2	3
CHANGE DIES	LOOSE HEAD	NO AIR PRESSUR	0	.	CLR
BREAK	LUNCH	MEETING	ESC		
EDIT	COUNTER	QUALITY	DOWNTIME	MESSAGE	SUPERVISOR

Portal Downtime System

CLEAN SCREEN



Touch four zeros on the SUPERVISOR KEYPAD to open the CLEAN SCREEN panel. This disables the Touch Screen and allows you to wipe off the screen without pressing any buttons.

Portal Downtime System

SUPERVISOR

PORTAL SUPERVISOR
VERSION 2.40

SHEAR-1

NETWORKED JOB CHANGE MESSAGING

REASON EDITS OPERATOR CHANGE COUNTER RESET

UNIT TYPE	# OF BUTTONS	DOWNTIME DELAY	CYCLE MULTIPLIER	QUALITY INTERVAL
SHEAR	5	10	1	5000
	EDIT	EDIT	EDIT	EDIT

CLEAR MESSAGES UPLOAD FROM PC KEYPAD RUN PORTAL

SHEAR-1

This button names the unit.

NETWORKED

This button toggles network access.

JOB CHANGE

Use this button to allow access to the Job Panel.

MESSAGING

Use this button to allow access to the Message Panel.

REASON EDITS

Toggles access to the Reason Edit feature.

Portal Downtime System

OPERATOR CHANGE

Use this button to allow access to the Operator Panel.

COUNTER RESET

Toggles access to the Counter Reset button.

UNIT TYPE

SHEAR

UNIT TYPE

SWAGER

UNIT TYPE

THREADER

Selects Unit Type.

OF
BUTTONS

5

Selects the number of Reason buttons (multiples of five).

DOWNTIME
DELAY

10

This sets the number of minutes of stoppage to wait before initiating a Downtime Event.

CYCLE
MULTIPLIER

1

The cycle count is multiplied by this factor to reflect true Parts Count.

QUALITY
INTERVAL

5000

This is the number of cycles to break on for a quality check.

Portal Downtime System



Clears the message log.



Uploads maintenance files from the PC.



Opens the keypad.



Returns to the Portal main screen.

Portal Downtime System

PORTPaI: MAIN SCREEN

PortPAL Portal Monitor

ONE	PORTAL Stopped	THREE	FOUR	PRESS01
SIX	SEVEN	EIGHT	NINE	TEN ...polling
ELEVEN	TWELVE	THIRTEEN	FOURTEEN	FIFTEEN
SIXTEEN	SEVENTEEN	EIGHTEEN	NINETEEN	TWENTY
TWENTY-ONE	TWENTY-TWO	TWENTY-THREE	TWENTY-FOUR	TWENTY-FIVE

UNIT: **PORTAL** SHEAR

JOB / BADGE: **OLDTEST** JIM SHUE

DATE: **1/1/2000 7:32:49 PM** PPH: **60**

DATE STARTED: **1/1/2000 6:26:00 P** 1/1/2000 6:26:00 P

AVAILABLE HOURS: **44585.07** 44585.07

ACTUAL CYCLES: **7** 7

CYCLES / HOUR: **0.00** 0.00

ACTUAL HOURS: **44584.45** 44584.45

% EFFICIENCY: **0.00 %** 0.00 %

DOWNTIME: **37** 37

Badge	Heat	Job	RecordDate	Tag	Unit	UnitType	Weight
JIM SHUE	HEAT-1	OLDTEST	1/1/2000 7:29	TAG-1	PORTAL	SHEAR	2000

SETUP JOB MESSAGE QUALITY DOWNTIME END



Unit is ACTIVE and RUNNING.



Unit is ACTIVE and DOWN.



Unit is being POLLED for status.



Unit is OFFLINE or INACTIVE



Communication has encountered an ERROR.

