CNV-1057 QM Master Inspection Characteristics

Revision in Progress

Status	Revision in Progress
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Purpose

The purpose of this document is to define the conversion approach to create 1057 - QM Master Inspection Characteristics in S/4 HANA.

Master Inspection Characteristics are a fundamental element of SAP Quality Management (QM) used to define the parameters, specifications, and methods for quality inspections. MICs provide a standardized definition of what is to be inspected and how it should be measured, ensuring uniformity and consistency across inspection plans and quality processes. MICs can be maintained as **Quantitative** (numeric specifications such as measurement ranges and tolerances) or **Qualitative** (descriptive specifications such as defect classes or codes).

In SAP S/4HANA, the structure and usage of MICs remain consistent with SAP ECC, typically defined by key combinations such as plant, characteristic name, and characteristic type. MICs may include additional settings such as selected sets for qualitative characteristics, catalog assignments, default inspection methods, target values, upper and lower specification limits, and sampling procedures.

In SAP ECC, aside from the standard MIC structures, there may be additional configurations, such as plant-independent characteristics, characteristics linked to custom catalogs, or MICs with special control indicators and custom fields. Certain legacy systems may also include MICs with obsolete catalog references, inactive units of measure, or unused selected sets (pending MDS review), which must be validated before conversion.

This conversion aims to migrate active and relevant MIC records, along with their associated control indicators, selected sets, catalog assignments, default inspection methods, and specification limits, from existing ECC systems into S/4HANA. The migration will apply the required transformation logic using Syniti as the data migration and transformation platform. The converted records will be loaded into the target S/4HANA system using standard SAP mechanisms such as BAPIs (e.g., `BAPI_INSPOPER_RECORDRESULTS` for linking to inspection operations, or `QS21` transaction for creation), IDOCs, or direct table loads where applicable, ensuring data integrity, compliance, and reusability across inspection plans.

Conversion Scope

The scope of this document covers the approach for converting active Conversion Specification CNV-1057 Master Inspection Characteristic (MIC) from Legacy Source Systems into S/4HANA following the Master Inspection Characteristic Master Data Design Standard MDS-1057.

From the current landscape, MIC data exists in legacy quality management systems (e.g., PF2 and WP2). Harmonization and validation are required to ensure accurate and consolidated MIC data in S/4HANA. While PF2 and WP2 serve as source systems, extensive mapping and transformation logic will be applied to ensure clean, relevant, and standardized data is migrated.

1. Active MIC records that meet the Material Relevancy Criteria (aligned with valid Material Master Basic Data View, QM View, QM Inspection Plan and Master Recipe) and are used in valid inspection processes within the last four (4) years.
2. MICs without deletion flags, ensuring only valid and relevant characteristics are migrated.
3. MICs assigned to in-scope plants or inspection plans based on the To-Be Plant Mapping.
4. MICs linked to valid inspection types and usage (e.g., 01, 04, 09) to ensure functional integration with quality processes in the target system.
5. MICs with valid catalog assignments (e.g., defect class, code group, selected set) and valid control indicators.
6. MICs referenced in sampling procedures or inspection plans to ensure inspection process continuity in the target environment.

The data from legacy system excludes:

1. Inactive or obsolete MICs that are not used in inspection plans or linked processes within the last four (4) years.
2. MICs marked for deletion in the legacy system.
3. MICs assigned to plants that are out of scope, based on the To-Be Plant Mapping in Enterprise Structure Catalog worksheet "30. Plants"
4. Invalid or incomplete catalog assignments, missing required control indicators, or unsupported settings in S/4HANA.

Relevancy rule

1. Material/Plant with history and active usage
   Materials must be defined at both global level (MARA) and plant level (MARC) with valid status and assignment to active in-scope plants. Only materials with active QM View are considered relevant. In addition, QM View relevancy must aligned with Material Master Basic Views (CNV-2019) to ensure consistent dependency with MARA-level relevancy. Usage confirmation may also include inspection lots (QALS) within the last four (4) years where applicable.
2. Active Inspection Types
   Only materials with at least one valid and active inspection type (e.g., 01, 02, 03, 04, 05, 06, 08, 10, 11, 12, 17) maintained in `QMAT` and linked to relevant plants will be considered in scope.
3. Inspection Setup with Valid Usage
   Inspection types must be relevant to in-scope Syensqo business processes (e.g., Goods Receipt, In-Process, Delivery). Materials without any active inspection usage in the last four (4) years will be excluded.
4. Plant-Specific Validation
   Materials with QM View will be checked against active plant mappings (To-Be Plant Definition) to ensure that only valid, active plants are considered for migration.

5. Master Inspection Characteristics
   Only latest version is considered as valid version. (I.e. 000001, 000002 and 000003. Then consider only 000003 as valid record and in S/4, it will be 000001)

Material/Plant active with four (4) years inspection usage history validates active QM View (QMAT) with at least one valid inspection type (e.g., 01, 04, 09) confirms Control Key, Certificate Type, and Q-Score alignment with configuration ensures accurate integration with incoming inspection and quality processes in S/4HANA.

Plant Merging

Plants will be harmonized based on the To-Be Plant Mapping. As some legacy plants will be merged into one target plant, QM Views will be reassigned accordingly to ensure data consistency and alignment with the new plant structure in SAP S/4HANA.

List of source systems and approximate number of records

Source	Scope	Source Approx No. of Records	Target System	Target Approx No. of Records
PF2 & WP2	Master Inspection Characteristic will be extracted from PF2 and WP2	PF2 =10145 records WP2 = 41526 records	S/4 HANA	11722 records

Additional Information

Multi-language Requirement

Master Inspection Characteristic description will be maintained in English by default.

Since multi-language support is available for Master Inspection Characteristic, users logging in with a different language will see the description displayed in their logon language, provided that the corresponding language key has been maintained in the on Characteristic.

Document Management

Not applicable

Legal Requirement

Not applicable

Special Requirements

Not applicable

Target Design

The technical design of the target for this conversion approach.

Table	Field	Data Element	Field Description	Data Type	Length	Requirement
QPMK	GUELTIGAB	GUELTIGAB	Valid-from Date	DATS	8	R
QPMK	LOEKZ	LOEKZ	Status of Master Record	CHAR	1	R (Migrate only status 1 and 2) 1 = Being Created 2 = Released 3 = Can No Longer Be Used 4 = Deletion Flag 5 = Archive
QPMK	MASSEINHSW	MASSEINHSW	Unit of Measurement in Which Quantitative Data Is Stored	UNIT	3	C

QPMK	MKMNR	QMERNKR	Master Inspection Characteristic (MIC)	CHAR	18	R
QPMK	SOLLWERT	SOLLWERT	Target Value for a Quantitative Characteristic	DEC	15	C
QPMK	STELLEN	STELLEN	Number of Places to the Right of a Decimal Point (Accuracy)	NUMC	2	C
QPMK	STEUERKZ	STEUERKZ	Cntrl Indicator String for Insp. Char./Master Insp. Char.	CHAR	30	R : Correspond to control data. System concatenate the data pulled from TQ27 customizing table or changed by the user --> Definition in Appendix tab
QPMK	TOLERANZOB	TOLERANZOB	Upper Specification Limit	DEC	15	C
QPMK	TOLERANZSL	TOLERANZSL	Tolerance Key	CHAR	3	C
QPMK	TOLERANZUN	TOLERANZUN	Lower Specification Limit	DEC	15	C
QPMK	VERSION	VERSION	MIC Version	NUMC	6	S
QPMK	WERKS	WERKS	Plant for Master Inspection Characteristic	CHAR	4	R
QPMK	ZAEHLER	QZAEHLER	Plant for Master Inspection Characteristic (Plant Specific MIC)	CHAR	4	R
QPMT	ZAEHLER	ZAEHLER	Plant for Master Inspection Characteristic	NUM	4	R
QPMT	MKMNR	MKMNR	Master Inspection Characteristic	CHAR	8	R
QPMT	VERSION	VERSION	Version Number of Inspection Method	CHAR	6	S
QPMT	SPRAS	SPRAS	Language Key	CHAR	2	R
QPMK	CODE9U	CODE9U	Defect Code for Rejection at Lower Specification Limit	CHAR	8	C If defect indicator and lower specification limit is set in QPMK-STEUERKZ and business required to maintain a defect catalog for the lower tolerance defect than this field need to be populated Value can be : Copy from the current system or a data enrichment or can be a blank.
QPMK	CODEGR9O	CODEGR9O	Defect Code Group for Rejection at Upper Tolerance	CHAR	8	C If defect indicator and upper specification limit is set in QPMK-STEUERKZ and business required to maintain a defect catalog for the upper tolerance defect than this field need to be populated Value can be : Copy from the current system or a data enrichment or can be a blank.
QPMK	CODE9O	CODE9O	Defect Code for Rejection at Upper Specification Limit	CHAR	8	C If defect indicator and upper specification limit is set in QPMK-STEUERKZ and business required to maintain a defect catalog for the upper tolerance defect than this field need to be populated Value can be : Copy from the current system or a data enrichment or can be a blank.
QPMK	ATINN	ATINN	Internal characteristic	NUMC	10	S
QPMK	EEANTVERF	EEANTVERF	Fraction Calculation	CHAR	1	NU

