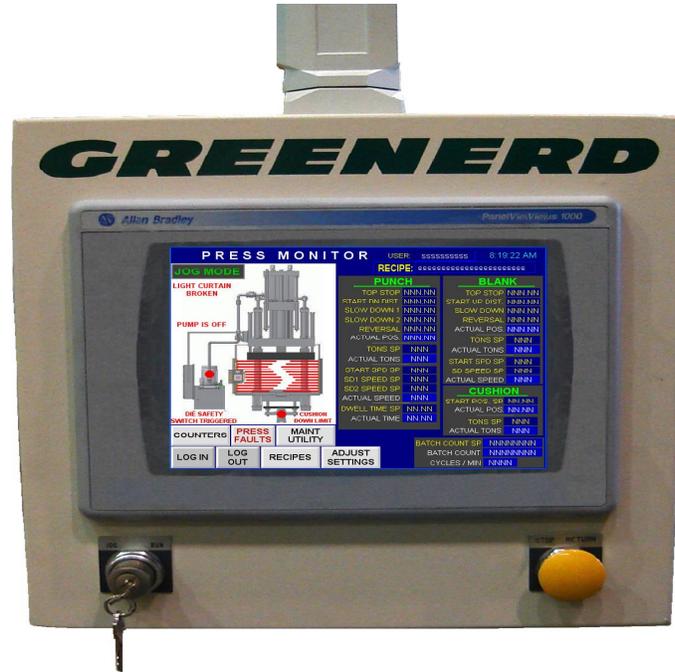


# The Ultimate Productivity Option . . . Greenerd's Touch Screen Press Control

*Greenerd's new touch screen control lets you maximize the productivity of your Greenerd press by dramatically simplifying and speeding press setup, fine tuning, and changeovers.*

*All press set points (settings such as top stop, slowdown and reversal) are easily changed at the touch of a finger, eliminating the need for time-consuming manual adjustments. The control's artificial intelligence even rejects incorrect settings, preventing costly accidents. On request, the screen displays all current settings as well as actual operating data. This information eliminates guesswork and the need to take manual measurements, and minimizes the time needed to fine tune setup parameters. An auto set point feature even lets you establish set points based on actual press positions arrived at visually.*

*Once you've finalized your setup parameters, you can store them in the control's memory for immediate retrieval and future use. With standard capacity for up to 100 jobs, this expandable program library speeds changeovers and lets most press operators set up jobs themselves.*



## **Faster Initial Setups**

By displaying all press settings on a single screen, the touch screen control makes it easy to establish change, or verify set points. The Press Monitor screen lets you review actual stroke parameters and press performance while the press is in operation.

An auto set point feature lets you establish set points visually. Just jog the press to the desired position, touch the auto set point indicator, and the control automatically stores the actual press position as the new set point, eliminating the need to take measurements and enter the values.

## **Faster, Easier Adjustments**

On most presses, making adjustments involves precise measurements, some guesswork, and several tries. Adjustments with a touch screen control, however, are fast and easy and can be made with greater precision. The touch screen display actual position information and exact set points, eliminating all too-common measurement and math mistakes.

## **Precise Control**

The touch screen control provides exceptionally precise control. Ram position is tracked by an absolute zero linear transducer, which never needs calibrating. The control can be easily integrated with a precision digital control system, which enables actual position accuracies of  $\pm 0.001$ " and reversal at  $\pm 1\%$  or specified tonnage.

## **Speeds Repeat Setups**

Program stored in the control memory can be called up instantly using the Program Utilities function. If the job is an exact rerun of a prior job, the program can be run as is. If minor changes or modifications are required, the program can be quickly and easily edited for one-time use or edited and then stored for future reuse.

## **Stores Up to 100 Programs or More**

The touch screen control's memory stores up to 100 press programs including all selectable press parameters and can be easily expanded to double capacity.

## **Ensures Consistency and Repeatability**

The touch screen control's ability to accept and faithfully execute precise press parameters ensures exceptional consistency and repeatability. It also eliminates most of the trial runs associated with setting up the same job in the future.

## **Provides Personnel Flexibility**

With Greenerd's touch screen control, press performance is consistent and repeatable regardless of the operator. Consequently, it affords manufacturers a high degree of flexibility when it comes to staffing and work assignments. In many cases, the press operator can set up his own jobs, freeing up the lead person or supervisor for other more demanding tasks.

## **Collects Data for Setting Standards**

The touch screen control automatically counts press cycles, tracks time, and calculates the production rate in cycles per minute. This information can be invaluable in establishing fair and accurate production and piecework standards.

# User-Friendly Menu Provides Access to All Setup, Monitoring, and Utility Functions

Greenerd's touch screen control provides fingertip access to a simple, step-by-step menu from which the operator can configure press parameters; monitor actual press operations; and create, store, recall, and edit programs.

To access the main sub menus, the operator simply follows screen prompts. An on-line Help function is available on every screen and provides additional information, instructions, or suggestions.

The following ladder chart outlines the capabilities and functions available under each Main Menu selection.

Control features and displays can be customized to meet specific user requirements.

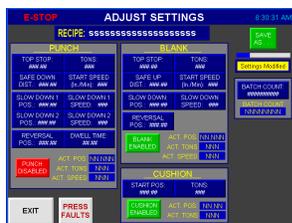
## Screen Description

## Typical Image

## Actual Screen Data/Information

### □ PRESS SETUP

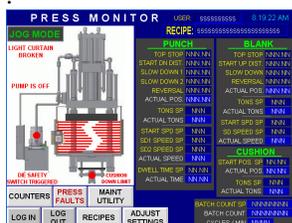
Allows the users to establish or change press settings. Displays current settings.



- Top Stop
  - Slowdown
  - Reversal
  - Tonnage
  - Dwell Time
  - Ram Speed Control
- Optional:
- Auxiliary set points
  - Stock Feed
  - Air Eject
  - Pin Position
  - User specific settings

### □ PRESS MONITOR

Allows the user to monitor actual. Press performance and parameter values while the press is in operation



- Platen Position
  - Reversal Position
  - Actual Tonnage
  - Ram Speed
  - Press Cycles Complete
  - Production Rate
- Optional:
- Fault Indication
  - Light Curtain Status
  - Program name
  - Platen Animation

### □ PROGRAM UTILITIES

Allows the user to store and retrieve press parameters by program number.



- Store Press Parameters
  - Retrieve Press Parameters
  - Select/specify Program Names
  - Copy/Delete/Rename Programs
- (All parameters are password protected except the ability to retrieve programs.)

### □ I/O MONITOR

Lets the operator review which inputs and outputs are being activated while the press is operating. This capability is an invaluable tool for troubleshooting and process evaluation.



Note: Access to this function is controlled by password protection.

### □ HELP

Provides user with additional explanations or instructions. Decreases the learning curve for new operators.

### □ SELF-DIAGNOSTICS

This feature provides optional alarms to warn the operator of potentially damaging press conditions such as overheating, clogged oil filter, low oil level, or other user specified conditions other user specified conditions.

Greenerd Press & Machine Company reserves the right to make engineering improvements and changes without notice.