Portal Downtime System



Unit's CYCLE COUNT \geq to 95% of BATCH PRESET.
 PORTPal: JOB HISTORY

PortPAL Portal Monitor

ONE	PORTAL Stopped	THREE	FOUR	PRESS01	UNIT: PORTAL	SHEAR
SIX	SEVEN	EIGHT	NINE	TEN ...polling	JOB / BADGE: OLDTEST	JIM SHUE
ELEVEN	TWELVE	THIRTEEN	FOURTEEN	FIFTEEN	DATE: 1/1/2000 7:32:49 PM	PPH: 60
SIXTEEN	SEVENTEEN	EIGHTEEN	NINETEEN	TWENTY	DATE STARTED: 1/1/2000 6:26:00 P	1/1/2000 6:26:00 P
TWENTY-ONE	TWENTY-TWO	TWENTY-THREE	TWENTY-FOUR	TWENTY-FIVE	AVAILABLE HOURS: 44585.07	44585.07
					ACTUAL CYCLES: 7	7
					CYCLES / HOUR: 0.00	0.00
					ACTUAL HOURS: 44584.45	44584.45
					% EFFICIENCY: 0.00 %	0.00 %
					DOWNTIME: 37	37

Badge	Heat	Job	RecordDate	Tag	Unit	UnitType	Weight
JIM SHUE	HEAT-1	OLDTEST	1/1/2000 7:29	TAG-1	PORTAL	SHEAR	2000

SETUP JOB MESSAGE QUALITY DOWNTIME END



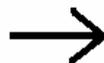
PORTPal: QUALITY

PortPAL Portal Monitor

ONE	PORTAL Stopped	THREE	FOUR	PRESS01	UNIT: PORTAL	SHEAR
SIX	SEVEN	EIGHT	NINE	TEN	JOB / BADGE: OLDTEST	JIM SHUE
ELEVEN	TWELVE	THIRTEEN	FOURTEEN	FIFTEEN ...polling	DATE: 1/1/2000 7:33:49 PM	PPH: 60
SIXTEEN	SEVENTEEN	EIGHTEEN	NINETEEN	TWENTY	DATE STARTED: 1/1/2000 6:26:00 P	1/1/2000 6:26:00 P
TWENTY-ONE	TWENTY-TWO	TWENTY-THREE	TWENTY-FOUR	TWENTY-FIVE	AVAILABLE HOURS: 44585.08	44585.08
					ACTUAL CYCLES: 7	7
					CYCLES / HOUR: 0.00	0.00
					ACTUAL HOURS: 44584.45	44584.45
					% EFFICIENCY: 0.00 %	0.00 %
					DOWNTIME: 37	37

Badge	UnitType	Heat	Job	QC1	QC2	QC3	QC4	QC5	QC6	RecordDate	Shift	Tag
JIM SHUE	BOLTTYPE	R2	OLDTEST	123.4	0	0	0	0	0	1/1/2000 6:50	2	RT

SETUP JOB MESSAGE QUALITY DOWNTIME END



PORTPal: DOWNTIME

Portal Downtime System

PortPAL Portal Monitor

UNIT: **PORTAL** **SHEAR**

JOB / BADGE: **OLDTEST** **JIM SHUE**

DATE: **1/1/2000 7:34:10 PM** PPH: **60**

DATE STARTED: **1/1/2000 6:26:00 P** **1/1/2000 6:26:00 P**

AVAILABLE HOURS: **44585.08** **44585.08**

ACTUAL CYCLES: **7** **7**

CYCLES / HOUR: **0.00** **0.00**

ACTUAL HOURS: **44,584.46** **44,584.46**

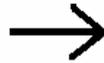
% EFFICIENCY: **0.00 %** **0.00 %**

DOWNTIME: **37** **37**

Badge	Description	Downtime	Heat	Job	Notes	RecordDate	Shift	Tag	Unit
JIM SHUE	CHANGE MATER	37	R2	OLDTEST		1/1/2000 7:28:56	2	R1	PORTA
JIM SHUE	QA HOLD: COSM	0	R2	OLDTEST		1/1/2000 6:51:16	2	R1	PORTA

