

KDD076 - Indirect Material Cleansing

Status	Approved
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Issue

Syensqo currently operates two separate SAP ECC systems, each housing material master data for **spare parts**. Over time these systems have accumulated inconsistencies, duplicate records and non-standardized data. These inconsistencies create challenges in spare parts identification, procurement and maintenance planning.

As Syensqo prepares to transition to the target S/4HANA systems, it is critical to cleanse and harmonize spare parts data to prevent these inefficiencies from being carried forward. Without a structured cleansing approach issues such as duplicate materials, incomplete records and inconsistent descriptions will persist, resulting in difficulties in inventory management, inaccurate procurement planning and potential operational disruptions post-migration.

Key areas covered in this document include:

- Benefits and drawbacks of each product
- Overview & Background
- Product Options
- Evaluation
- Recommendation
- Business & Project Impacts

A decision is required on how to systematically cleanse and harmonize Indirect Material master data, ensuring accuracy, consistency and usability in the new S/4HANA environment while minimizing operational disruptions during the migration.

Recommendation

In view of the strategic importance of establishing a clean, accurate and operationally efficient spare parts master data foundation for Syensqo's transition to SAP S/4HANA, it is recommended that Syensqo adopt **Sphera - MRO Data Quality Optimization Services** as the **solution** for spare parts material data cleansing, enrichment and standardization.

Sphera's comprehensive approach directly addresses the full lifecycle of spare parts data quality, not just for the initial cleansing required for S/4HANA migration, but for sustainable management of spare parts creation into the future.

Key drivers for this recommendation include:

- **Comprehensive Cleansing:** Advanced deduplication, validation, and standardization specifically targeted for Spare Parts.
- **Data Enrichment and Regulatory Compliance:** Detailed manufacturer information, part specifications, and regulatory certifications embedded in material records.
- **Direct SAP S/4HANA Integration:** Clean, compliant materials ready for efficient migration and go-live.
- **Sustainable Master Data Governance:** Sphera will serve as the entry point for the creation of **new Spare Parts** records in Business-As-Usual (BAU) operations, ensuring lasting master data integrity.

Background & Context

Spare parts data is critical for effective asset management, procurement and maintenance planning. The transition to S/4HANA presents an opportunity to cleanse, standardize and harmonize spare parts data to enhance operational efficiency. The chosen tool must facilitate data validation, deduplication and enrichment while integrating seamlessly with the data migration strategy led by **Syniti**.

To address these challenges, the project aims to:

- Define and standardize foundational data elements such as manufacturer name, part number, model number, short/long descriptions and MRP type.
- Ensure compliance with industry standards by linking parts to specifications, regulatory requirements and maintenance best practices.
- Identify and eliminate duplicate spare parts records using advanced data matching and cleansing techniques.
- Leverage an automated, scalable data cleansing solution to process large volumes of spare parts data efficiently before migration to S/4HANA.

By conducting a thorough data cleansing exercise prior to migration, Syensqo can eliminate these inefficiencies and create a more streamlined, accurate, and efficient spare parts management system within S/4HANA. This will ultimately enable smoother procurement processes, better maintenance planning and more accurate inventory tracking contributing to greater overall operational efficiency.

Assumptions

- **Syniti** is the official data migration partner for the S/4HANA implementation.
- The cleansing process must be completed before the S/4HANA migration cutover.
- The selected tool must support large-scale data cleansing while ensuring data integrity and governance.
- Business users will be engaged to validate and approve the cleaned data.
- Standardized naming conventions and classifications will be adopted.
- All materials are reviewed and categorized with the correct Material Type to ensure accurate classification.
- Spare part materials are not classified as CUI relevant data
- Only material data will be included in the cleansing and optimization process, not the corresponding procedures or specifications

Constraints

- Differences in the data structures of the two ECC systems will require careful consideration when merging or harmonizing data.
- The cleansing process must not interfere with ongoing operations or delay other critical project activities.
- Any data identified as CUI-relevant in the future will be excluded from this process and will require manual handling.

Impacts

- Improved accuracy and consistency in spare parts data.
- Enhanced efficiency in procurement, maintenance planning, and inventory management.
- Reduced data redundancy and improved system performance in S/4HANA.
- Minimized risk of data migration errors and inconsistencies.

Business Rules

- Material descriptions must follow a standardized dictionary format to ensure consistency.
- Identified duplicates must be either merged or removed, with no duplicate records migrated to S/4HANA.
- Only validated, cleansed spare parts data will be migrated into the new S/4HANA systems to ensure data integrity.

Options considered

Option A: Syniti - Enterprise Data Matching

Syniti's Enterprise Data Matching tool provides advanced data matching, cleansing and migration capabilities. As Syniti is already the migration partner for the project, leveraging their data quality tools ensures alignment and efficiency.

Features & Benefits:

- AI-driven data matching for duplicates and inconsistencies.
- Seamless integration with SAP
- Supports large-scale data cleansing for global operations.
- Alignment with the project's migration strategy, reducing implementation complexity.

Limitations:

- Cleansing is performed solely within staging databases and is not validated against external databases.
- Requires customization for specific MRO data classification / material needs.
- May involve additional licensing costs depending on scope.

Option B: Sparetech - MRO Master Data Cleansing

Sparetech specializes in MRO (Maintenance, Repair and Operations) data quality improvement, focusing on spare parts classification, taxonomy and cleansing.