QPMK	CODEGRQUAL	CODEGRQUAL	Defect Code Group for General Rejection	CHAR	8	C If defect indicator and upper specification limit is set in QPMK-STEUERKZ and business required to maintain a defect catalog for the upper tolerance defect than this field need to be populated Value can be : Copy from the current system or a data enrichment or can be a blank.
QPMK	CODEQUAL	CODEQUAL	Defect Code for Rejection: General	CHAR	8	C If defect indicator and upper specification limit is set in QPMK-STEUERKZ and business required to maintain a defect catalog for the upper tolerance defect than this field need to be populated Value can be : Copy from the current system or a data enrichment or can be a blank.
QPMK	DUMMY10	DUMMY10	Spec ID	CHAR	10	C
QPMK	DUMMY20	DUMMY20	Spec	CHAR	20	C
QPMK	DUMMY40	DUMMY40	Text Line for Additional Information	CHAR	40	C
QPMK	SORTFELD	SORTFELD	Search Field	CHAR	20	R
QPMK	LSPER	LSPER	Data Record Is Used	CHAR	1	S
QPMK	KONSISTENT	KONSISTENT	Copy Model/Reference Characteristic	CHAR	1	R : Empty is a valid value
QPMK	AUTOR	AUTOR	Name of User Who Created the Data Record	CHAR	12	S
QPMK	DATES	DATES	System Date on Which Data Record Was Created	DATS	8	S
QPMK	AEAUT	AEAUT	Name of User Who Last Changed Data Record	CHAR	12	S
QPMK	DATAE	DATAE	System Date on Which Data Record Was Changed	DATS	8	S
QPMK	CHANGEDDATETIME	CHANGEDDATETIME	UTC Time Stamp in Short Form (YYYYMMDDhhmmss)	CHAR	14	S
QPMK	MERKGEW	MERKGEW	Weighting of Characteristic	DEC	3	C (Empty is a valid value) Value can be : Copy from the current system or a data enrichment or can be a blank. Accepted values as per 10/2025 are : • 01 • 02 • 03 • 04 • 05 • 91 • 92 • 93
QPMK	PRFQL	PRFQL	Inspector Qualification	CHAR	3	C
QPMK	QAUTH	QAUTH	Authorization Group QM Master Data	CHAR	4	C
QPMK	PLAUSIOBEN	PLAUSIOBEN	Upper Plausibility Limit	DEC	15	C

QPMK	PLAUSIUNTE	PLAUSIUNTE	Lower Plausibility Limit	DEC	15	C
QPMK	TOLERWEIOB	TOLERWEIOB	Change to Upper Specification Limit	CHAR	1	C
QPMK	TOLERWEIUN	TOLERWEIUN	Change to Lower Specification Limit	CHAR	1	C
QPMK	TOLERWAB	TOLERWAB	Date from Which the Tolerance Change Is Valid	DATS	8	C
QPMK	TOLERWBIS	TOLERWBIS	Date Until Which the Tolerance Change Is Valid	DATS	8	C
QPMK	CODEGR9U	CODEGR9U	Defect Code Group for Rejection at Lower Tolerance	CHAR	8	C If defect indicator and lower secification limit is set in QPMK-STEUERKZ and business requiered to maintain a defect catalog for the lower tolerance defact than this field need to be populated Value can be : Copy from the current system or a data enrichment or can be a blank.
QPMK	GRENZEOB1	GRENZEOB1	First Upper Specification Limit	DEC	15	C
QPMK	GRENZEUN1	GRENZEUN1	First Lower Specification Limit	DEC	15	C
QPMK	GRENZEOB2	GRENZEOB2	Second Upper Specification Limit	DEC	15	C
QPMK	GRENZEUN2	GRENZEUN2	Second Lower Specification Limit	DEC	15	C
QPMT	KURZTEXT	KURZTEXT	Short Text for MIC	CHAR	40	R
STXH	TDOBJECT	TDOBJECT	Texts: application object	CHAR	10	S : Always "QPMERKMAL"
STXH	TDNAME	TDNAME	Name	CHAR	70	Consists of concatenated value as per below: Client (MANDT)+ Plant (WERKS) + MIC (MKMNR) + Version (VERSION) + Language Key (SPRAS) If actual MIC length is 8, then remain as it is. If actual MIC data length < 8, add additional zero until it reach data length = 8
STXH	TDID	TDID	Text ID	CHAR	4	S : Always "QPMT"
STXH	TDSPRAS	TDSPRAS	Language Key	LANG	1	S
STXH	TDTITLE	TDTITLE	Title in dialog box	CHAR	20	S
STXH	TDFRELES	TDFRELES	Release	CHAR	4	S
STXH	TDFUSER	TDFUSER	Created by	CHAR	12	S
STXH	TDFDATE	TDFDATE	Date created	DATS	8	S
STXH	TDFTIME	TDFTIME	Time Created	TIMS	6	S

STXH	TDLRELES	TDLRELES	Last Changed in Release	CHAR	4	S
STXH	TDLUSER	TDLUSER	Last changed by	CHAR	12	S
STXH	TDLTIME	TDLTIME	Last Changed At	TIMS	6	S
STXH	TDVERSION	TDVERSION	Version	CHAR	4	S
STXH	TDSTYLE	TDSTYLE	Style Name	CHAR	8	S
STXH	TDFORM	TDFORM	Form name	CHAR	10	S
STXH	TDHYPHENAT	TDHYPHENAT	Hyphenation Active	CHAR	1	S
STXH	TDTRANSTAT	TDTRANSTAT	Translation status	CHAR	1	S
STXH	TDOSPRAS	TDOSPRAS	Original language	LANG	1	S
STXH	TDMACODE1	TDMACODE1	Short Title 1	CHAR	20	S
STXH	TDMACODE2	TDMACODE2	Short Title 2	CHAR	20	S
STXH	TDTXTLINES	TDTXTLINES	Number of Text Lines in Line Table	NUMC	5	S
STXH	TDREF	TDREF	Reference text	CHAR	70	S
STXH	TDREFNAME	TDREFNAME	Name of Referenced Text	CHAR	70	S
STXH	TDREFID	TDREFID	ID of Referenced Text	CHAR	4	S
STXH	TDTEXTTYPE	TDTEXTTYPE	SAPscript: Format of Text	CHAR	1	S
STXH	TDCOMPRESS	TDCOMPRESS	SAPscript: Text is compressed	CHAR	1	S
STXH	LOGSYS	LOGSYS	Logical system	CHAR	10	S
STXH	RELID	RELID	CHAR02 data element	CHAR	2	S
STXL	TDOBJECT	TDOBJECT	Text object	CHAR	10	S : Always "QPMERKMAL"
STXL	TDNAME	TDNAME	Text name	CHAR	70	Consists of concatenated value as per below: Client (MANDT)+ Plant (WERKS) + MIC (MKMNR) + Version (VERSION) + Language Key (SPRAS) If actual MIC length is 8, then remain as it is. If actual MIC data length < 8, add additional zero until it reach data length = 8

STXL	TDID	TDID	Text ID	CHAR	4	S : Always "QPMT"
STXL	TDSPRAS	TDSPRAS	Language	LANG	1	S
STXL	SRTF2	SRTF2	BIN1 data element fo	RAW	2	S
STXL	CLUSTR	CLUSTR	BIN2 data element fo	RAW	2	S
STXL	CLUSTD	CLUSTD	Data	RAW	255	S : Correspond to the long text
STXH	TDLDATE	TDLDATE	Changed On	DATS	8	S
STXH	TDREFOBJ	TDREFOBJ	Object of Referenced Text	CHAR	10	S
STXH	TDOCLASS	TDOCLASS	SAPscript: Object Class	CHAR	2	S

Data Cleansing

All data cleansing activities must be performed in the source systems (e.g., PF2, WP2) wherever possible, following the rules and criteria defined in this document. The objective is to ensure that only valid, active, and relevant master data is migrated to S/4HANA, while obsolete, redundant, or inconsistent records are excluded.