Navigation Bar: **SETUP** **JOB** **MESSAGE** **QUALITY** **DOWNTIME** **END**

DOWNTIME



PORTPal: MESSAGE DISPLAY

PortPAL Portal Monitor

UNIT: **PORTAL** **SHEAR**

JOB / BADGE: **OLDTEST** **JIM SHUE**

DATE: **1/1/2000 7:33:32 PM** PPH: **60**

DATE STARTED: **1/1/2000 6:26:00 P** **1/1/2000 6:26:00 P**

AVAILABLE HOURS: **44585.07** **44585.07**

ACTUAL CYCLES: **7** **7**

CYCLES / HOUR: **0.00** **0.00**

ACTUAL HOURS: **44,584.45** **44,584.45**

% EFFICIENCY: **0.00 %** **0.00 %**

DOWNTIME: **37** **37**

ENTER NEW MESSAGE

SEND MESSAGE

RECENT MESSAGES

Message

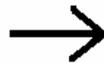
TEST MESSAGE

2/1/2005 10:29:42 AM SWAGER-1: test

2/1/2005 10:46:33 AM PORTAL: TEST

Navigation Bar: **SETUP** **JOB** **MESSAGE** **QUALITY** **DOWNTIME** **END**

MESSAGE



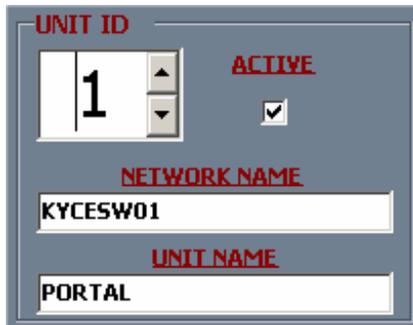
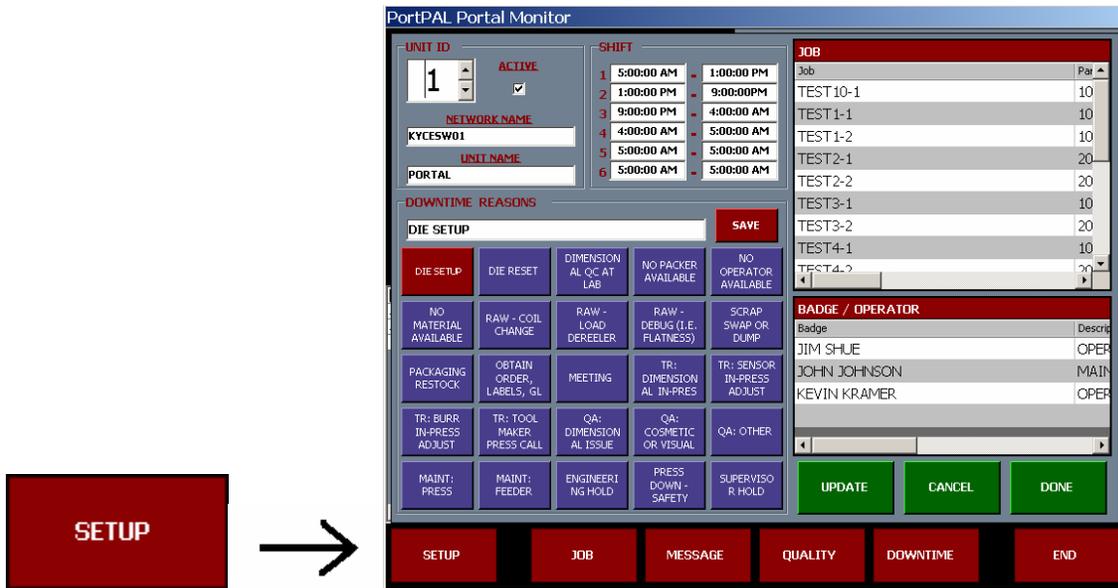
Click on the Unit to send a message to.
Click on the Message Panel and type in the desired message.

ENTER NEW MESSAGE

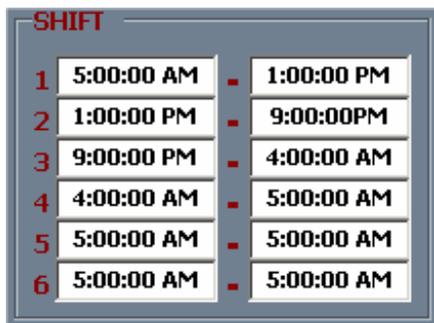
SEND MESSAGE

Click SEND MESSAGE to route it to the selected unit.

