

# Applied SmartFactory® Recipe Management

An E3 module ensuring valid recipe selection and correct recipe conditions for runtime execution, resulting in reduced scrap and critical product genealogy.



## INDUSTRIES

Semiconductor Wafer Manufacturing  
Semiconductor Assembly & Test (ATP)  
Discrete Electronics  
Display Manufacturing  
Pharmaceutical and Emerging  
Technologies



## FEATURES

Common platform with seamless integration to other CIM systems

Versatile connectivity options for integrating all factory systems and data sources

Secure centralized recipe repository

Recipe level security

Tool specific recipe parsing for recipe visualization and validation



## BENEFITS

Correct recipe is validated and processed. This reduces product scrap and loss of manufacturing capacity due to non-qualified or incorrect recipe being used during manufacturing

Recipe parameters are within customer defined specification tolerances

Protection of IP due to control of unauthorized access to recipe content

Customer recipes are maintained in a centralized recipe body storage area with redundancy and version control



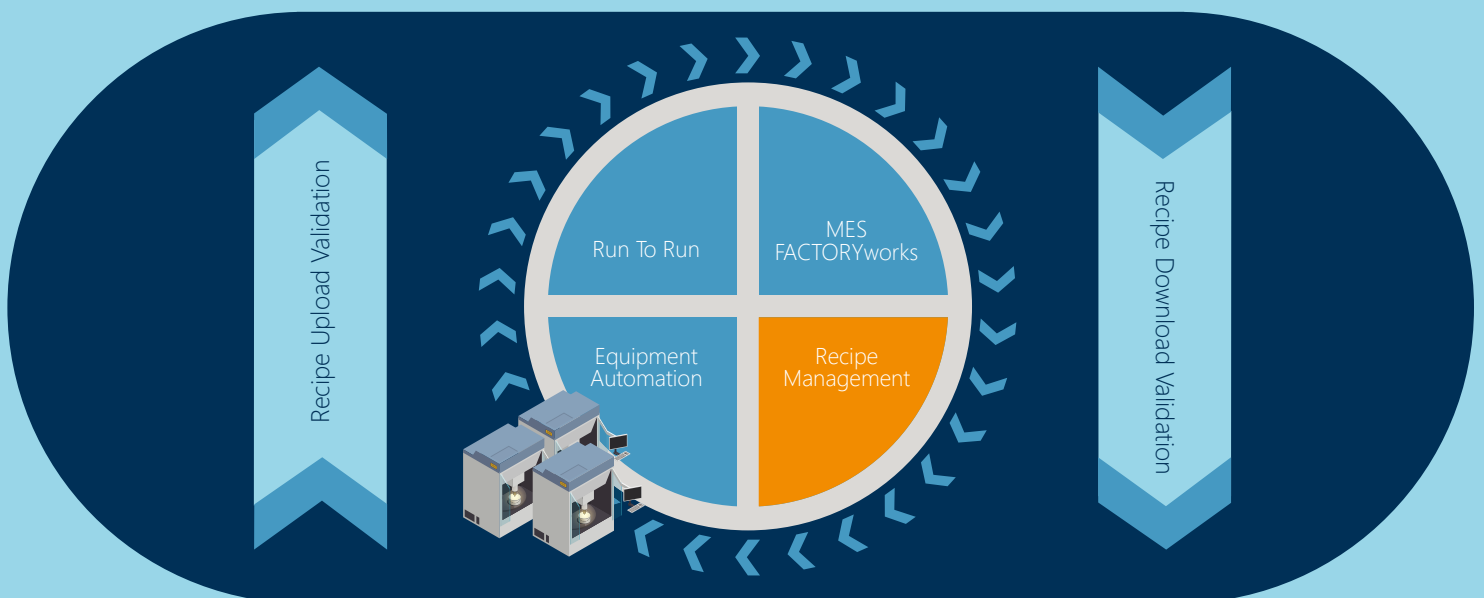
## INDUSTRY CHALLENGES

Manufacturing quality requires complete traceability of the products being produced.

