## **Lineup** Release ERP 6.0, EhP 4

WCM GmbH

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### **Underlying Business Process (1/3)**

In particular, an item of an Operational WCD contains:

- Operational condition that the technical object is being transferred to when being tagged (=: tagging condition),
- Operational condition that the technical object is being (re-)transferred to when being (temporarily) untagged (=: untagging condition).
- As of EhP 3 (ERP 6.0), WCM supports "mode-dependent tagging", which is based on the maintenance of appropriate master data, i.e. the assignment of untagging conditions to technical objects.
  - For each technical object, the assignment of different untagging conditions is supported, depending on the overall condition (e.g. Full Load, Partial Load, Revision) of the technical asset (= operation mode).
  - Above master data maintenance may reflect e.g. vendor equipment recommendations (→ optimized performance) or regulators requirements.
  - The master data is taken into account whenever a technical object is switched (→ for the untagging condition of the respective WCD item).
- Remark: To simplify matters, we don't consider operational groups and operational types.



### **Underlying Business Process (2/3)**

- In spite of "mode-dependent tagging", it is possible that on-site a technical object has an operational condition that deviates from the expected (on the basis of the operation mode) operational condition.
  - If the technical object is part of an active lockout/tagout, the deviation is process-related on one hand and uncritical on the other: The expected operational condition will be adopted automatically as soon as the respective WCD item will be untagged.
  - A deviation may occur also independent from an active lockout/tagout: In particular, it may result from a change of the operational mode (involving a change of the expected operational conditions).
- For this reason, an on-site check of operational condition is useful.
  - As pure documentation, that is as logging the operational conditions on-site.
  - As alignment ("Lineup"), that is as change of operational conditions on-site.
    - Example: Mass change of operational conditions on-site involved by a change of the operation mode.



# **Underlying Business Process (3/3)**





### **Central Requirements of the Business Process**

For an arbitrary set of technical objects the following shall be supported:

- Planning of (repeated) checks of operational conditions on-site by means of an appropriate list.
  - For each technical object, the list shall show the expected (according to master data) operational condition as well as the current operational condition (as per system).
- On-site execution of checks based on above list.
- Specification of reasons for potential switching activities.
- Confirmation of the (potentially changed) operational conditions on-site.
  - If necessary, system shall adapt/correct the current operational condition.
- Logging of the confirmations in the system, including user, date and time.



### **Realization with Release ERP 6.0, EhP 4**

Work Clearance Management provides lineups for meeting above requirements.

- Each lineup contains a verification list with the technical objects to be checked. In case that the checks shall be executed several times, the lineup supports creation of an adequate number of (identical) verification lists.
- For the on-site check, the following cases are taken into account:
  - Technical object is part of an active lockout/tagout → Documentation is sufficient, no further action is allowed.
  - Object has expected operational condition → Confirmation is sufficient, no further action is required.
  - Object has deviating operational condition → Leave operational condition unchanged or change it, reason is required.

System supports operational lineups as well as lineup templates (similar to WCDs).



### **IMG: Maintain Overall Conditions of Technical Systems**





#### **Maintain Master Data for Mode-Dependent Tagging**



Untagging conditions of explicitly specified overall conditions



#### **IMG: Define Usages for Lineups**

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# **Lineup - Creation (1/4)**

A lineup always refers to the overall condition of a technical asset (= operation mode) and to the operational group to be considered.

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# **Lineup - Creation (2/4)**

Alternatively, you can take advantage of existing lineups (pure templates or operational lineups) when creating a new lineup.

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# **Lineup - Creation (3/4)**

In general, a lineup consists of two parts:

- Header data
- Verification list(s)

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# **Lineup - Creation (4/4)**

The verification list contains the technical objects to be checked on-site, together with the relevant switching information.

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#### **Verification List – Confirmation of checked Items (1/4)**

■ Case 1: Technical object is part of an active lockout/tagout → Documentation is sufficient, no further action is allowed.

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#### **Verification List – Confirmation of checked Items (2/4)**

■ Case 2: Object has expected operational condition → Confirmation is sufficient, no further action is required.

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#### **Verification List – Confirmation of checked Items (3/4)**

■ Case 3: Object has deviating operational condition → Leave operational condition unchanged or change it, reason is required.

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#### **Verification List – Confirmation of checked Items (4/4)**

After completed processing of all list items, system closes the verification list automatically (and creates the next one if a subsequent check is required).

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# **Lineup – Closure**

After completed processing (= closure) of all verification lists, system closes the whole lineup automatically.

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## **Lineup – Final Remarks**

- Lineups reuse standard field selection.
- Before using lineups in EhP 4 (ERP 6.0), notes 1283648 and 1298520 must be installed.
  - Both notes are contained as of Support Package 3 (EA-APPL).



### **Questions and Answers**





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