Portal Downtime System



Select the unit by number. Name it or provide an IP address. Toggle polling.



Edit shift times.

Portal Downtime System

DOWNTIME REASONS

DIE SETUP **SAVE**

DIE SETLP	DIE RESET	DIMENSIONAL QC AT LAB	NO PACKER AVAILABLE	NO OPERATOR AVAILABLE
NO MATERIAL AVAILABLE	RAW - COIL CHANGE	RAW - LOAD DEREELEER	RAW - DEBUG (I.E. FLATNESS)	SCRAP SWAP OR DUMP
PACKAGING RESTOCK	OBTAIN ORDER, LABELS, GL	MEETING	TR: DIMENSIONAL IN-PRES	TR: SENSOR IN-PRESS ADJUST
TR: BURR IN-PRESS ADJUST	TR: TOOL MAKER PRESS CALL	QA: DIMENSIONAL ISSUE	QA: COSMETIC OR VISUAL	QA: OTHER
MAINT: PRESS	MAINT: FEEDER	ENGINEERING HOLD	PRESS DOWN - SAFETY	SUPERVISOR HOLD

Edit downtime reasons.

JOB	
Job	Par
TEST10-1	10
TEST1-1	10
TEST1-2	10
TEST2-1	20
TEST2-2	20
TEST3-1	10
TEST3-2	20
TEST4-1	10
TEST4-2	20

Set up Jobs for download to each units.

BADGE / OPERATOR	
Badge	Descrip
JIM SHUE	OPER
JOHN JOHNSON	MAIN
KEVIN KRAMER	OPER

List operators for each unit.



Commit pending changes.

Portal Downtime System



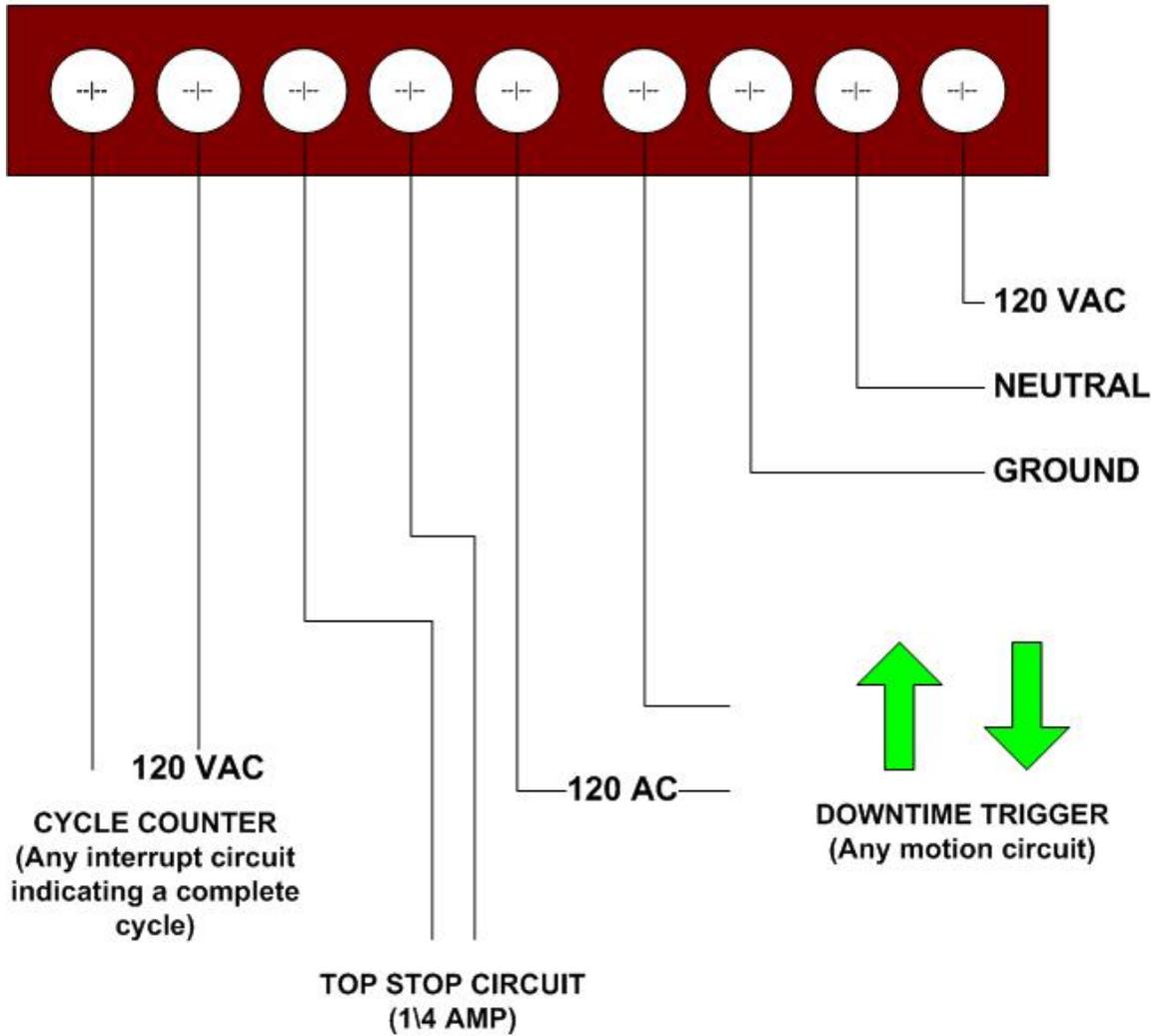
Cancel pending changes.



