

Visual Data Analytics via Parallel Coordinate and Near Rigorous Model based Quality Inferential

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Visual Data analytics

Parallel coordinates are a common way used in many sectors of visualising multivariate data. Parallel coordinates allow to analyse and visualise multidimensional data that would be very difficult to explore using conventional methods based on time series trends. This paper shows several examples of using parallel coordinates for analysing and troubleshooting process operations, viewing advanced process control performances and finding optimum operating regions.

Near rigorous model.

On-line quality estimation is a critical step in any process optimization project, such as Advanced Process Control or Real Time optimization.

The presentation shows an innovative approach that has been successfully used in the estimation of product qualities for distillation columns. This technology adopts a simplified (“near”) rigorous model to calculate product properties. In multistream columns such as Crude Distillation Unit fractionators, FCC main fractionators etc. it is used to predict properties such as distillation ASTM D86 points, cutpoints etc.