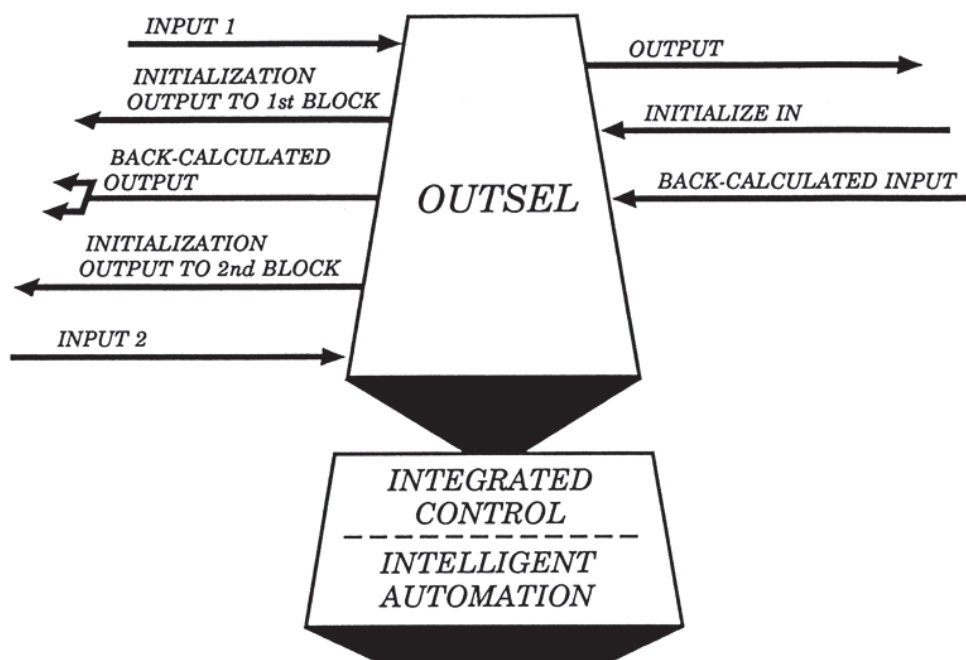


Output Selection (OUTSEL) Block



The Output Selection (OUTSEL) Block provides high select or low select of two outputs from upstream controllers to be used as the final output to the process.

OVERVIEW

The OUTSEL block provides the capability of selecting the desired output signal to the process from the higher or lower of two output signals from the upstream blocks, i.e., PID/X/E/XE/A, RATIO, BIAS, or OUTSEL blocks. OUTSEL is often used in constraint control schemes. The OUTSEL block clamps the selected input value between the high and low output limits and stores it as the output of the block.

The selected output value is used as part of the back calculation of the two inputs. The BCALCO output should be connected to the upstream “back-calculation-input” parameter BCALCI (and FBK) of each control block in a cascaded scheme to provide bumpless initialization and avoid integral windup.

Depending on the situation (input unselected, cascade open, or OUTSEL or downstream block output limited), the block provides separate logic signals, INIT01 and INIT02, to each of the two upstream blocks.

STANDARD FEATURES

- ▶ Auto/Manual control of the output
- ▶ Output clamping in Auto mode
- ▶ Automatic cascade handling that includes input/output connection parameters to provide proper anti-windup coordination and initialization of cascade schemes
- ▶ Bad output detection

OPTIONS

- ▶ Output clamping in manual mode
- ▶ Initial auto/manual state