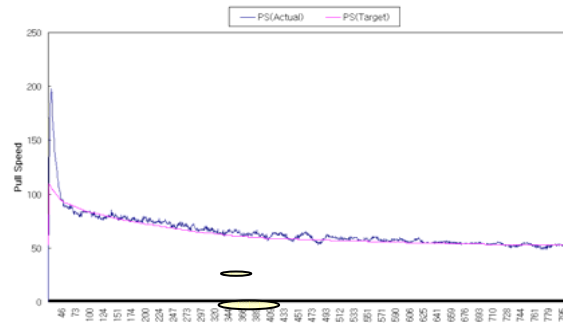


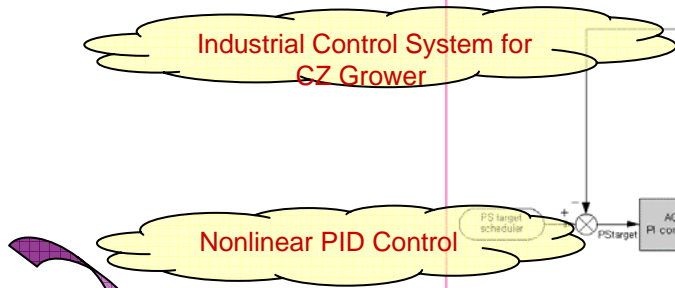
# Improvement of Industrial Control System for Single Crystal Grower for Semiconductor Wafer Production

## ● What we have done

- Target Temperature Tracking by Nonlinear PID Control
- Batch to batch Feedforward Trajectory Design by DMC
- Application of Power Control Structure

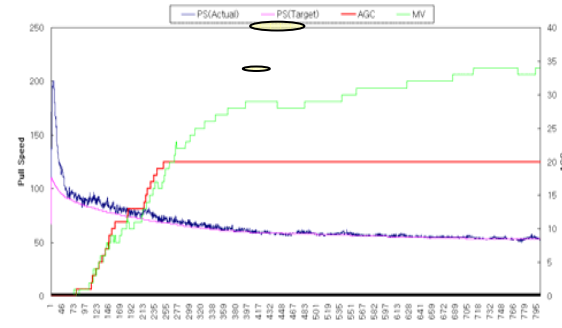


Conventional PID Control



Industrial Control System for CZ Grower

Nonlinear PID Control



Power Control