If certain data cleansing activities cannot be executed directly in the source systems due to system limitations, they may be managed externally (e.g., using Syniti Migrate, 3rd Party Vendor tools, or DCT processes). In such cases, proper documentation of the cleansing activity must be maintained and appended to this deliverable to support review, validation, and sign-off by stakeholders.

ID	Criticality	Error Message /Report Description	Rule	Output	Source System
1057-001	C1	MIC not used in last 4 years	All MICs not referenced in any inspection plan (PLMK) or inspection lot in the last 4 years won't be migrated.	Active MICs used within last 4 years	PF2/WP2
1057-002	C1	MIC flagged for deletion	All MICs with status 1 and 2 (QPMK-LOEKZ) won't be migrated.	Active MICs with status = 1 (Being Created) and 2 (Released)	PF2/WP2
1057-003	C1	Duplicate MIC (and duplicate description)	Identify all MICs with duplicate or similar descriptions (e.g., PH, PH1, PH3) and provide them for consolidation. Only one MIC should be selected for use.	Business must decide which MIC will be retained as the representative MIC for data migration purpose.	PF2/WP2

Conversion Process

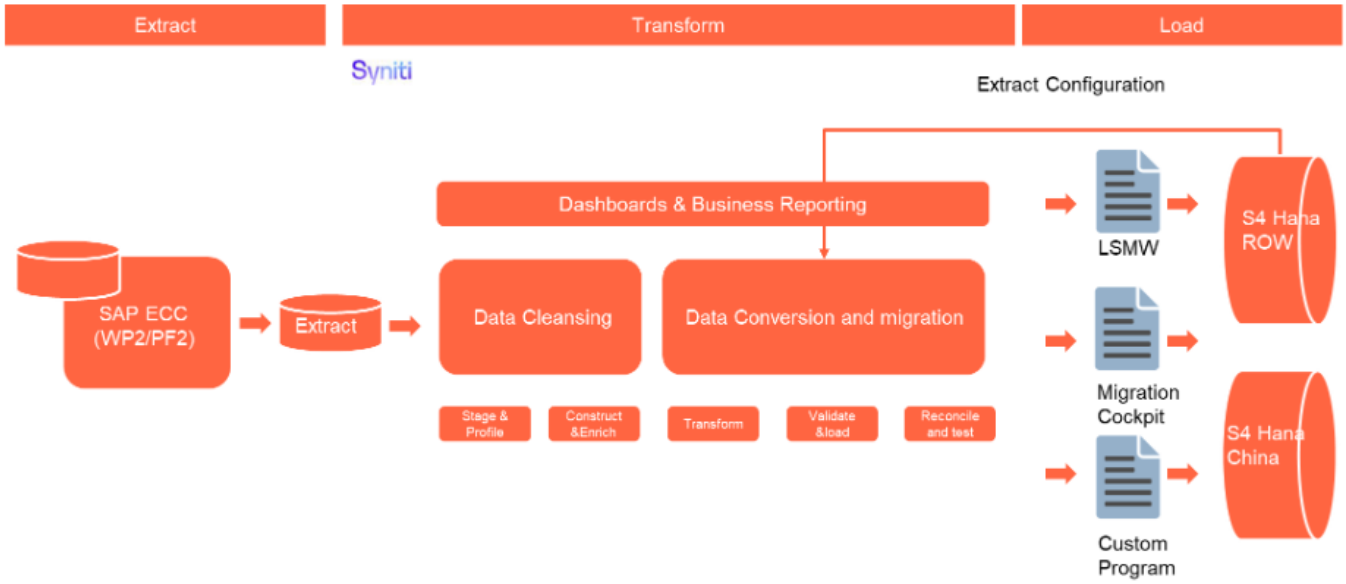
The high-level process is represented by the diagram below:

The ETL (Extract, Transform, Load) process is a structured approach to data migration and management, ensuring high-quality data is seamlessly transferred across systems. Here's a breakdown of its key components:

1. **Extraction**
The process begins with extracting metadata and raw data from source systems, such as Syensqo ECC system (i.e. WP2/PF2) periodically. The extracted data is then staged for transformation.

2. **Transformation**
Once extracted, the data undergoes cleansing, consolidation, and governance. This step ensures data integrity, consistency, and compliance with business rules. The transformation process includes:
- Data validation to remove inconsistencies.
- Standardization to align formats across datasets.
- Business rule application to refine data for operational use.

3. **Loading**
The transformed data is then loaded into the target S/4HANA system.



Data Privacy and Sensitivity
Not applicable

Extraction

Extract data from a source into Syniti Migrate. There are 2 possibilities:

1. The data exists. Syniti Migrate connects to the source and loads the data into Syniti Migrate. There are 3 methods:
    a. Perform full data extraction from relevant tables in the source system(s).
    b. Perform extraction through the application layer.
    c. Only if Syniti Migrate; cannot connect to the source, data is loaded to the repository from the provided source system extract/report.
2. The data does not exist (or cannot be converted from its current state). The data is manually collected by the business directly in Syniti Migrate. This is to be conducted using DCT (Data Collection Template) in Syniti Migrate.

The agreed relevancy criteria is applied to the extracted records to identify the records that are applicable for the Target Loads

Extraction Run Sheet

Req #	Requirement Description	Team Responsible
Extraction Scope Definition	- Identify the source systems and databases involved. - Define the data objects (tables, fields, records) to be extracted. - Establish business rules for data selection.	Syniti / LTC Data team
Extraction Methodology	- Specify the extraction approach (full, incremental, or delta extraction). - Determine the tools and technologies used. - Define data filtering criteria to exclude irrelevant records.	Syniti
Extraction Execution Plan	- Establish execution timelines and batch processing schedules. - Assign responsibilities for extraction monitoring. - Document dependencies on other migration tasks.	Syniti
Data Quality and Validation	- Define error handling mechanisms for extraction failures.	Syniti

Selection Screen

Selection Ref Screen	Parameter Name	Selection Type	Requirement	Value to be entered/set
Not applicable				

Data Collection Template (DCT)

A Target-Ready Data Collection Template will be created for all required fields in the SAP QM - Master Inspection Characteristics, except for fields that require transformation in accordance with the defined transformation rules. Each template will follow the structure and format required by the target S/4HANA Quality Management.

