



Integrated Automation and Control Solution

Our smart factory platform offers a range of packaged solutions for optimized factory automation, ensuring a smooth and reliable experience from installation to operation.

By harnessing data from individual equipment and inter-equipment processes, our integrated solution streamlines production management, equipment maintenance, and real-time monitoring. With instant processing capabilities, it helps customers make better use of their resources and achieve maximum operational efficiency.



RMS

Recipe Management System

Field-oriented Optimized service



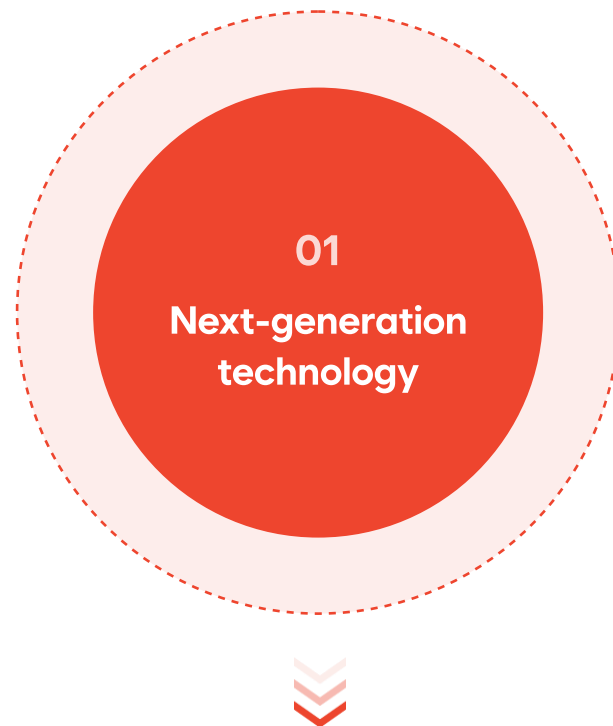
What does it do?

RMS is a system designed to provide integrated management of equipment recipes and parameters, which are fundamental to product production and processing. It helps prevent major quality incidents by avoiding recipe misapplication (caused by operator or engineer errors) and automatically manages recipe change histories and compares parameter specifications within the system.

By centralizing the management of recipes and parameters, RMS acts as a solution to prevent accidents caused by faulty processes or incorrect recipes.

Minimize! Easy Working!

Good UX Validation History
Management Spec Management



Fast and secure Vue.js framework

- Built on the Vue.js (JavaScript Framework), this system serves as a flexible, scalable framework designed to handle common functionalities. Its architecture supports incremental adoption and gradual development.

Cloud aimPlatform service

- The R&D Center focuses on applying web-based technologies to keep pace with the rapid evolution and release of IT technologies and devices.
- Through research into key IT technologies, the aim Cloud-based platform is designed to enable enhanced functionality and improved productivity.

Configuration management / deployment

- Supports version changes by reviewing and confirming changes to source files, documents, and components through fundamental principles, strategies, and technologies used to ensure convenient development and maintain the environment.

02

Convenient work environment that maximizes operator efficiency



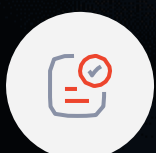
Minimizing large volumes of repetitive tasks

- Supports multi-input, edit, and delete functions to reduce repetitive tasks.
- Supports bulk data upload and download.
- The auto-complete feature quickly completes the user's intended search term, saving time by suggesting expected search terms generated through the automated system.