Close the SETUP panel and resume polling.

Portal Downtime System

PORTAL DOWNTIME CONNECTIONS



Portal Downtime System

PORTAL DATABASE STRUCTURE

Table: BADGE – Operator's Name by Unit

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>Badge</u>	<u>Text</u>	<u>50</u>
<u>UnitName</u>	<u>Text</u>	<u>50</u>
<u>Description</u>	<u>Text</u>	<u>255</u>

Table: DOWNTIME – Events recorded by Date & Time

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>RecordDate</u>	<u>Text</u>	<u>25</u>
<u>Downtime</u>	<u>Long Integer</u>	<u>4</u>
<u>Description</u>	<u>Text</u>	<u>255</u>
<u>Job</u>	<u>Text</u>	<u>50</u>
<u>Unit</u>	<u>Text</u>	<u>35</u>
<u>UnitType</u>	<u>Text</u>	<u>50</u>
<u>Badge</u>	<u>Text</u>	<u>35</u>
<u>Notes</u>	<u>Text</u>	<u>255</u>
<u>Shift</u>	<u>Integer</u>	<u>2</u>
<u>Tag</u>	<u>Text</u>	<u>50</u>
<u>Heat</u>	<u>Text</u>	<u>50</u>

Table: DOWNTIMEREASONS – Maintenance table or uploading event reasons to a Unit

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>Reason</u>	<u>Integer</u>	<u>2</u>
<u>Description</u>	<u>Text</u>	<u>255</u>

Table: JOB – Tabled by Unit Name, this data is uploaded to each unit.

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>Job</u>	<u>Text</u>	<u>50</u>
<u>UnitName</u>	<u>Text</u>	<u>50</u>
<u>PPH</u>	<u>Long Integer</u>	<u>4</u>
<u>PartsToRun</u>	<u>Long Integer</u>	<u>4</u>

Table: JOBHISTORY – Recorded by date & time, contains records of each job change or material change.

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>RecordDate</u>	<u>Text</u>	<u>50</u>
<u>Job</u>	<u>Text</u>	<u>50</u>
<u>Badge</u>	<u>Text</u>	<u>35</u>
<u>Unit</u>	<u>Text</u>	<u>50</u>
<u>UnitType</u>	<u>Text</u>	<u>50</u>
<u>Tag</u>	<u>Text</u>	<u>50</u>
<u>Heat</u>	<u>Text</u>	<u>50</u>
<u>Weight</u>	<u>Single</u>	<u>4</u>

Table: MESSAGE – Logs messages sent to the Units

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>Message</u>	<u>Text</u>	<u>255</u>

Portal Downtime System

Table: QUALITY – Logs quality information. When a unit reaches a preset cycle count, the unit stops and requires a quality record entry. Operators may also enter a quality record at any time. The QC values are defined by unit type.