1. Master Inspection Characteristic - Basic Data

Field Name	Field Description	Data Type	Length	Requirement	Rule	Mapping
QPMK-MANDT	Client Name	CHAR	3	Required	Client	XREF from T000
QPMK-ZAEHLER	Plant for Master Inspection Characteristic	NUM	4	Required	Mandatory technical key for MIC per plant	Copy from DCT
QPMK-MKMNR	Master Inspection Characteristic	CHAR	8	Required	Must be unique per plant	Copy from DCT
QPMK-WERKS	Plant for Master Inspection Characteristic	NUM	4	Required	Must exist in plant mapping; must be active plant	Copy from DCT
QPMK-VERSION	Version Number of Master Inspection Characteristics	CHAR	6	System generated	Copy from DCT	Copy from DCT
QPMK-GUELTIGAB	Valid-From Date	DATE	8	Required	Default = creation date unless specified	Copy from DCT
QPMK-SORTFELD	Search Field	CHAR	20	Required	Optional (Used for search help)	Copy from DCT
QPMK-LOEKZ	Status of Master Record	CHAR	1	Required	Value as per below: 1 = Being Created 2 = Released 3 = Can No Longer Be Used 4 = Deletion Flag 5 = Archived	Copy from DCT
QPMT-ZAEHLER	Plant for Master Inspection Characteristic	NUM	4	Required	Mandatory technical key for MIC per plant	Copy from DCT
QPMT-MKMNR	Master Inspection Characteristic	CHAR	8	Required	Must be unique per plant	Copy from DCT
QPMT-KURZTEXT	Short Text	CHAR	40	Required	Short Text for MIC	Copy from DCT
QPMT-VERSION	Version Number of Inspection Methods	CHAR	6	System generated	Copy from DCT	Copy from DCT
QPMT-SPRAS	Language Key	CHAR	2	Required	Default = EN unless multilingual	Copy from DCT
QPMK-LSPER	Data Record Is Used	CHAR	1	Conditional	Can be used to link MIC to a Batch Characteristic	Copy from DCT
QPMK-KONSISTENT	Copy Model / Reference Characteristic	CHAR	1	Conditional	Value as per below: Blank = Incomplete Copy Model (system default value) 1 = Complete Copy Model X = Reference Characteristics	Copy from DCT
QPMK-STEUERKZ	Control Indicator String	CHAR	30	Required	Derived from QS27 customizing	Copy from DCT

QPMK-MERKGEW	Weighting of Characteristic	NUM	2	Conditional	Value as per below: 01 = Critical Characteristic 02 = Major Characteristic A 03 = Major Characteristic B 04 = Minor Characteristic A 05 = Minor Characteristic B 91 = Critical Characteristic 92 = Major Characteristic 93 = Minor Characteristic	Copy from DCT
QPMK-PRFQL	Inspector Qualification	CHAR	8	Conditional	Validate against qualification list (if used)	Copy from DCT
QPMK-DUMMY10	Spec ID	CHAR	20	Conditional	Copy from legacy or enrichment or blank	Copy from DCT
QPMK-DUMMY20	Spec	CHAR	40	Conditional	Copy from legacy or enrichment or blank	Copy from DCT
QPMK-DUMMY40	Text Line for Additional Information	CHAR	40	Conditional	Copy from legacy or enrichment or blank	Copy from DCT
QPMK-QAUTH	Authorization Group QM Master Data	CHAR	4	Conditional	Optional; controls access to QM master data	Copy from DCT
QPMK-TOLERANZSL	Tolerance Key	CHAR	4	Conditional	Populate only if tolerance data is maintained	Copy from DCT
QPMK-STELLEN	Decimal Places	NUM	2	Conditional	Required for quantitative MIC	Copy from DCT
QPMK-MASSEINSHW	Unit of Measurement	CHAR	3	Conditional	Required for quantitative MIC; must exist in T006	Copy from DCT
QPMK-SOLLWERT	Target Value	NUM	13	Conditional	Optional; only if maintained in legacy	Copy from DCT
QPMK-TOLERANZOB	Upper Specification Limit	NUM	13	Conditional	Optional; only if maintained	Copy from DCT
QPMK-TOLERANZUN	Lower Specification Limit	NUM	13	Conditional	Optional; only if maintained	Copy from DCT
QPMK-GRENZEOB1	First Upper Specification Limit	NUM	13	Conditional	Optional	Copy from DCT
QPMK-GRENZEUN1	First Lower Specification Limit	NUM	13	Conditional	Optional	Copy from DCT
QPMK-GRENZEOB2	Second Upper Specification Limit	NUM	13	Conditional	Optional	Copy from DCT
QPMK-GRENZEUN2	Second Lower Specification Limit	NUM	13	Conditional	Optional	Copy from DCT
QPMK-PLAUSIOBEN	Upper Plausibility Limit	NUM	13	Conditional	Optional	Copy from DCT
QPMK-PLAUSIUNTE	Lower Plausibility Limit	NUM	13	Conditional	Optional	Copy from DCT
QPMK-TOLERWEIOB	Change to Upper Spec Limit	CHAR	13	Conditional	Optional	Copy from DCT
QPMK-TOLERWEIUN	Change to Lower Spec Limit	CHAR	13	Conditional	Optional	Copy from DCT
QPMK-TOLERWAB	Date From Which Tolerance Change is Valid	CHAR	8	Conditional	Optional	Copy from DCT
QPMK-TOLERWBIS	Date Until Which Tolerance Change is Valid	CHAR	8	Conditional	Optional	Copy from DCT
QPMK-CODEGRU	Defect Code Group for Rejection at Lower Tolerance	CHAR	8	Conditional	Required only if defect indicator in QPMK-STEUERKZ requires it	Copy from DCT
QPMK-CODEGU	Defect Code for Rejection at Lower Spec Limit	CHAR	8	Conditional	Required only if defect indicator in QPMK-STEUERKZ requires it	Copy from DCT
QPMK-CODEGR90	Defect Code Group for Rejection at Upper Tolerance	CHAR	8	Conditional	Required only if defect indicator in QPMK-STEUERKZ requires it	Copy from DCT
QPMK-CODEGQUAL	Defect Code Group for General Rejection	CHAR	8	Conditional	Required only if defect indicator in QPMK-STEUERKZ requires it	Copy from DCT
QPMK-CODEQUAL	Defect Code for Rejection: General	CHAR	4	Conditional	Required only if defect indicator in QPMK-STEUERKZ requires it	Copy from DCT

2. Characteristics Control Indicator

Field Name	Field Description	Data Type	Length	Requirement	Rule	Mapping	Field Sequence for Control Indicator
ZAEHLER	Plant for Master Inspection Characteristic	CHAR	4	Required	Mandatory technical key for MIC per plant	Copy from DCT	
MKMNR	Master Inspection Characteristic	CHAR	8	Required	Must be unique per plant	Copy from DCT	
QUANTITAT	Quant or Qual charac	CHAR	1	Conditional	Drop-down value list: X = Quantitative <Blank>/ Null = Qualitative	Copy from DCT	1
MESSWERTE	Record measured Values	CHAR	1	Conditional	Drop-down value list: X = Use if Quantitat = X <Blank>/ Null =Use if QUANTITAT = Null	Copy from DCT	2
PRUEFKAT	Characteristic Attributes	CHAR	1	Conditional	**Only for Qualitative Characteristics** Drop-down value list: X = Use characteristics attributes <Blank>/ Null = not use characteristics attributes	Copy from DCT	3
TOLEROBEN	Upper Spec	CHAR	1	Conditional	**Only for Quantitative Characteristics** Drop-down value list: X = Use Upper Specification Limit <Blank>/ Null = not use Upper Specification Limit	Copy from DCT	4
TOLERUNTEN	Lower Spec	CHAR	1	Conditional	**Only for Quantitative Characteristics** Drop-down value list: X = Use Lower Specification Limit <Blank>/ Null = not use Lower Specification Limit	Copy from DCT	5
SOLLPRUEF	Target Value	CHAR	1	Conditional	**Only for Quantitative Characteristics** Drop-down value list: X = Use Target Value <Blank>/ Null = not use Target Value	Copy from DCT	6
PUMFKZ	Inspection Scope	CHAR	1	Conditional	Drop-down value list: = is Fixed > is Larger < is Smaller <Blank> or Null = No Scope	Copy from DCT	7
LZEITKZ	Long term inspection	CHAR	1	Conditional	Drop-down value list: X = Use Long Term Inspection <Blank>/ Null = not use Long Term Inspection	Copy from DCT	8
ESTUKZ	Recording type	CHAR	1	Conditional	Drop-down value list: + is Individual <Blank> or Null = Summarized - is no recording * is classed recording	Copy from DCT	9
DOKUKZ	Documentation	CHAR	1	Conditional	Drop-down value list: <Blank> or Null is No documentation . (period) is Documentation Required if Rejected + is Documentation Required	Copy from DCT	10
RZWANG	Charac. req. or not	CHAR	1	Conditional	Drop-down value list: X is Required <Blank> or Null is Optional + is After Acceptance - is After Rejection	Copy from DCT	11
SYNCRO	Synchronization is Active	CHAR	1	Not Used	Not Used (This record is retained to maintain sequence consistency.)	Not Used	12
ADDPRO	Additive charac.	CHAR	1	Conditional	Drop-down value list: X = Use Additive Characteristics <Blank>/ Null = not use Additive Characteristics	Copy from DCT	13
ZERSTPRF	Destructive charac.	CHAR	1	Conditional	Drop-down value list: X = Use Destructive Characteristics <Blank>/ Null = Not Use Destructive Characteristics	Copy from DCT	14
FORMELMK	Formula	CHAR	1	Conditional	Drop-down value list: <Blank> or Null is No Formula X is Calculated Characteristic 1 is Input Processing	Copy from DCT	15
STICHPR	Sampling proc. Required	CHAR	1	Conditional	Drop-down value list: X = Use Sampling Procedures <Blank>/ Null = Not Use Sampling Procedures	Copy from DCT	16