Convenient service features

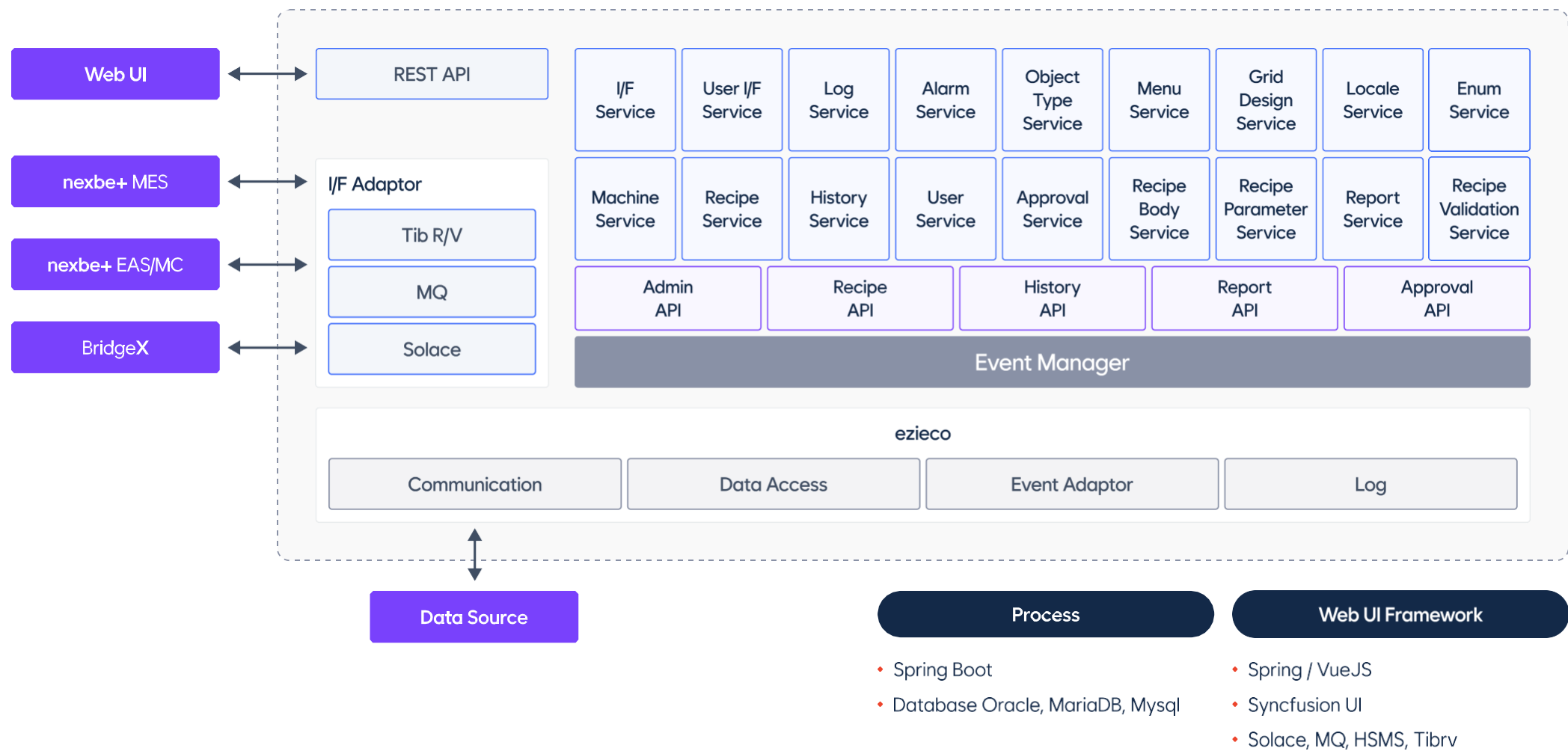
- Easily locate desired menus with intuitive navigation
- Ideal for quick document creation and management tasks.
- Allows users to review relevant data history.
- Facilitates smooth transitions to subsequent tasks with related menu options.



Validation Runtime

- Select the elements to review when modifying Spec information. Spec validation can be checked by ObjectType.
- Prevent process incidents in advance through custom functions during data creation, modification, or deletion.
- Includes run-time features (synchronization of data and servers).