Features & Benefits:

- Industry-specific MRO data cleansing and classification.
- AI-based recommendations for standardization.
- Automated enrichment of missing attributes using external databases.
- Supports multiple languages for global deployments.

Limitations:

- Limited integration with Syniti, requiring additional effort to align with the migration approach.

Option C: Sphera - MRO Data Quality Optimization Services

Sphera provides a service-based approach to MRO data optimization, focusing on compliance, standardization and cataloging.

Features & Benefits:

- Full deduplication and cleansing of spare parts master data, validated against extensive external industry databases.
- Standardization of material descriptions and attributes aligned to recognized industry taxonomies.
- Automated enrichment of missing data including manufacturer details, technical specifications, safety certifications, and regulatory compliance references.
- Deduplication within the Sphera portal post-cleansing, ensuring a second layer of validation.
- Direct SAP S/4HANA integration for efficient material upload and risk reduction.
- **Ongoing BAU Support:** Sphera may serve as the controlled entry point for new indirect material creation, embedding preventative governance to maintain a clean SAP environments.

Limitations:

- Higher cost due to service-based pricing model.
- May require additional validation if integrated into SAP S/4HANA.

Requirement Comparison Table

Criterion	Syniti - Enterprise Data Matching	SpareTech - MRO Master Data Cleansing	Sphera - MRO Data Quality Optimization
Data Cleansing Approach	Deduplication, data consistency, and cleansing of material master data	Industry-specific MRO data cleansing, classification, and enrichment	Standardization, enrichment and optimization of critical, high-value and high-usage materials
Scalability	PRO: Highly scalable for large volumes of material data. Suitable for large-scale deduplication of vast material data	CON: Limited scalability for large-scale projects. Focuses on MRO-specific materials, particularly for industry standardization and classification	CON: Less scalable for large datasets compared to automated solutions like Syniti
Data Integrity	CON: Ensures only basic data integrity by removing duplicates and ensuring consistency	PRO: Improves data integrity by cleansing and classifying MRO materials using industry standards	PRO: Ensures enriched, high-quality data with complete attributes and regulatory compliance
Integration with SAP	PRO: Seamless integration with SAP S/4HANA, ready for migration	CON: Limited SAP integration, additional effort required for migration	PRO: Can integrate post-enrichment, but requires validation for seamless integration
Data Enrichment	CON: Limited enrichment, mainly focused on deduplication and consistency	PRO: Provides some enrichment via external databases but limited compared to Sphera's service	PRO: Comprehensive enrichment using external databases, AI-driven suggestions, and regulatory updates

Evaluation

The evaluation of Indirect Material Cleansing considers three options: Syniti - Enterprise Data Matching (Option A), SpareTech - MRO Master Data Cleansing (Option B) and Sphera - MRO Data Quality Optimization (Option C).

**The evaluation scoring system ranges from Low to Very High. In this system, a low score indicates a negative attribute, such as high costs.*

Criteria	Weight	Option A Syniti - Enterprise Data Matching	Option B SpareTech - MRO Master Data Cleansing	Option C Sphera - MRO Data Quality Optimization Services
Comprehensive Cleansing Capability	VH	Medium	Medium	Very High
Data Enrichment and Attribute Completeness	VH	Low	Medium	Very High
SAP S/4HANA Integration Readiness	H	High	Medium	Very High
Master Data Governance (BAU Enablement)	H	High	High	Very High
Scalability and Flexibility for Global Scope	M	Very High	Medium	High
Regulatory and Compliance Support	M	Low	Medium	Very High

Cost Efficiency (Total Value for Investment)	M	High	Medium	High
Overall		Medium	Medium	Very High

Conclusion

Selecting **Sphera - MRO Data Quality Optimization Services** as the sole solution for Syensqo's spare parts material master cleansing and governance enables the organization to:

- Achieve a complete, compliant, and operationally reliable spare parts master prior to S/4HANA migration.
- Secure direct, low-risk integration into SAP S/4HANA environments.
- Embed sustainable master data governance practices into BAU operations for indirect materials, ensuring data integrity is preserved beyond go-live.

This decision ensures that Syensqo's move to S/4HANA is not just a technical migration, but a strategic leap toward operational excellence, data-driven decision-making and digital maturity.

Sphera is not only the optimal solution for today's cleansing needs, it is the foundation for Syensqo's master data excellence into the future.

See also

Business Endorsement

[KDD076 - Indirect Material Cleansing Endorsement.pdf](#)

Change log

Version	Published	Changed By	Comment
CURRENT (v. 31)	Jun 02, 2025 07:05	LEIGHTON-ext, Dean	
v. 30	May 20, 2025 13:18	WENNINGER-ext, Sascha	
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v. 26	Apr 28, 2025 08:20	LEIGHTON-ext, Dean	
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v. 24	Apr 28, 2025 08:03	LEIGHTON-ext, Dean	
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Jun 02, 2025	Actor	Type	Activity	Version
Approved	LEIGHTON-ext, Dean	Edit	updated the page at 7:05 am	
	GONZALVEZ-ext, Antonio	State	changed state to Approved at 5:21 am	v31

Pending SteerCo Review	GONZALVEZ-ext, Antonio	State	gave <i>Final Approval</i> approval at 5:21 am	
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