

ABOUT THE CONTROL STRATEGY, PROCESS MODEL AND TUNING PACKAGES

As the name implies, a control strategy, process model and tuning package specifies a control strategy, references a particular process model, and contains predefined controller tuning parameters and control options. When it is opened, all that is required to have a fully functional control loop demonstration is to put the controllers in the automatic mode. This is useful for seminar instruction where time is limited, yet demonstration of various control strategy behavior is desired.

The available packages, the control strategies and the process models they reference are:

PACKAGE	CONTROL STRATEGY	PROCESS MODEL	REMARKS
Feedback.stg	Feedback	Generic	Well-tuned
Feedbck1.stg	Feedback	Generic	Poorly-tuned
DualFdbk.stg	Dual Feedback	Generic1	Minimal interaction between loops
Ratio.stg	Ratio	RatioFlo	
Cascade.stg	Cascade	Generic	
Ffwd_Add.stg	Feedforward-Add	Heater	
Ffwd_Mul.stg	Feedforward-Multiply	Heater	
Override.stg	Override	Generic	
DecupFwd.stg	Decoupling (Fwd)	Generic	Tuned for both controllers in Auto
DecupInv.stg	Decoupling (Inv)	Generic	
SmithPrd.stg	Smith Predictor	Generic	
ModSmPrd.stg	Modified Smith Predictor	Generic	
IMC.stg	Internal Model Control	Generic	
Dahlin.stg	Dahlin's Algorithm	Generic	
ZN_Tune	Feedback	Generic2	Approximately the same results for open-loop and closed-loop tuning