Product Configuration



Field-oriented Optimized service

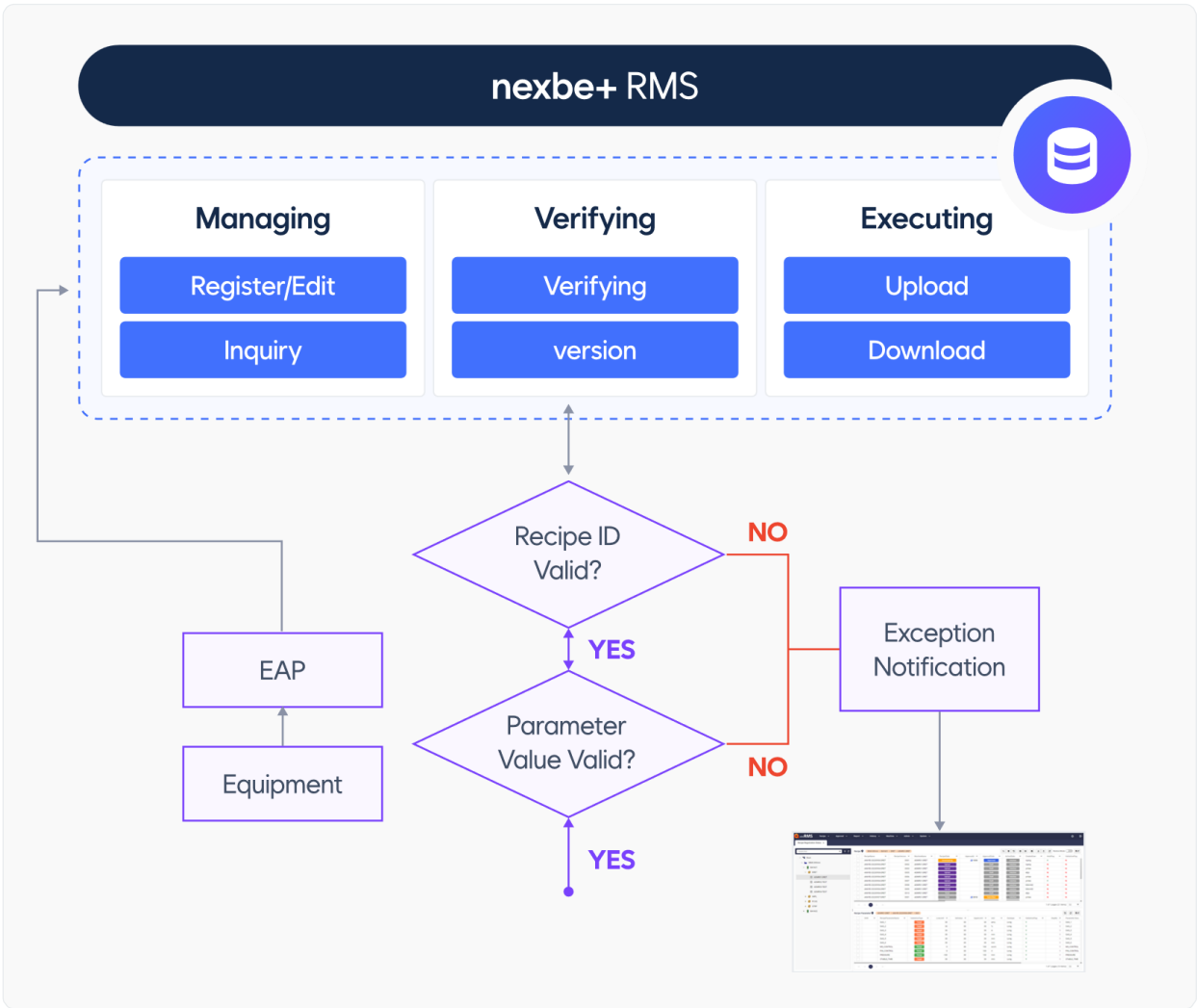
01 nexbe+ RMS

nexbe+ RMS

- Acts as a solution to prevent accidents caused by faulty processes or incorrect recipes by centralizing the management of recipes and parameters.

KeyFeatures

- Centralized recipe/parameter management
- Recipe version management (remote and manual)
- Recipe comparison
- Validation of setting parameters within the equipment
- Intuitive Editor interface for comprehensive recipe parameter management
- Workflow integration for enhanced internal logic processing (refers to client-specific special business logic)



02 Default

Centralized recipe management

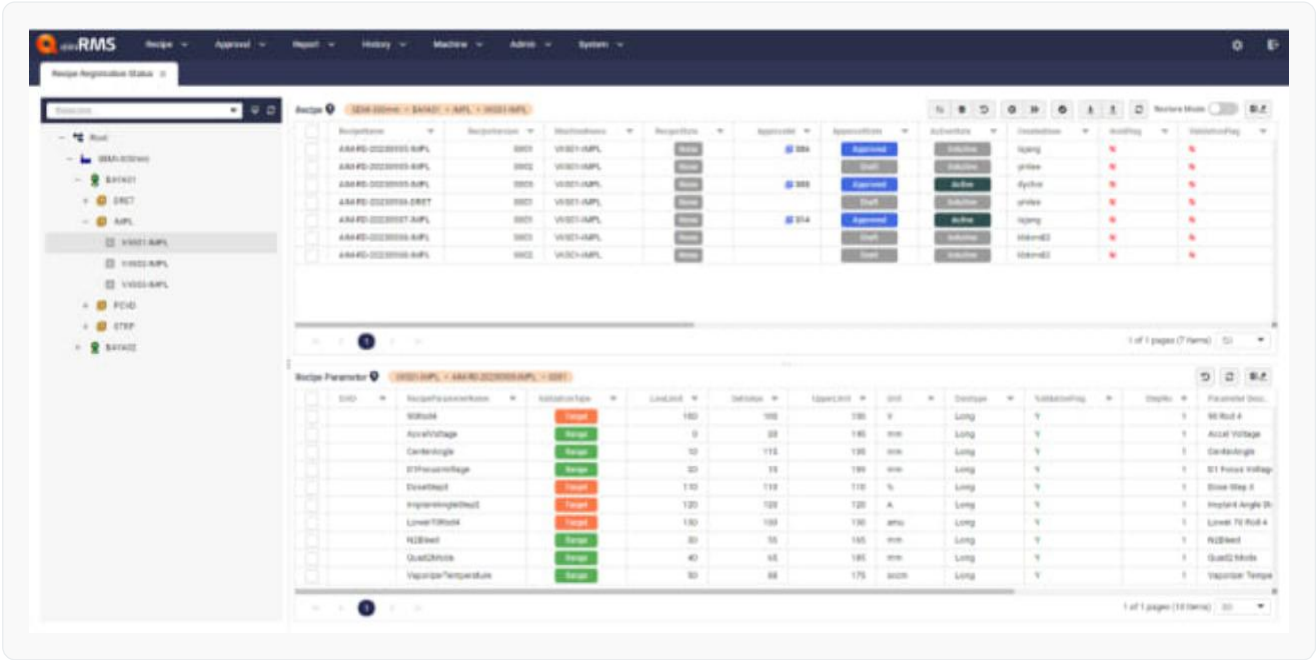
- Golden recipe management
- Recipe download and check
- Recipe status management
- Recipe archive

Parameter management

- Parameter-based recipe management
- Full parameter viewer support
- Parameter specification support (UCL,LCL)
- Equipment constant (EC) management