AUSSLOS	Scrap Share/Q score	CHAR	1	Conditional	Drop-down value list: X = Use Scrap Share/Quality Score <Blank>/ Null = Not Use Scrap Share /Quality Score	Copy from DCT	17
FIXIERT	Fixed	CHAR	1	Not Used	Not Used (This record is retained to maintain sequence consistency.)	Not Used	18
BEWFHLZHL	Record # defects	CHAR	1	Not Used	Not Used (This record is retained to maintain sequence consistency.)	Not Used	19
LSTKZ	Subsystem	CHAR	1	Not Used	Not Used (This record is retained to maintain sequence consistency.)	Not Used	20
VORGAEND	Specifications	CHAR	1	Not Used	Not Used (This record is retained to maintain sequence consistency.)	Not Used	21
PMMZWANG	Test Equipment	CHAR	1	Conditional	Drop-down value list: X = Test Equipment <Blank>/ Null = Not Test Equipment	Copy from DCT	22
FEHLREC	Defects recording	CHAR	1	Conditional	Drop-down value list: X = Use Defect Recordings <Blank>/ Null = Not Use Defect Recordings	Copy from DCT	23
AENDBELEG	RR Change Docs	CHAR	1	Conditional	Drop-down value list: X = Use Result Recording Change Documentation <Blank>/ Null = Not Use Result Recording Change Documentation	Copy from DCT	24
QSPCMK	SPC charac.	CHAR	1	Conditional	Drop-down value list: X = Use SPC Characteristics <Blank>/ Null = Not Use SPC Characteristics	Copy from DCT	25
KEINDRUCK	Print	CHAR	1	Conditional	Drop-down value list: X = Do Not Print <Blank> or Null = Print * is Do Not Print at Skip	Copy from DCT	26
PARA	Parameter Characteristic	CHAR	1	Not Used	Not Used (This record is retained to maintain sequence consistency.)	Not Used	27
PROCESSMK	Process Characteristic	CHAR	1	Not Used	Not Used (This record is retained to maintain sequence consistency.)	Not Used	28

3. Master Inspection Characteristic - Long Text

Field Name	Field Description	Data Type	Length	Requirement	Rule	Mapping
STXH-TDOBJECT	Text Object	CHAR	10	Required	Always = QPMERKMAL	Copy from DCT
STXH-TDNAME	Name	CHAR	70	Required	Consists of concatenated value as per below: Client (MANDT)+ Plant (WERKS) + MIC (MKMNR) + Version (VERSION) + Language Key (SPRAS) If actual MIC length is 8, then remain as it is. If actual MIC data length < 8, add additional zero until it reach data length = 8	Copy from DCT
STXH-TDID	Text ID	CHAR	4	Required	Always = QPMT	Copy from DCT
STXH-TDSPRAS	Language Key	CHAR	1	Required	Default = EN unless multilingual	Copy from DCT
STXL-CLUSTD	Text Cluster Data	CHAR	2000	Conditional	Must contain MIC long text lines	Copy from DCT
Note:	Please check the link attached for Layout:					

Extraction Dependencies

Item #	Step Description	Team Responsible

1	**Source System Availability** • Ensure that the source database or application is accessible. • Confirm that necessary credentials and permissions are granted	Syensqo IT
2	**Data Structure** • Identify relationships between tables, views, and stored procedures.	Syniti
3	**Referential Integrity** • Ensure dependent records are extracted together.	Syniti
4	**Extraction Methodology** • Define whether extraction is **full, incremental, or delta-based**. • Establish batch processing schedules for large datasets.	Syniti
5	**Performance and Scalability Considerations** • Optimize extraction queries to prevent system overload. • Ensure network bandwidth supports data transfer volumes.	Syniti
6	**Security and Compliance** • Adhere to regulatory standards for sensitive information if applicable	Syniti

Transformation

The Target fields are mapped to the applicable Legacy field that will be its source, this is a 3-way activity involving the Business, Functional team and Data team. This identifies the transformation activity required to allow to make the data Target ready:

1. Perform value mapping and data transformation rules.
    a. Legacy values are mapped to the to-be values (this could include a default value)
    b. Values are transformed according to the rules defined in
2. Prepare target-ready data in the structure and format that is required for loading via prescribed Load Tool. This step also produces the load data ready for business to perform Pre-load Data Validation

Transformation Run Sheet

Item #	Step Description	Team Responsible
1	Obtain DCT Sign-off from Business	SyWay Data Team
2	<Add steps from Syniti Migrate here>	SyWay Data Team
3	Review and Validate Error and Preload Reports	SyWay Data Team
4	Generate Load Files	SyWay Data Team

Transformation Rules

Rule #	Source system	Source Table	Source Field	Source Description	Target System	Target Table	Target Field	Target Description	Transformation Logic
1	PF2, WP2	QPMK	GUELTIGAB	Valid-from Date	S4 HANA	QPMK	GUELTIGAB	Valid-from Date	Use S/4 Start-from Date
2	PF2, WP2	QPMK	LOEKZ	Status of Master Record	S4 HANA	QPMK	LOEKZ	Status of Master Record	Copy from legacy. Migrate both status 1 (Being Created) and status 2 (Released) records
3	PF2, WP2	QPMK	VERSION	Version of Master Inspection Characteristic	S4 HANA	QPMK	VERSION	Version of Master Inspection Characteristic	Use Latest version and make the default value to "000001"

