



## Process control

Poids:

6

*Process control mixes cybernetics and physical laws to master material and energy transformation*



Process control is my initial expertise: I gradually expanded from the cybernetics of machines to organizations'. Meantime, process control information technology converged with non-physical control, from pneumatics, hydraulics, and electronics to digital.

Unfortunately, process control expertise does not exist anymore as a holistic engineering discipline, it is now split into system architects, cybersecurity specialists, software programmers, instrument engineers, process designers...

I still fascinated by industrial processes and very much enjoy developing and setting up process control strategies off and on site.

My rules and beliefs:

- A deep understanding of the process is a precondition of its control: One must identify himself as the machine, feeling being the machine, exhaust operators' knowledge, stare endlessly at measurement trends
- PID control is an old, yet incredibly powerful control means that needs to be mathematically and physically mastered before to envisage sensitive advanced control technics
- Control strategies bumpless switching conditions the success of neat, robust control
- When things become complicated, go back and follow another way (the number of code lines is a good precursor of failure)
- The most important artefacts of process control are measurement and actuators

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