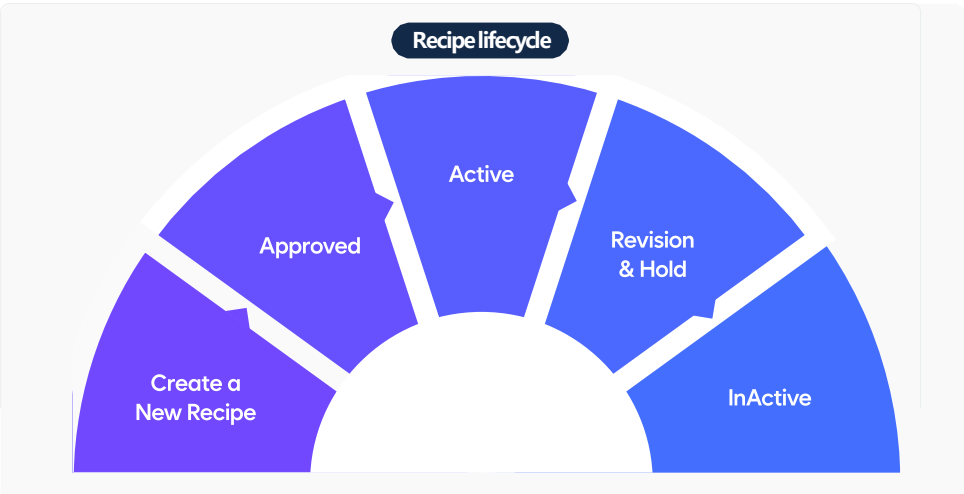
Recipe editor & viewer

- Universal recipe editing
- Editing for all types of recipes
- Excel Import/Export support for recipe components



03 Recipe operational procedures

- ✓ **Step1** : Create a new version of the recipe
 - ✓ **Step2** : Proceed with approval (authorization)
 - ✓ **Step3** : Activate the recipe (Active)
Recipe for use in mass-production equipment
 - ✓ **Step4** : Change the recipe to a "Hold" status as needed (administrator-controlled)
 - ✓ **Step5** : Upon version updates, the status of the existing recipe is automatically converted.
- Once the status changes from Active to Inactive, the recipe cannot be used.



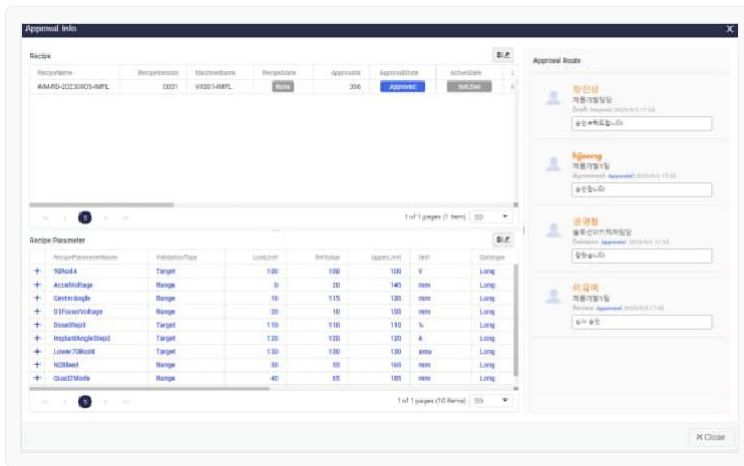
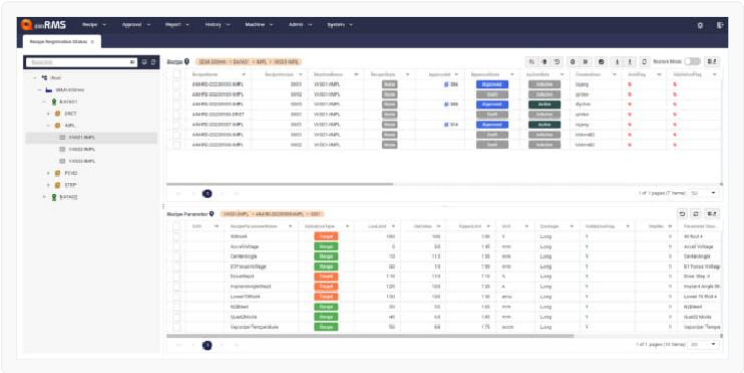
04 Recipe version control

1. Revision & Version control

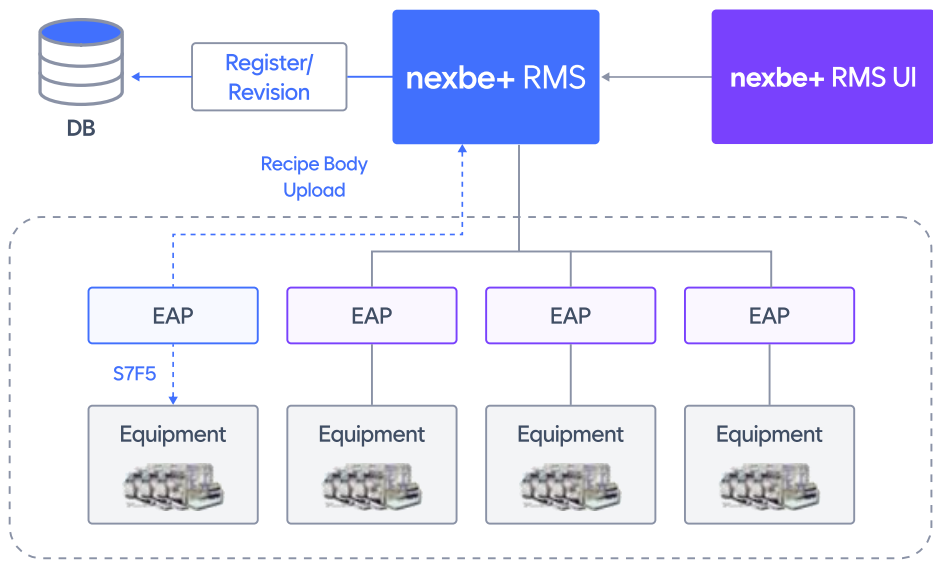
- Version status management
Unlock / Lock(Inactive) / Active
- Maintain a single active version of the recipe
- Prevent deletion of active versions
- Multi-recipe version management
- Prevent overlapping changes (Check In/Check Out)
- Record all changes with date/time stamps and maintain a detailed history