4	PF2, WP2	QPMK	MASSEINHSW	Unit of Measurement in Which Quantitative Data Is Stored	S4 HANA	QPMK	MASSEINHSW	Unit of Measurement in Which Quantitative Data Is Stored	Copy from legacy
5	PF2, WP2	QPMK	MKMNR	Master Inspection Characteristic (MIC)	S4 HANA	QPMK	MKMNR	Master Inspection Characteristic (MIC)	Copy from legacy
6	PF2, WP2	QPMK	SOLLWERT	Target Value for a Quantitative Characteristic	S4 HANA	QPMK	SOLLWERT	Target Value for a Quantitative Characteristic	Copy from legacy for quantitative MIC; blank for qualitative
7	PF2, WP2	QPMK	STELLEN	Number of Places to the Right of a Decimal Point (Accuracy)	S4 HANA	QPMK	STELLEN	Number of Places to the Right of a Decimal Point (Accuracy)	Copy from legacy for quantitative MIC. Default value as 0 (blank) for qualitative.
8	PF2, WP2	QPMK	STEUERKZ	Cntrl Indicator String for Insp. Char./Master Insp. Char.	S4 HANA	QPMK	STEUERKZ	Cntrl Indicator String for Insp. Char. /Master Insp. Char.	Copy from legacy. Validate against S /4 customizing (only permitted flags).
9	PF2, WP2	QPMK	TOLERANZOB	Upper Specification Limit	S4 HANA	QPMK	TOLERANZOB	Upper Specification Limit	Copy from legacy. Numeric check; ensure upper lower when both present.
10	PF2, WP2	QPMK	TOLERANZSL	Tolerance Key	S4 HANA	QPMK	TOLERANZSL	Tolerance Key	Copy from legacy. Must exist in S/4 target customizing
11	PF2, WP2	QPMK	TOLERANZUN	Lower Specification Limit	S4 HANA	QPMK	TOLERANZUN	Lower Specification Limit	Copy from legacy. Numeric check; ensure lower upper when both present.
12	PF2, WP2	QPMK	WERKS	Plant for Master Inspection Characteristic	S4 HANA	QPMK	WERKS	Plant for Master Inspection Characteristic	Xref (value mapping) from To-Be Plant Mapping
13	PF2, WP2	QPMK	ZAEHLER	Plant for Master Inspection Characteristic (Plant Specific MIC)	S4 HANA	QPMK	ZAEHLER	Plant for Master Inspection Characteristic (Plant Specific MIC)	Copy from legacy. Plant must be exist in Material Relevancy Rules.
14	PF2, WP2	QPMT	ZAEHLER	Plant for Master Inspection Characteristic	S4 HANA	QPMT	ZAEHLER	Plant for Master Inspection Characteristic	Copy from legacy. Plant must be exist in Material Relevancy Rules.
15	PF2, WP2	QPMT	MKMNR	Master Inspection Characteristic (MIC)	S4 HANA	QPMT	MKMNR	Master Inspection Characteristic (MIC)	Copy from legacy
16	PF2, WP2	QPMT	KURZTEXT	Short Text for MIC	S4 HANA	QPMT	KURZTEXT	Short Text for MIC	Copy from legacy
17	PF2, WP2	QPMT	VERSION	Version number of Inspection Method	S4 HANA	QPMT	VERSION	Version number of Inspection Method	Use Latest version and make the default value to "000001"
18	PF2, WP2	QPMT	SPRAS	Language Key	S4 HANA	QPMT	SPRAS	Language Key	Default = EN unless multilingual
19	PF2, WP2	QPMK	CODE9U	Defect Code for Rejection at Lower Specification Limit	S4 HANA	QPMK	CODE9U	Defect Code for Rejection at Lower Specification Limit	Copy from legacy. Catalog/code must exist in target.
20	PF2, WP2	QPMK	CODEGR9O	Defect Code Group for Rejection at Upper Tolerance	S4 HANA	QPMK	CODEGR9O	Defect Code Group for Rejection at Upper Tolerance	Copy from legacy. Target catalog group must exist.
21	PF2, WP2	QPMK	CODE9O	Defect Code for Rejection at Upper Specification Limit	S4 HANA	QPMK	CODE9O	Defect Code for Rejection at Upper Specification Limit	Copy from legacy. Ensure code is valid in target.
22	PF2, WP2	QPMK	CODEGRQUAL	Defect Code Group for General Rejection	S4 HANA	QPMK	CODEGRQUAL	Defect Code Group for General Rejection	Copy from legacy. Target catalog group must exist.
23	PF2, WP2	QPMK	CODEQUAL	Defect Code for Rejection: General	S4 HANA	QPMK	CODEQUAL	Defect Code for Rejection: General	Copy from legacy. arget code must exist.
24	PF2, WP2	QPMK	DUMMY10	Spec ID	S4 HANA	QPMK	DUMMY10	Spec ID	Copy only if value exists (optional). Leave blank otherwise.
25	PF2, WP2	QPMK	DUMMY20	Spec	S4 HANA	QPMK	DUMMY20	Spec	Copy only if value exists (optional). Leave blank otherwise.
26	PF2, WP2	QPMK	DUMMY40	Text Line for Additional Information	S4 HANA	QPMK	DUMMY40	Text Line for Additional Information	Copy only if value exists (optional). Leave blank otherwise.
27	PF2, WP2	QPMK	SORTFELD	Search Field	S4 HANA	QPMK	SORTFELD	Search Field	Copy from legacy
28	PF2, WP2	QPMK	KONSISTENT	Copy Model/Reference Characteristic	S4 HANA	QPMK	KONSISTENT	Copy Model /Reference Characteristic	Copy from legacy
29	PF2, WP2	QPMK	MERKGEW	Weighting of Characteristic	S4 HANA	QPMK	MERKGEW	Weighting of Characteristic	Copy from legacy
30	PF2, WP2	QPMK	PRFQL	Inspector Qualification	S4 HANA	QPMK	PRFQL	Inspector Qualification	Copy from legacy
31	PF2, WP2	QPMK	QAUTH	Authorization Group QM Master Data	S4 HANA	QPMK	QAUTH	Authorization Group QM Master Data	Copy from legacy. Ensure target auth group exists
32	PF2, WP2	QPMK	PLAUSIOBEN	Upper Plausibility Limit	S4 HANA	QPMK	PLAUSIOBEN	Upper Plausibility Limit	Copy from legacy. Numeric check; only relevant to quantitative MICs.
33	PF2, WP2	QPMK	PLAUSIUNTE	Lower Plausibility Limit	S4 HANA	QPMK	PLAUSIUNTE	Lower Plausibility Limit	Copy from legacy. Numeric check; only relevant to quantitative MICs.
34	PF2, WP2	QPMK	TOLERWEIOB	Change to Upper Specification Limit	S4 HANA	QPMK	TOLERWEIOB	Change to Upper Specification Limit	Copy from legacy

35	PF2, WP2	QPMK	TOLERWEIUN	Change to Lower Specification Limit	S4 HANA	QPMK	TOLERWEIUN	Change to Lower Specification Limit	Copy from legacy
36	PF2, WP2	QPMK	TOLERWAB	Date from Which the Tolerance Change Is Valid	S4 HANA	QPMK	TOLERWAB	Date from Which the Tolerance Change Is Valid	Copy from legacy. Validate as a real date; must be “valid-to”.
37	PF2, WP2	QPMK	TOLERWBIS	Date Until Which the Tolerance Change Is Valid	S4 HANA	QPMK	TOLERWBIS	Date Until Which the Tolerance Change Is Valid	Copy from legacy. Validate as a real date; must be “valid-from”.
38	PF2, WP2	QPMK	CODEGR9U	Defect Code Group for Rejection at Lower Tolerance	S4 HANA	QPMK	CODEGR9U	Defect Code Group for Rejection at Lower Tolerance	Copy from legacy. Target group must exist.
39	PF2, WP2	QPMK	GRENZEOB1	First Upper Specification Limit	S4 HANA	QPMK	GRENZEOB1	First Upper Specification Limit	Copy from legacy. Numeric; ensure UoM alignment
40	PF2, WP2	QPMK	GRENZEUN1	First Lower Specification Limit	S4 HANA	QPMK	GRENZEUN1	First Lower Specification Limit	Copy from legacy. Numeric; check lower upper.
41	PF2, WP2	QPMK	GRENZEOB2	Second Upper Specification Limit	S4 HANA	QPMK	GRENZEOB2	Second Upper Specification Limit	Copy from legacy
42	PF2, WP2	QPMK	GRENZEUN2	Second Lower Specification Limit	S4 HANA	QPMK	GRENZEUN2	Second Lower Specification Limit	Copy from legacy
43	PF2, WP2	STXH	TDOBJECT	Texts: application object	S4 HANA	STXH	TDOBJECT	Texts: application object	Defaulted to "QPMERKMAL"
44	PF2, WP2	STXH	TDNAME	Name	S4 HANA	STXH	TDNAME	Name	Consists of concatenated value as per below: Client (MANDT)+ Plant (WERKS) + MIC (MKMNR) + Version (VERSION) + Language Key (SPRAS) If actual MIC length is 8, then remain as it is. If actual MIC data length < 8, add additional zero until it reach data length = 8
45	PF2, WP2	STXH	TDID	Text ID	S4 HANA	STXH	TDID	Text ID	Always "QPMT"
46	PF2, WP2	STXH	TDSPRAS	Language Key	S4 HANA	STXH	TDSPRAS	Language Key	Copy from legacy
47	PF2, WP2	STXH	TDTITLE	Title in dialog box	S4 HANA	STXH	TDTITLE	Title in dialog box	System-generated value
48	PF2, WP2	STXH	TDFRELES	Release	S4 HANA	STXH	TDFRELES	Release	System-generated value
49	PF2, WP2	STXH	TDFUSER	Created by	S4 HANA	STXH	TDFUSER	Created by	System-generated value
50	PF2, WP2	STXH	TDFDATE	Date created	S4 HANA	STXH	TDFDATE	Date created	System-generated value
51	PF2, WP2	STXH	TDFTIME	Time Created	S4 HANA	STXH	TDFTIME	Time Created	System-generated value
52	PF2, WP2	STXH	TDLRELES	Last Changed in Release	S4 HANA	STXH	TDLRELES	Last Changed in Release	System-generated value
53	PF2, WP2	STXH	TDLUSER	Last changed by	S4 HANA	STXH	TDLUSER	Last changed by	System-generated value
54	PF2, WP2	STXH	TDLTIME	Last Changed At	S4 HANA	STXH	TDLTIME	Last Changed At	System-generated value
55	PF2, WP2	STXH	TDVERSION	Version	S4 HANA	STXH	TDVERSION	Version	System-generated value
56	PF2, WP2	STXH	TDSTYLE	Style Name	S4 HANA	STXH	TDSTYLE	Style Name	System-generated value
57	PF2, WP2	STXH	TDFORM	Form name	S4 HANA	STXH	TDFORM	Form name	System-generated value
58	PF2, WP2	STXH	TDHYPHENAT	Hyphenation Active	S4 HANA	STXH	TDHYPHENAT	Hyphenation Active	System-generated value
59	PF2, WP2	STXH	TDTRANSTAT	Translation status	S4 HANA	STXH	TDTRANSTAT	Translation status	System-generated value
60	PF2, WP2	STXH	TDOSPRAS	Original language	S4 HANA	STXH	TDOSPRAS	Original language	System-generated value
61	PF2, WP2	STXH	TDMACODE1	Short Title 1	S4 HANA	STXH	TDMACODE1	Short Title 1	System-generated value
62	PF2, WP2	STXH	TDMACODE2	Short Title 2	S4 HANA	STXH	TDMACODE2	Short Title 2	System-generated value
63	PF2, WP2	STXH	TDTXTLINES	Number of Text Lines in Line Table	S4 HANA	STXH	TDTXTLINES	Number of Text Lines in Line Table	System-generated value
64	PF2, WP2	STXH	TDREF	Reference text	S4 HANA	STXH	TDREF	Reference text	System-generated value
65	PF2, WP2	STXH	TDREFNAME	Name of Referenced Text	S4 HANA	STXH	TDREFNAME	Name of Referenced Text	System-generated value
66	PF2, WP2	STXH	TDREFID	ID of Referenced Text	S4 HANA	STXH	TDREFID	ID of Referenced Text	System-generated value
67	PF2, WP2	STXH	TDTEXTTYPE	SAPscript: Format of Text	S4 HANA	STXH	TDTEXTTYPE	SAPscript: Format of Text	System-generated value
68	PF2, WP2	STXH	TDCOMPRESS	SAPscript: Text is compressed	S4 HANA	STXH	TDCOMPRESS	SAPscript: Text is compressed	System-generated value