Without a recipe management system, it is very challenging to know recipe and parameter conditions used at runtime. Additionally, these challenges may also be present:

- Inability to drive KPI related to recipe management
- The management of thousands of recipes
- Maintaining recipe change history
- Protecting recipe IP by controlling who may view equipment recipes

## Recipe Management Runtime Scenarios

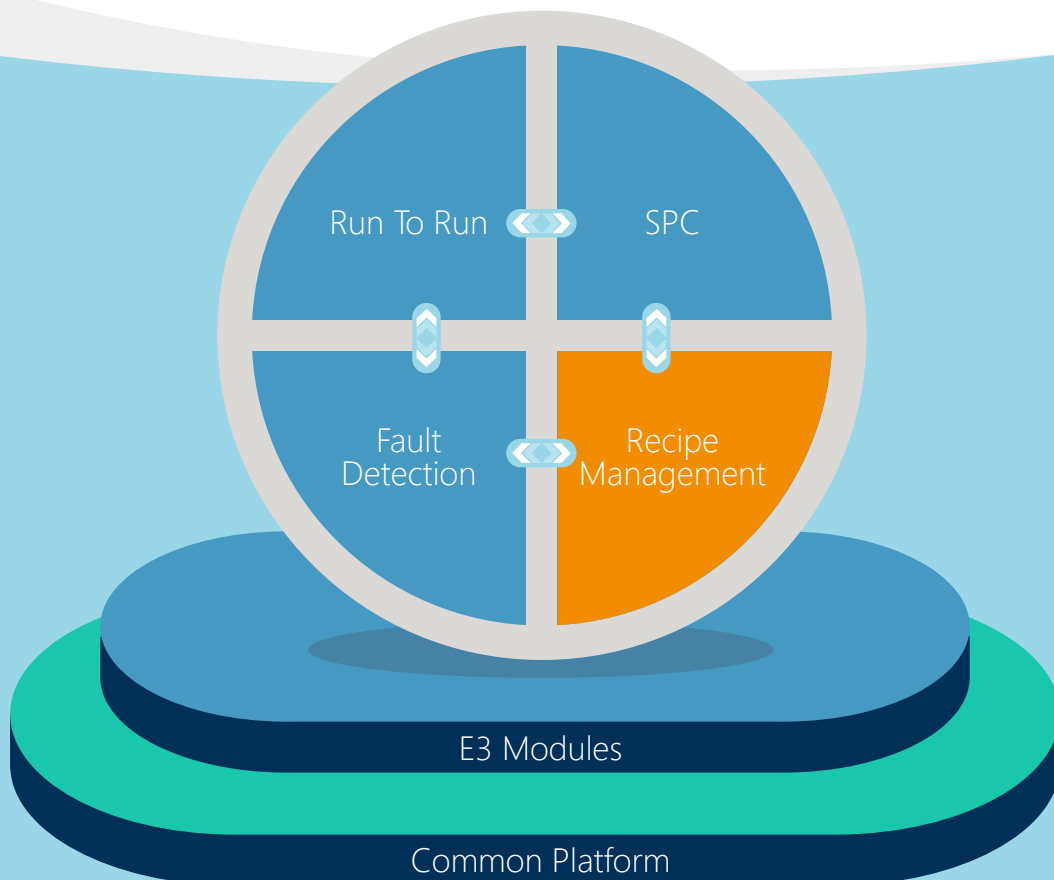


SmartFactory Recipe Management within the manufacturing environment



## PRODUCT DESCRIPTION

Manufacturing equipment recipes is a company's top intellectual property. Typical manufacturing environments contain 1000's of recipes requiring protection. SmartFactory Recipe Management provides access controlled centralized storage of the recipes. All recipe transactions including equipment recipe edits, versions and upload success / failures are all recorded within the application. Additionally, SmartFactory Recipe Management provides an easy way to review recipe differences, duplications and consolidations.