2. Recipe change Management

- Recipe check-in/check-out functions
- Define access levels for each equipment and recipe
- Recipe change approval system
- Change history management



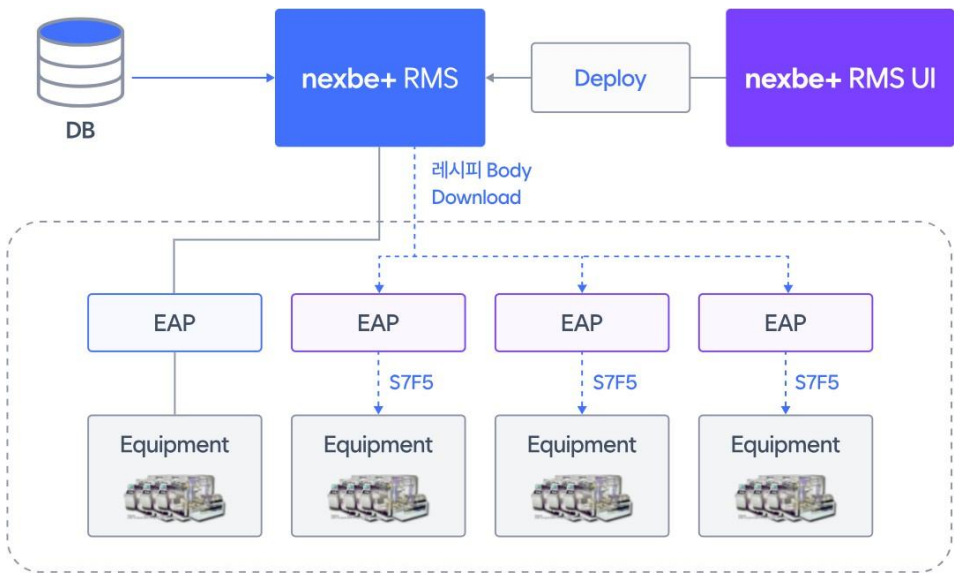
05 Recipe creation (Upload)



Recipe creation: Upload-based registration

- Upload equipment recipe components to the **nexbe+** RMS system for registration
- Supports various recipe structures for In-Line Equipment Recipes, including multi-part recipes and shared sub-recipes
- Incorporates an approval process for recipe creation or change (to approve and notify changes or anomalies)

06 Recipe deployment(Download)

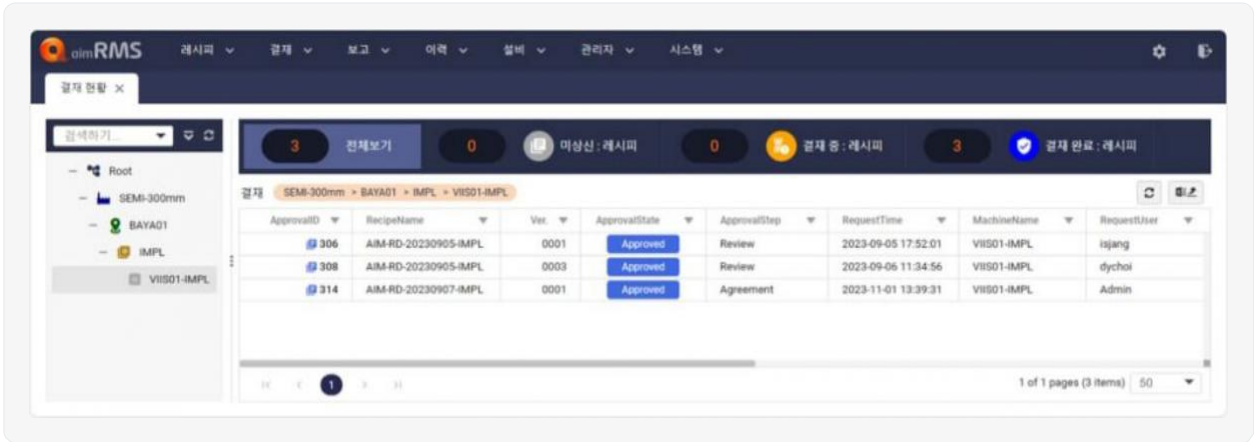


Recipe deployment: Download

- **nexbe+** RMS allows recipe data to be downloaded to equipment based on user-defined deployment rules or batch jobs.
- **nexbe+** RMS allows users to download one or more recipes to one or more equipment.