69	PF2, WP2	STXH	LOGSYS	Logical system	S4 HANA	STXH	LOGSYS	Logical system	System-generated value
70	PF2, WP2	STXH	RELID	CHAR02 data element	S4 HANA	STXH	RELID	CHAR02 data element	System-generated value
71	PF2, WP2	STXL	TDOBJECT	Text object	S4 HANA	STXL	TDOBJECT	Text object	Defaulted to "QPMERKMAL"
72	PF2, WP2	STXL	TDNAME	Text name	S4 HANA	STXL	TDNAME	Text name	Consists of concatenated value as per below: Client (MANDT)+ Plant (WERKS) + MIC (MKMNR) + Version (VERSION) + Language Key (SPRAS) If actual MIC length is 8, then remain as it is. If actual MIC data length < 8, add additional zero until it reach data length = 8
73	PF2, WP2	STXL	TDID	Text ID	S4 HANA	STXL	TDID	Text ID	Always "QPMT"
74	PF2, WP2	STXL	TDSPRAS	Language	S4 HANA	STXL	TDSPRAS	Language	Copy from legacy
75	PF2, WP2	STXL	SRTF2	BIN1 data element fo	S4 HANA	STXL	SRTF2	BIN1 data element fo	System-generated value
76	PF2, WP2	STXL	CLUSTR	BIN2 data element fo	S4 HANA	STXL	CLUSTR	BIN2 data element fo	System-generated value
77	PF2, WP2	STXL	CLUSTD	Data	S4 HANA	STXL	CLUSTD	Data	Copy from legacy
78	PF2, WP2	STXH	TDLDATE	Changed On	S4 HANA	STXH	TDLDATE	Changed On	System-generated value
79	PF2, WP2	STXH	TDREFOBJ	Object of Referenced Text	S4 HANA	STXH	TDREFOBJ	Object of Referenced Text	System-generated value
80	PF2, WP2	STXH	TDOCLASS	SAPscript: Object Class	S4 HANA	STXH	TDOCLASS	SAPscript: Object Class	System-generated value

Transformation Mapping

Mapping Table Name	Mapping Table Description
Plant	Mapping of legacy Plants to new S/4HANA Plant codes according to To-Be Plant Mapping definition. Ensures characteristics are assigned to valid and active plants only.
Characteristic Name (MIC)	Mapping of legacy Master Inspection Characteristic (QS21) names to new harmonized naming convention in S/4HANA, following corporate quality standards.
Characteristic Type	Mapping of legacy Characteristic Type values (Quantitative / Qualitative) to target system domain values (QMTB-KZQUI).
Catalog Type	Mapping of legacy Catalog Type to valid Catalog Type entries in configuration table TQ15 in S/4HANA.
Selected Set / Code Group	Mapping of legacy Selected Set and Code Group to harmonized sets in target system (reference configuration table TQ15T). Ensures consistency of catalog-based inspection characteristics.
Unit of Measure (UoM)	Mapping of legacy Units of Measure to ISO-compliant Units of Measure in S/4HANA (as defined in table T006).
Decimal Places	Mapping of legacy Decimal Place format to target format as per S/4HANA numeric precision standard (QPMK-ANZST / QPMK-STELL).
Target Value / Upper & Lower Limit	Conversion of legacy target, lower, and upper specification limits into harmonized decimal format consistent with target measurement system.
Characteristic Group	Mapping of legacy characteristic groups (QPMK-MERKNR grouping) to harmonized groups in target system for standardized reporting and search.
Plant Authorization Group	Mapping of legacy Authorization Groups (QPMK-BEGRU) to target Authorization Groups in S/4HANA (per configuration table TBRG).
Class / Class Type (Optional)	Mapping of legacy class assignments (if MICs were linked to classes) to target class and class type configuration in S /4HANA.
Reference Indicator	Mapping of legacy Reference Indicator values to target domain values ensuring correct reference linkage between global and plant-specific MICs.

Transformation Dependencies

List the steps that need to occur before transformation can commence

Item #	Step Description	Team Responsible
1	Ensure tables completeness	Syniti
2	Ensure all Transformation mappings are up to date.	Syniti

Pre-Load Validation

Project Team

Completeness

Task	Action
Business validates the load file	Send the load file to the Business Representatives for all plants so they can review and validate the data.
Mock 1 test must occur beforehand	The 1st mock load (manual) must be executed before the actual load can take place.
Count before and after	Review and document the item counts in the Transformation Files before the load, and verify them again after the load.
Validation Reports	

Accuracy

Task	Action
Conversion Accuracy	SyWay P2F-MFG Data Team to verify that all fields below meet pass the checks: 1. Mandatory Fields 2. Field and Value Mapping Correctness 3. Null Checks 4. Text Length Checks
Review Error Reports	Review and correct the errors. Achieve a zero-error record count as much as possible. Raise defects for data remediated and requiring a correction in the source data.

Business

Completeness

Task	Action
Verify Record Count	Business Data Owner/s to verify that the total number of relevant records from the the system is equal to the total number of records in the Preload and Load Sheets.

Accuracy

Task	Action
Conversion Accuracy	Business Data Owner/s to verify that all the data in the load table/file is accurate as per endorsed transformation/mapping rules.