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>RecordDate</u>	<u>Text</u>	<u>25</u>
<u>Unit</u>	<u>Text</u>	<u>35</u>
<u>UnitType</u>	<u>Text</u>	<u>50</u>
<u>Job</u>	<u>Text</u>	<u>50</u>
<u>Badge</u>	<u>Text</u>	<u>50</u>
<u>Shift</u>	<u>Integer</u>	<u>2</u>
<u>Tag</u>	<u>Text</u>	<u>50</u>
<u>Heat</u>	<u>Text</u>	<u>50</u>
<u>BoltType</u>	<u>Text</u>	<u>50</u>
<u>QC1</u>	<u>Single</u>	<u>4</u>
<u>QC2</u>	<u>Single</u>	<u>4</u>
<u>QC3</u>	<u>Single</u>	<u>4</u>
<u>QC4</u>	<u>Single</u>	<u>4</u>
<u>QC5</u>	<u>Single</u>	<u>4</u>
<u>QC6</u>	<u>Single</u>	<u>4</u>

SHEAR

QC1 – SHEAR LENGTH

QC2 – BACKCUT

SWAGER

QC1 : SWEDGE LENGTH

QC2 : TIP

QC3 : MIDDLE

QC4 : BACK

QC5 : BOLT LENGTH

THREADER

QC1 - BOLT LENGTH

QC2 - THREAD GAUGE

QC3 - THREAD LENGTH

QC4 - TIP SIZE

QC5 - MIDDLE SIZE

QC6 - BACK SIZE

Portal Downtime System

Table: SHIFT – Maintenance table of shift times.

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>Prime</u>	<u>Byte</u>	<u>1</u>
<u>Start1</u>	<u>Text</u>	<u>11</u>
<u>Stop1</u>	<u>Text</u>	<u>11</u>
<u>Start2</u>	<u>Text</u>	<u>11</u>
<u>Stop2</u>	<u>Text</u>	<u>11</u>
<u>Start3</u>	<u>Text</u>	<u>11</u>
<u>Stop3</u>	<u>Text</u>	<u>11</u>
<u>Start4</u>	<u>Text</u>	<u>11</u>
<u>Stop4</u>	<u>Text</u>	<u>11</u>
<u>Start5</u>	<u>Text</u>	<u>11</u>
<u>Stop5</u>	<u>Text</u>	<u>11</u>
<u>Start6</u>	<u>Text</u>	<u>11</u>
<u>Stop6</u>	<u>Text</u>	<u>11</u>

Table: UNIT – This table contains current status information and is updated each time the unit is polled.

<u>Name</u>	<u>Type</u>	<u>Size</u>
<u>Index</u>	<u>Byte</u>	<u>1</u>
<u>Computer</u>	<u>Text</u>	<u>50</u>
<u>Unit</u>	<u>Text</u>	<u>50</u>
<u>UnitType</u>	<u>Text</u>	<u>50</u>
<u>Active</u>	<u>Byte</u>	<u>1</u>
<u>JobStarted</u>	<u>Text</u>	<u>25</u>
<u>TotalAvailable</u>	<u>Single</u>	<u>4</u>
<u>TotalDowntime</u>	<u>Single</u>	<u>4</u>
<u>TotalCycles</u>	<u>Single</u>	<u>4</u>
<u>CurrentStarted</u>	<u>Text</u>	<u>25</u>
<u>CurrentAvailable</u>	<u>Single</u>	<u>4</u>
<u>CurrentDowntime</u>	<u>Single</u>	<u>4</u>
<u>CurrentCycles</u>	<u>Single</u>	<u>4</u>
<u>PPH</u>	<u>Single</u>	<u>4</u>
<u>Batch</u>	<u>Single</u>	<u>4</u>
<u>RecordDate</u>	<u>Text</u>	<u>25</u>
<u>Job</u>	<u>Text</u>	<u>50</u>
<u>Badge</u>	<u>Text</u>	<u>35</u>