07 Recipe authentication

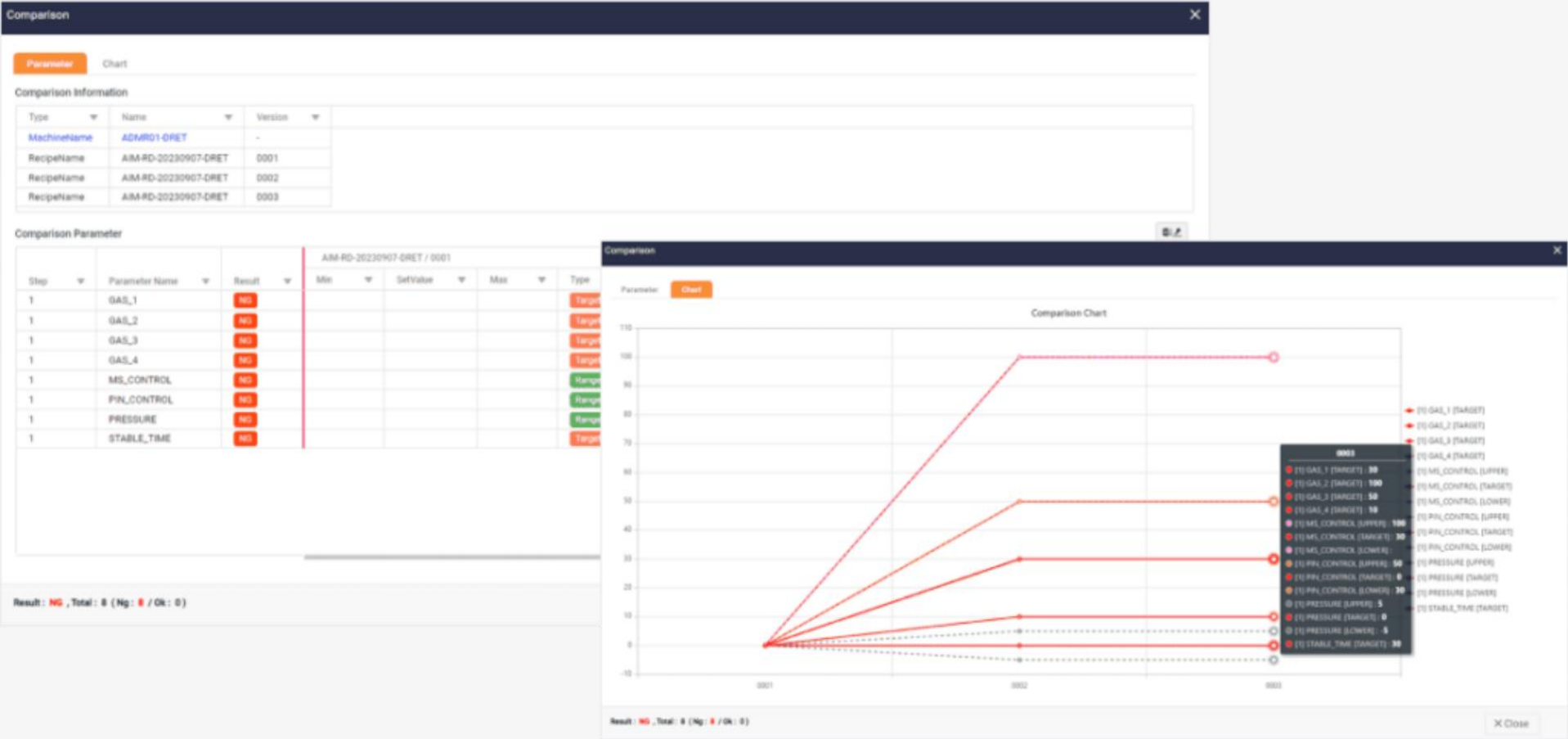
- Recipes are authenticated following the designated approval process and approvers.
- Only recipes approved through final authentication are automatically transitioned : **Inactive** → **Active**
- Unauthorized recipes cannot be downloaded → this prevents misapplication



08 Recipe comparison and validation

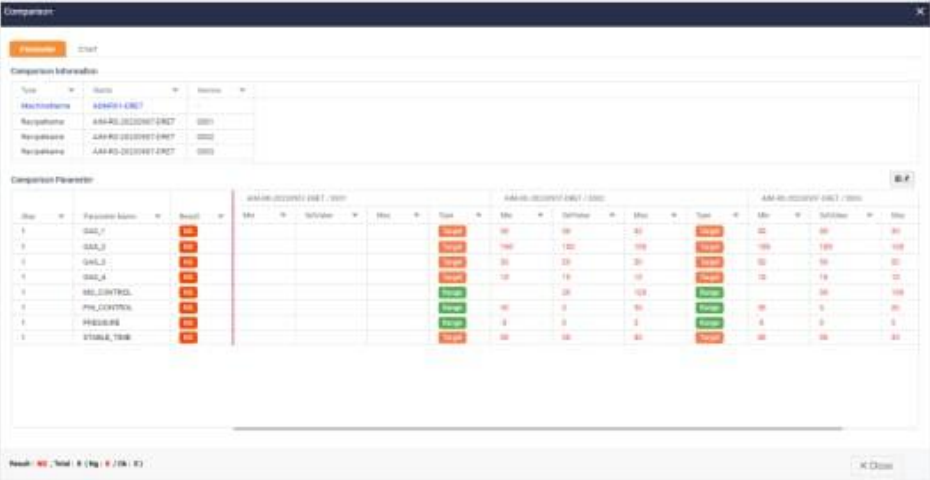
- Unique identifiers for recipes and recipe parameters
- Recipe validation between RMS Recipes and Equipment Recipes

