A VARINDUSTRIES

PROCESS PREPARATION

Fast and accurate introduction of new products in electronics manufacturing

Process Preparation is the ideal solution for a fast and accurate first time new product introduction (NPI).

With Process Preparation it is possible to digitise the electronic assembly process and to cope with the demand for high mix low volume production in the SMT/THT/test process flows, faster and without errors.

Why choose Process Preparation?

Facilitates and improves documentation

Process Preparation simplifies the documentation process using integrated and customised templates to achieve a simple and efficient process. Tight integration with the Bill of Materials (BOM) ensures that any changes are updated, avoiding consistency issues.

Accelerates new product introduction

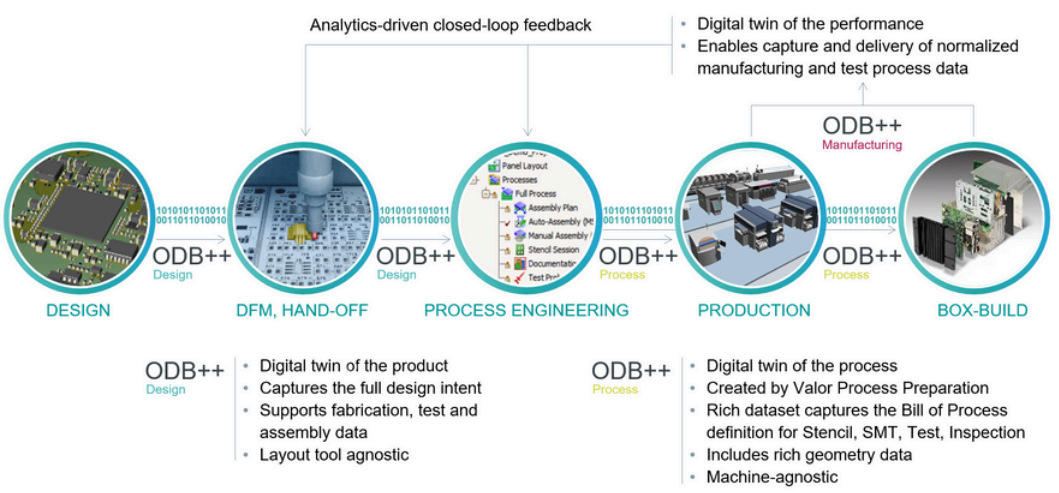
Process Preparation increases engineering efficiency by using a single tool for all activities. It eliminates redundant preparatory work with learning-based libraries, through automation, and by using templates.

Increases the utilisation rate of the line

Process Preparation maximises off-line preparation to avoid online testing and error-related delays. It enables the rapid and consistent generation and maintenance of machine library data with ad hoc configurations to minimize changes.

Enables portability of productions

Process Preparation leverages the ODB ++ format to seamlessly move production between lines and factories, reducing engineering time and increasing the quality of the final product. Allows for easy export and import of assembly projects.



Siemens' latest data exchange format, ODB ++ Process, enables the open exchange of process engineering information between autonomous machines, software vendors, and processes, helping accelerate new product introduction (NPI) and smooth manufacturing right the first time.

The ideal solution for high-mix, low-volume productions

How does Process Preparation address manufacturers' concerns?

The current market for electronic assemblies faces three main issues:

1. How to introduce new products quickly and as accurately as possible;
2. How to ensure that the machines perform optimally;
3. How to easily move production from one location to another.

To meet these requirements, Cadlog proposes the introduction of Process Preparation. This solution allows:

1. To accelerate the introduction of new products;
2. To increase the utilisation rate of the production lines;
3. To move individual productions easily between lines and locations.

How does Process Preparation increase the utilisation rate of production lines?

- Process Preparation maximises offline preparation to avoid testing on the line as well as delays due to errors.
- It enables fast and consistent creation and maintenance of machine library data.
- Process Preparation enables the creation of standard workflows to reduce time and utilise the corporate experience accumulated.

Results:

- Increases the throughput.
- Increases the utilisation rate of the available resources.

How does Process Preparation accelerate the introduction of new products?

- Process Preparation increases technical efficiency by using a single tool for all process-related tasks.
- Process Preparation eliminates redundant preparation work with learning-based libraries (machine shapes, rotation, etc.).
- The Siemens tool increases efficiency through automation and the use of templates (for work instructions, data import parsers, etc.).

Results:

- Reduces time- and technical effort.
- Increases the production capacity of manufacturing.

How does Process Preparation enable portability of productions?

- Process Preparation takes advantage of the ODB++ format to move production seamlessly between lines and production sites, reducing development time and increasing the quality of the final product.
- The tool enables rapid portability of programmes to any technology platform, including automatic conversion of library data.
- Process Preparation enables easy export and import of assembly projects that are encrypted to protect intellectual property.

Results:

- Reduces time- and technical effort.
- Improves time-to-market.