

DISTRIBUTED CONTROL SOFTWARE FOR HIGH PERFORMANCE CONTROL LOOP ALGORITHM

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The majority of ST-CV industrial plant required complex processes. All these processes are highly important for the operation of the machines. The stability and reliability of these processes are leading factors in identifying the quality of the service provided. The control system architecture and software structure as well are required to have high dynamical performance and robust behaviour. The intelligent systems based on Model-Based Controller as well as RST controllers are used for their high level of stability and accuracy. The design and tuning of these complex controllers require to know the dynamic model of the plant (generally obtained by identification) and to specify the desired performance of the various control loops for achieving good performances. The concept of having a distributed control algorithm software provides full automation facilities with well adapted functionalities and good performances giving methods and tools to master the process dynamic optimisation and achieve the required real time performances.