Comparison

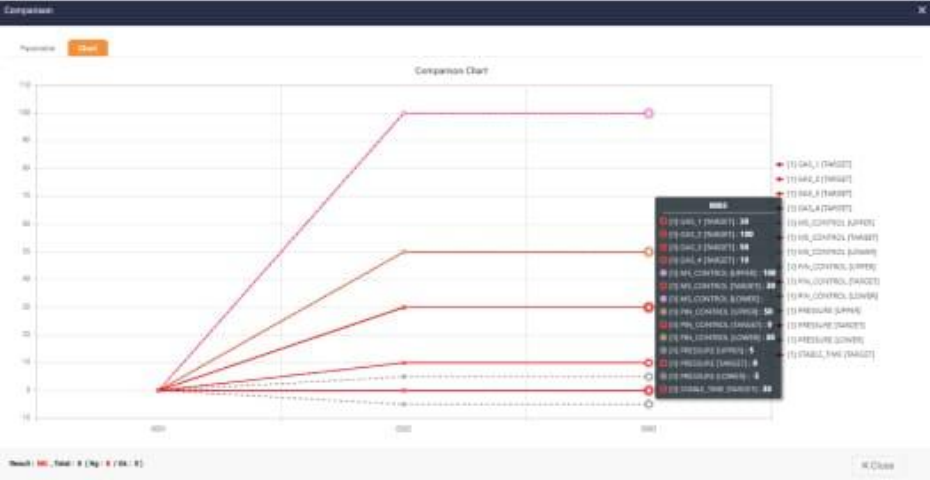


09 Cross-comparison of recipes

Cross-comparison of recipes: Equal & Different



Cross-comparison of recipes (View Type): Chart



10 Recipe validation

- RMS Version VS Equipment Current Parameter

비교

비교 정보

Type	Name	Version
MachineName	VIIS01-IMPL	-
RecipeName	AIM-RD-20230905-IMPL	0001

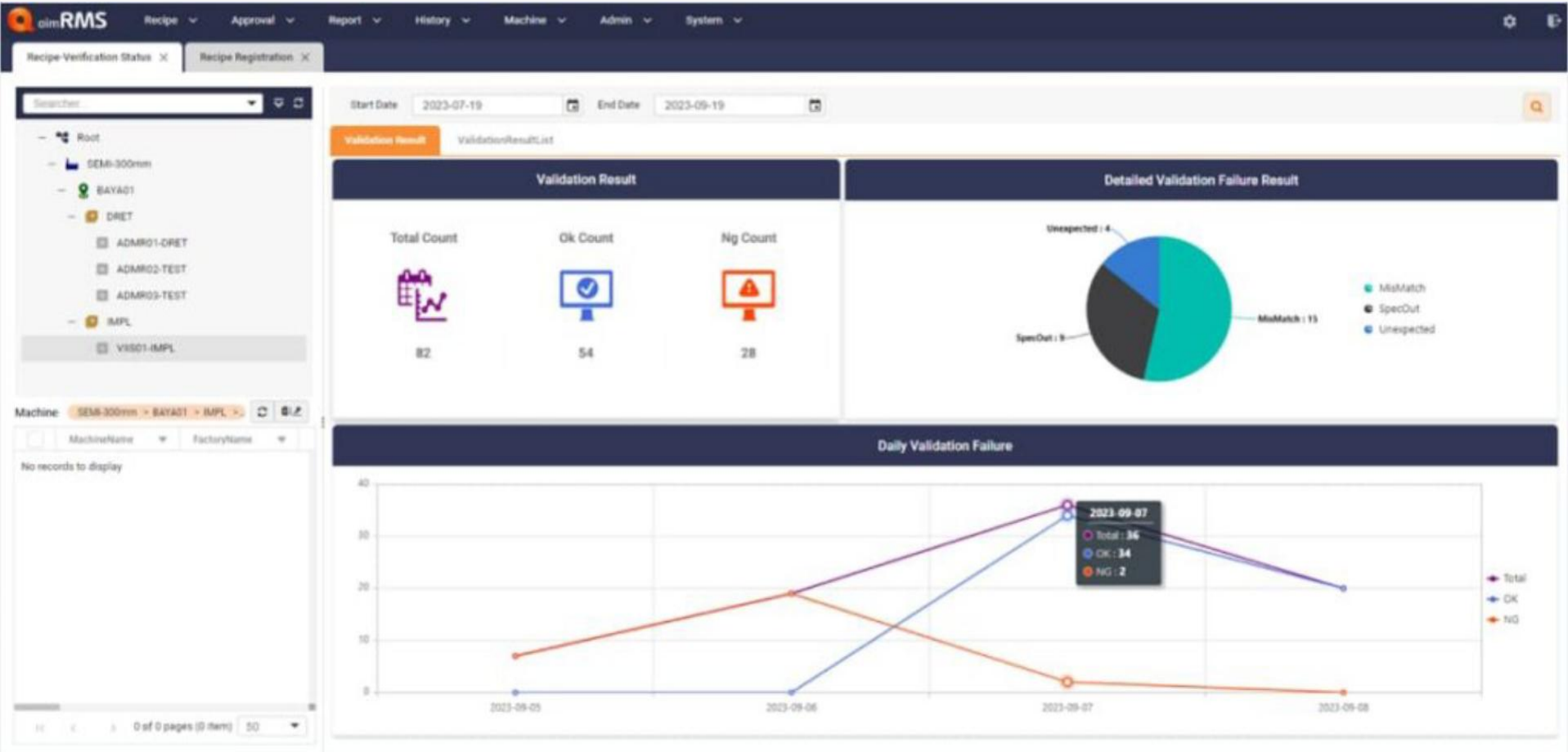
비교 파라미터

Step	Parameter Name	Result	VIIS01-IMPL	RMS
			Value	MinValueMaxType
1	90Rod4	NG	100	100100Target
1	AccelVoltage	OK	140	020145Range
1	CenterAngle	OK	110	10115135Range
1	D1FocusVoltage	OK	150	2010155Range
1	DoseStep3	NG	120	110110110Target
