



Chemical Injection Technologies

Installation/Service Bulletin

SUPERIOR VacuFeed™ Liquid Chemical Feed Systems Appendix C - Special AutoValve Programming V2.40

When the SUPERIOR VacuFeed™ is supplied with an AutoValve Automatic positioning valve, a special version of the software programming is used. This program is identical in all respects to the standard gas feed AutoValve versions, except that three (3) parameters have been added to the PROGRAMMING section of the menu. The program allows the valve to automatically enter a "Cleaning" sub-routine, independent of the calibration or other valve settings. This cleaning routine periodically opens the valve to a pre-set, programmable, position to allow impurities that may accumulate around the valve in low feed rate situations to flush out of the valve, and to allow any "off-gassed" air that has coalesced in the valve or regulator to flow out of the system with the increased liquid velocity. The valve then returns to the pre-cleaning position and resumes automatic control operation.

Note: In FLOW control mode, the F1 (ESC) key on the PROGRAMMING menu is replaced with F1 (PRM), to access the liquid feed programming parameters. In COMPOUND LOOP and RESIDUAL control modes, the liquid feed parameters have been added to the existing program parameters.

The following menu choices (parameters) have been added:

LQD CLR = "Liquid Clear Period"

Defines the number of hours between "cleanings".

0= Off

Set from 1-168 hours.

CLR HOLD = "Liquid Clear Hold Time"

Sets the amount of time, in seconds, that the valve remains in the fully open position. A count-down timer appears when the cleaning cycle is activated.

1 -240 Seconds

CLEAN POS = "Liquid Clear Valve Position"

Sets the position to which the valve will open during the clearing cycle. Use UP & DWN function keys to run the valve to the desired position for clearing. The display will indicate a value for the valve position which is shown as 200 positions per revolution of the motor, from the valve zero reference. **NOTE:** care must be exercised when setting the valve open position, since this is independent of any calibration or factory default settings - operator must watch the valve position indicator on the valve shaft, and must not drive the valve beyond the top of the indicator slot in the clear plastic plate or valve damage may occur.

When the settings have been made, press ESC (F4) to return to the Password setting menu and then on to the main menu. When the system is set in RUN mode, the standard menus will appear, along with a menu offering the option to clean the valve immediately. If the operator chooses to run the clearing routine, the valve will open to the set position for the desired period of time, and then return to automatic control. If a manual clearing cycle is desired at a time between the set interval periods, just return to the main menu, press RUN (F4) and press YES to immediately enter the clearing cycle before going back to Automatic control.