

Product Positioning

The area in which PP-PI will be used is the production plant carrying out batch manufacturing processes. With the help of PP-PI it will be possible to carry out integrated planning of the production, transport and waste disposal data flows of a plant. Furthermore, PP-PI will support the integration of all plants in an enterprise over the entire logistics chain: vertically by means of an integrated information flow, ranging from central business applications down to process control on the shop floor. Horizontally, this integration is supported by the coordination of planning between production plants, as well as with the recycling and waste disposal facilities and the production laboratory.

The ideal plant for PP-PI is found in the chemical, pharmaceutical or food and beverages industries. The following are some of the features characterizing such a plant:

- It has a relatively large degree of planning autonomy with regard to its resources.
- It carries out non-continuous forms of manufacturing and the batches are often grouped together in production campaigns.
- The production plant is designed as a multi-way plant and can be used in various ways.
- The product sequences must be planned carefully, in order to avoid unnecessary cleanout operations and changeovers.
- The various production steps lead to the creation of finished products, by-products and remaining materials.
- Process control involves various parameters which vary from batch to batch, because the quality of the ingredients used or the environmental conditions may vary.
- The control of the product quality requires a close coordination with the production laboratory allocated to the production process.
- The production plant is partially automated; some of the operating instructions must therefore be in natural language and others in a language understandable to the automated process control system.
- For each batch, the corresponding recipe and its production order must be archived, together with the actual data on the process. This data must be available for evaluations of all types.

Vertical and Horizontal Integration

Characteristics of Process Industries

- Furthermore, all messages sent during a process, whether they are used in a process control system or have been entered by a plant operator, must be processed in a uniform manner. These messages may provide status information on a batch just produced, or on the resources used to produce it. A message may deal with material consumption or production yields, which must be posted immediately as stock movements. Or, a message may deal with a process event or quality data, which must be archived according to GMP (Good Manufacturing Practice).

These features roughly describe process-oriented production as it is carried out in modern plants today.

With Release 3.0 of PP-PI, SAP is providing the first version of its system for production planning and control of process-oriented lines of industry.

For which type of production is PP-PI primarily suited?

PP-PI is suited primarily for process-oriented plants, and can support central as well as local applications. The main lines of industry for which the functionality of PP-PI was developed are the chemical and pharmaceutical industries, as well as food and beverages and the process-oriented electronics industry.