1	ImplantAngleStep2	NG	130	120120120Target
1	Lower70Rod4	NG	110	130130130Target
1	N2Bleed	OK	130	3055165Range
1	Quad2Mode	OK	120	4065185Range

결과 : 불일치 , 전체 : 10 (불일치 : 4 / 일치 : 6)

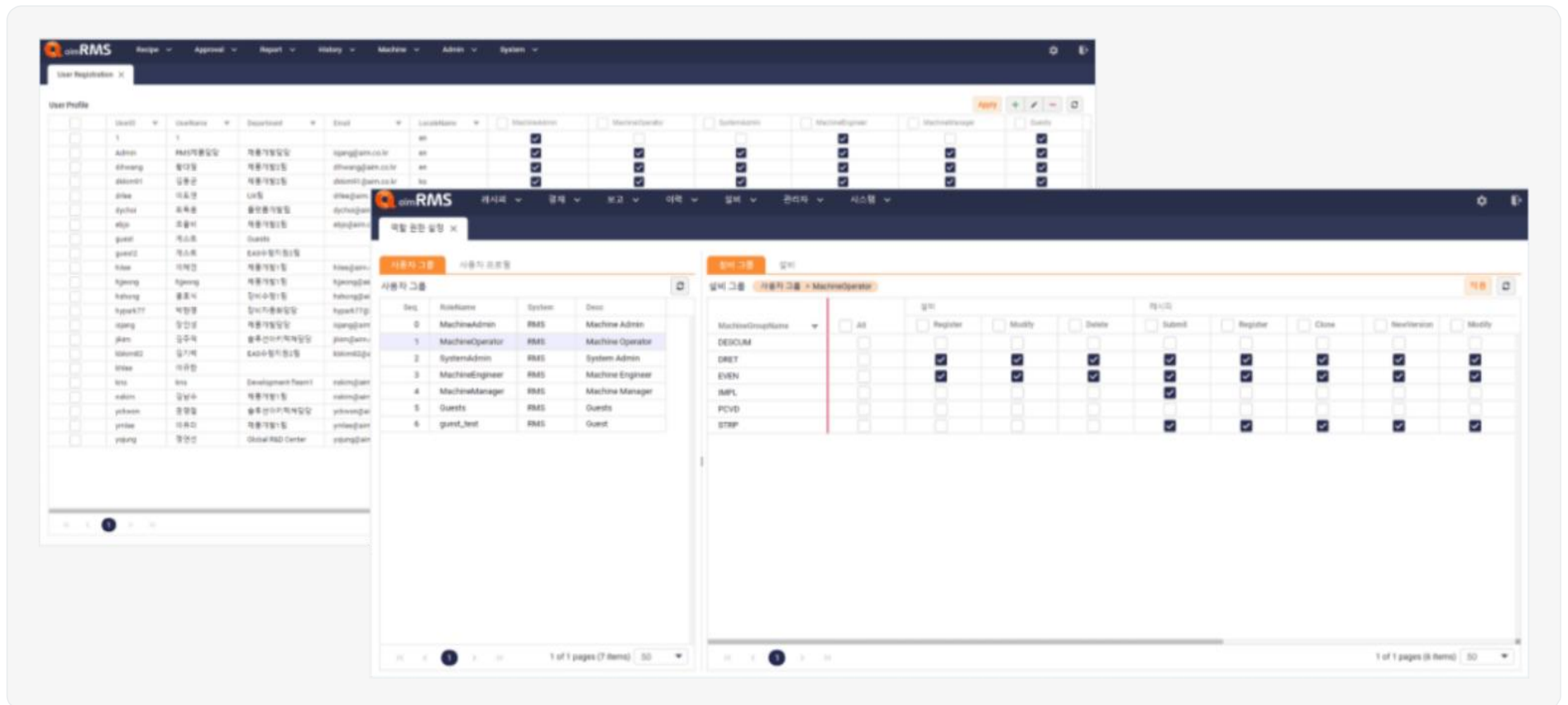
11 Recipe validation history

- View validation history for target equipment recipes within a specific period
- Parameter anomaly check during validation



12 Security and access control

- Configure access levels for each user group
- Configure tailored screen layouts and user interfaces based on user groups
- Define access permissions for equipment groups and recipes



User registration management

User permission management