Load

The load process includes:

1. Execute the automated data load into target system using load tool or product the load file if the load must be done manually
2. Once the data is loaded to the target system, it will be extracted and prepared for Post Load Data Validation

Load Run Sheet

Item #	Step Description	Team Responsible
1	Ensure Pre-load sign-offs are obtained.	SyWay Data team
2	Go to the load tool and select the correct load Program.	SyWay Data team
3	Proceed with Data load.	SyWay Data team
4	Validate few records loaded by accessing standard transactions.	SyWay Data team
5	Generate the post load reports in the tool.	SyWay Data team
6	Log errors as defects, if any and address resolutions. Close defects.	SyWay Data team
7	Resolve defects by re-upload and re-generate post load reports if necessary.	SyWay Data team
8	Business to validate the post load files as part of post-load validation, raise data defects or provide the post-load sign-off.	Business
9	Repeat steps 5 to 7 if necessary.	SyWay Data team

Load Phase and Dependencies

Pre-Cutover

Configuration

Item #	Configuration Item
1	**T001W – Plants/Branches**: Definition of plants where Master Inspection Characteristics are created and maintained.
2	**T006 – Units of Measurement**: ISO-compliant UoM definitions to ensure consistency of quantitative inspection characteristics.
3	**TQ07A – Inspection Types**: Configuration of valid inspection types used for assigning MICs in inspection plans or material QM view.
4	**TQ08 – Control Keys (QM)**: Definition of control keys for inspection processing, including in-process and final inspection controls.
5	**TQ09 – Usage Keys**: Definition of usage keys to determine where inspection characteristics can be used (e.g., in inspection plans, material QM view).
6	**TQ15 – Catalog Types**: Definition of catalog types for qualitative inspection characteristics (e.g., defect codes, result recording codes).
7	**TQ15T – Selected Sets & Code Groups**: Configuration of selected sets and code groups used to classify qualitative MIC values.
8	**TBRG – Authorization Groups**: Assignment of authorization groups controlling access and maintenance rights for MICs.
9	**TQ30 – Reference Indicators**: Configuration of reference indicator usage for linking global and plant-specific MICs.
10	**TQ75 – Decimal Places & Format**: Configuration of decimal places, number format, and rounding rules for quantitative MIC values.
11	**TCLA – Class Type (optional)**: Configuration of class type if MICs are linked to classification system (e.g., class type 023).
12	**TQ33 – Catalog Profile Assignment**: Control of which catalog profiles are assigned to MICs for standardizing defect recording.
13	**TQ85 – Inspection Lot Origin**: Configuration of inspection lot origin values that determine MIC usage in inspection processes.

Conversion Objects

Object #	Preceding Object Conversion Approach
1064	Sampling Procedure
1043	Inspection Methods

Error Handling

Error Type	Error Description	Action Taken
1	Plant does not exist or not mapped in target system	Verify that the plant exists in the target system and mapping is correctly maintained. Reprocess once mapping is updated.
2	UoM (Unit of Measure) not valid or not harmonized	Ensure that UoM is mapped correctly in T006 and harmonized with the target system. Correct invalid values in the collection template and reload.
3	Catalog or Selected Set not found in target system	Check if the required catalog and selected set are already migrated or configured in the target system. Migrate or create them before reprocessing.
4	Characteristic code or description missing	Validate source data completeness. Update missing mandatory fields (e.g., short text, characteristic ID) in the collection template.
5	Duplicate inspection characteristic records for the same plant	Perform deduplication and retain only the valid active characteristic in the collection file before loading.
6	Invalid characteristic type or control indicators	Review and correct control indicators (e.g., quantitative/qualitative flags, sampling procedures) to align with target system configuration.
7	Authorization group or class type not maintained in target system	Ensure the required authorization group or class type is configured in the target system before reprocessing.
8	Obsolete or marked-for-deletion characteristics	Exclude these records from migration as per data cleansing rules.

Post-Load Validation

Project Team

Completeness

Task	Action
Verify Count	SyWay P2F-MFG Data Team to verify the record count created in target S/4 HANA by accessing post load reports in dspMigrate or standard reports from S/4 HANA.

Accuracy

Task	Action
Verify Logs	Check if there is data that failed to load and perform the necessary actions (e.g. register as post load issue or attempt to load the record again, etc.).

Business

Completeness

Task	Action
Verify Count	Download Post Load Reports from dspMigrate and verify that the record count loaded in the target S/4 HANA is the same count as of the endorsed load file.

Accuracy

Task	Action
Conversion Accuracy	Verify that the Material BOM data in target S/4 HANA were loaded correctly via DSP Migrate post load reports or standard reports from S/4 HANA.

Key Assumptions

- Master Data Standard (MDS) is up to date as of the date of documenting this conversion approach and Master Inspection Characteristic data load.
- Data cleansing activities have been completed to ensure only active, valid, and relevant Master Inspection Characteristics are migrated. Characteristics marked for deletion or obsolete records are excluded.
- Required configuration elements such as Catalogs, Selected Sets, Code Groups, Control Indicators, and Authorization Groups are already in place in the target S/4HANA system prior to migration.
- All Units of Measure (UoM) used in quantitative characteristics are harmonized between source and target systems to ensure data consistency during migration.
- Plant master data and organizational mapping are completed prior to Master Inspection Characteristic load to ensure proper assignment.
- Number ranges for characteristic identifiers are preconfigured in S/4HANA and internal numbering will be applied during migration unless otherwise specified.
- Only fields required for QM inspection processing, quality planning, and execution are in scope for migration. Legacy-specific or unused fields will not be migrated.
- Enrichment activities (such as missing control indicators, invalid UoM, or obsolete characteristics) are handled outside of the automated migration process and may require business sign-off.
- Dependencies such as catalog entries, selected sets, and reference data are assumed to be loaded and validated prior to characteristic migration.
- Any exceptions to these assumptions (e.g., manual updates to control indicators or special characteristic types) will be managed through a formal exception process.

See also

CNV-2009 Material Master QM view

CNV-1064 QM Sampling Procedure

CNV-1043 QM Inspection Methods

CNV-1041 QM Inspection Plan

CNV-1047 Batch Characteristics of Class Type: 023

Change log

Version	Published	Changed By	Comment
CURRENT (v. 52)	**May 08, 2026 10:02**	**SUSANTO-ext, William**	Section Update - Conversion Spec Update (DCT Section) v5.0
v. 51	Apr 07, 2026 14:15	**SUSANTO-ext, William**	Section Update - Conversion Spec Update (DCT Section) v4.0
v. 50	Apr 03, 2026 09:37	**SUSANTO-ext, William**	Section Update - Conversion Spec Update (DCT Section) v3.0
v. 49	Mar 26, 2026 09:35	**SUSANTO-ext, William**	Section Update - Minor Update v4.0
v. 48	Mar 26, 2026 09:32	**SUSANTO-ext, William**	Section Update - Minor Update v3.0
v. 47	Mar 13, 2026 12:39	**SUSANTO-ext, William**	Section Update - Conversion Spec Minor Update (DCT & Transformation Rules) v2.0
v. 46	Feb 24, 2026 08:41	**SUSANTO-ext, William**	Section Update - Conversion Spec Minor Update v1.0
v. 45	Feb 18, 2026 16:57	**SUSANTO-ext, William**	Section Update - Conversion Scope Draft v1.7
v. 44	Feb 18, 2026 16:47	**SUSANTO-ext, William**	Section Update - Conversion Scope Draft v1.6

v. 43	Feb 18, 2026 16:40	**SUSANTO-ext, William**	Section Update - Conversion Scope Draft v1.5

Go to Page History

Workflow history

Title	Last Updated By	Updated	Status
There are no pages at the moment.			

Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

From Mar 26, 2026 to May 08, 2026	Actor	Type	Activity	Version
Revision in Progress	SUSANTO-ext, William	Edit	updated the page at 9:32 am	
Mar 18, 2026				
	WENNINGER-ext, Sascha	State	changed state to Revision in Progress at 5:42 pm	v47
From Feb 09, 2026 to Mar 13, 2026				
Edited following Approval	SUSANTO-ext, William	Edit	updated the page at 12:05 pm	
	SUSANTO-ext, William	State	changed state to Edited following Approval at 11:05 am	v38
Dec 15, 2025				
Approved	POOVADAN-ext, Vineet Kumar	State	changed state to Approved at 10:52 am	v37