

# MAX APC

Uses Your Controllers Existing APC Model!

[CTC]



## THE WORLD'S FIRST ADAPTIVE *PREDICTIVE CONTROLLER!*

Options include using any or all valve positions  
as Independent Variables

### New Features Include:

**Built in Calculations (Soft Inferential)**

**Gain Matrix Analysis (Included in UPID)**



The new MAX APC can replace most MPC controllers with a minimal amount of engineering work. Load the existing MPC set point model into max apc, configure and run! Since the MAX APC engine is a modernized version, it runs up to 10 times faster than earlier MPC's.

Options include *using any or all Valve Positions as independent variables* with CTC's patented Hybrid PV/Set Point model option!



**MAX APC** is the latest version of **Dr. Cutler's APC Algorithm**. Cutler APC products are Field proven, patent protected and backwards compatible to easily use your existing controller's model.

- \* **Adaptive Transformations:** The transformations in the controller are automatically adapted as the upstream and downstream pressures change.
- \* **Stiction Move:** The transform output is passed through an algorithm that further corrects the output change to account for Stiction.
- \* **PV-based modeling:** The models in the controller use Process Variables as their independent variables, so the prediction is updated only when the process changes. The predictions are not corrupted by sticking valves.
- \* **PV Models** are linear across a wider range than PID set point controllers with non linear valves.
- \* **PV Models** are not corrupted by PID tuning or configuration changes.
- \* **LP Optimizer:** handles infeasibilities based on relative importance.
- \* **Dynamic weighting:** Variables are weighted dynamically based on their relative importance.
- \* **Compatible with** most common data historians, including PHD and PI.
- \* **Trip limits:** if the process exceeds a trip limit, the controller will automatically turn off.
- \* **Field Proven** on over half a dozen major process units including the World's largest Ammonia Plant!
- \* **Data Historian Export** compatible with most "Process Watch" software packages on the market today.
- \* **New! Built in Calculations (Soft Inferential) & Gain Matrix Analysis (Included in UPID)**