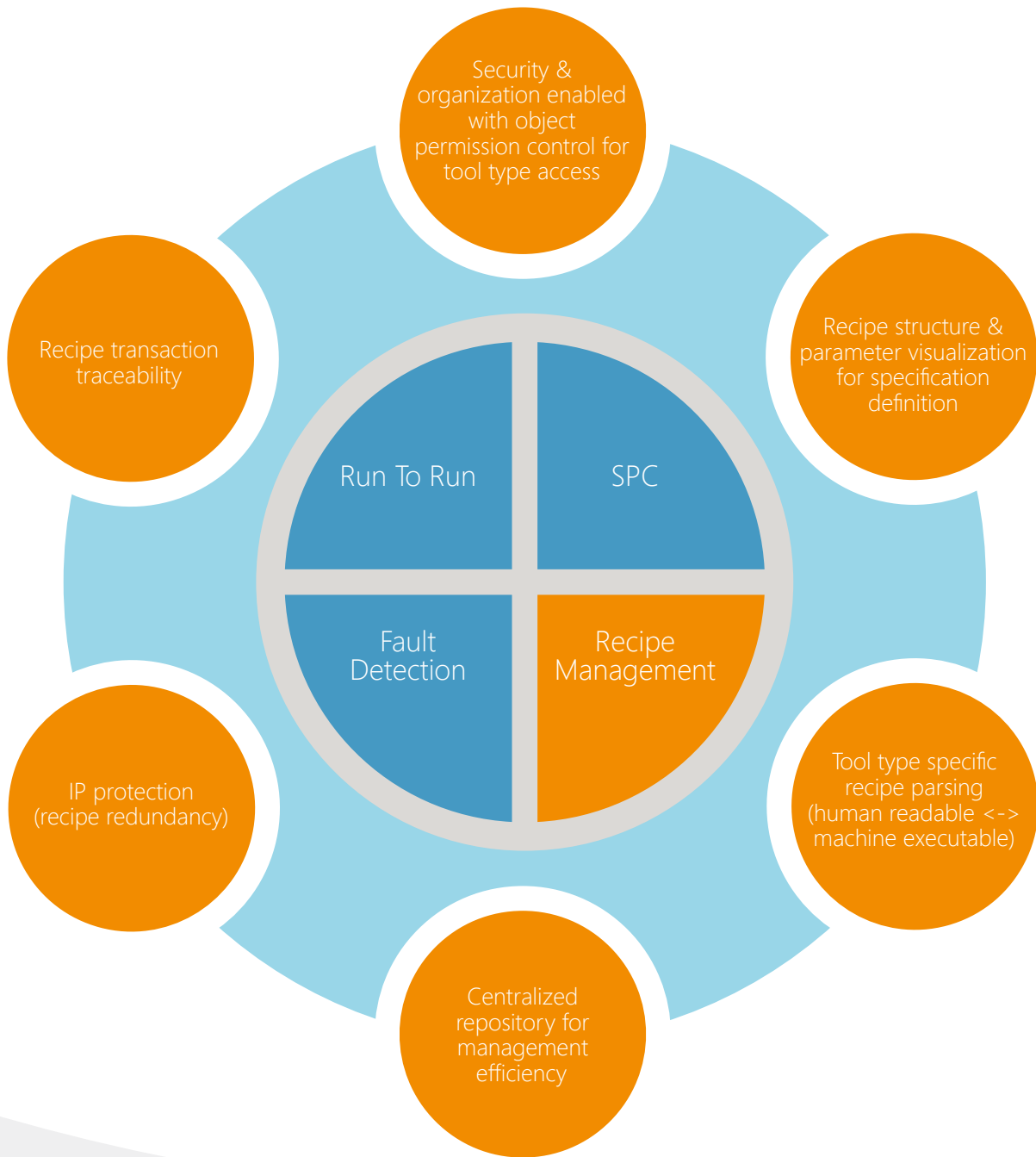


Sensory Control with Structured Data

Powered by E3 Platform



## System Integration with Program Governance



# Recipe Management Capabilities for Error Reduction

Ensuring validated recipes are executed on your equipment at runtime

## Recipe Specification Version Control

Provides systematic control with recipe versioning and tool level security access. Recipe specification states are traceable from creation (Draft), when updated and saved (Formal), to approved for production (Active).

## Recipe Validation

Recipe bodies are transferred from the equipment into storage with either a simple configuration or high availability configuration as needed. The stored recipes are used for either runtime upload/validate or recipe download/delete.

## Recipe Body Management

Provides a highly available scalable storage for equipment recipes, delivering runtime performance and historical quality record compliance. Centralized storage secures IP with recipe redundancy protecting business continuity.

Learn more about  
Applied SmartFactory



## PACKAGE CONTENTS

Designed around best-known methods for managing manufacturing equipment recipes, offering proven technology in one package, which includes:

### SOFTWARE

- Recipe Management server and client licenses
- Applied E3 Platform:
  - Connectivity and Integration tools
  - Designer studio logic strategy engine
  - Change management and version tracking

### SERVICES, TRAINING & SUPPORT

- On-site deployment
- One-year of technology maintenance and support
- User training
- Consulting options