ASSETSTAGE
DATA STAGING & QUALITY PLATFORM

Engineering Standards Implementation Guide

Practical guide for implementing ISO 14224, KKS, and other engineering standards in your CMMS. Includes mapping tables and examples.

Implementing engineering standards in your CMMS ensures consistent data structures, better reliability analysis, and easier integration across projects and industries. This guide covers ISO 14224 for reliability data, KKS for power plants, and other standards commonly used in asset-intensive industries.

1. ISO 14224

- Provides taxonomy for equipment classes, subclasses, and attributes.
- Defines failure modes and codes for consistent reliability analysis.
- Supports data exchange between operators, OEMs, and regulators.
- Helps align CMMS structures with RCM and RBI programs.

Example mapping (ISO 14224 to CMMS):

ISO 14224 Class	CMMS Example
Centrifugal Pump	Equipment Class: PUMP-CENT
Gas Turbine	Equipment Class: GT-001
Heat Exchanger	Equipment Class: HX-STD

2. KKS (Kraftwerk Kennzeichen System)

KKS is the international tagging system for power plants. It provides a standardized way to identify systems, equipment, and signals.

Best practices:

- Apply KKS codes consistently across all systems and documentation.
- Link CMMS functional locations to KKS tags.
- Use KKS structure to align maintenance tasks with equipment functions.
- Audit codes periodically to ensure compliance and prevent drift.

Example KKS mapping:

KKS Code	CMMS Functional Location
MKA10	Boiler Feedwater System
MKA20	Main Boiler System
MKA30	Condensate System

3. Other Standards

- RDS-PP / RDS-PS: Reference Designation System for power and process industries.
- IEC/ISO 81346: Structuring principles for systems and equipment.
- ISO 55000: Asset Management principles and terminology.
- Local regulatory standards (e.g., OSHA, ATEX, API codes).

4. Implementation Steps

- 1. Select relevant standards (ISO 14224, KKS, etc.) for your industry and assets.
- 2. Map standards into CMMS structures (functional locations, classes, codes).
- 3. Create templates and validation rules to enforce compliance.
- 4. Import and align asset registers to new standards in a staging environment.
- 5. Train staff on standards usage and governance rules.
- 6. Monitor compliance with dashboards and regular audits.

5. Standards Implementation Checklist

- ✓ ISO 14224 classes and codes mapped to CMMS equipment structures.
- ✓ KKS tags integrated with functional locations.
- ✓ Other standards identified and applied where relevant.
- ✓ Validation rules and templates in place to enforce compliance.
- ✓ Training delivered to maintenance and engineering staff.
- ✓ Dashboards and audits configured for ongoing monitoring.

AssetStage helps organizations implement engineering standards with mapping tools, staging environments, and validation dashboards for CMMS.