

SIMATIC IT Interspec 6.4

Database Tables

Technical Reference

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Guidelines

This manual contains notices intended to protect the products and connected equipment against damage. These notices are graded according to severity by the following texts:

Caution

Indicates that if the proper precautions are not taken, this can result into property damage.

Notice

Draws your attention to particularly important information on handling the product, the product itself or to a particular part of the documentation.

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Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Preface

Purpose

This Technical Reference explains which tables are added to the database after the installation of SIMATIC IT Interspec. For some columns (IDs, types), detailed information is available.

Important

This guide does not intend to describe in detail each column in the database table. Also, there is no visualization of all links between the different database tables.

Basic knowledge required

This guide is intended for SIMATIC IT Interspec users who are responsible for system configuration, such as application managers and system integrators (consultants). To be able to understand the concepts and examples discussed in this guide, the reader should at least have taken the SIMATIC IT Interspec Configuration Training.

In order to understand this manual, general knowledge of Oracle and Interspec terms is required.

Where is this manual valid?

This manual is valid for release 6.4 of SIMATIC IT Interspec.

Readme

The installation includes a readme file, which contains information on upgrade procedures and compatibility with previous releases. This file is supplied both in standard text (**Readme.wri**) and in Acrobat PDF (**Readme.pdf**) format.

This file is available in folder \ReleaseNotes of the setup DVD and is available from the shortcut **Start > SIMATIC > SIMATIC IT Documentation**.

Related documentation

The following documents contain information related to the content of this Technical Reference.

- System settings.doc
- Customising the system.doc

All these documents can be found in the Product Library.

Conventions

The table below describes the specific typographic conventions that are used throughout this manual:

Symbol/Convention	Indicates...
E.g.	Where examples are given.
Text in bold	The names of menus, commands, dialog boxes and toolbar buttons and, in general, all strings (e.g. File menu; Save command).
KEY1+KEY2	Shortcut keys, which permit rapid access to commands (e.g. CTRL+C).
UPPERCASE	The names of keyboard keys (e.g. RETURN key).
<i>Italics</i>	Noun with special importance or significance for which emphasis is needed. The names of parameters that must be replaced with a specific name or value.
>	A succession of commands in which the command preceding the symbol must be selected before the command following it.
Code example	Code example.

SIMATIC IT Training Center

Siemens IA AS MES offers a number of training courses to familiarize you with the SIMATIC IT product suite. To successfully achieve this goal, training consists of lessons in both theory and practice.

Courses are held year-round, according to a program that is published well in advance of the first scheduled session.

The material on the basis of which our courses are conducted reflects the result of years of experience in process, LIMS, quality control and production management.

All courses are held by expert personnel that are aware of the developments and innovations in the Siemens IA AS MES product suite.

Courses are held in English at the Siemens IA AS MES Training Centers.

Upon request, training courses can also be organized on the customer's premises.

For more information on the training course calendar, please visit our technical web site (<http://www.siemens.com/simatic-it/training>).

SIMATIC IT Service & Support

A comprehensive Software Maintenance program is available with SIMATIC IT products. Software Maintenance includes the following services:

- **Software Update Service (SUS):** automatic distribution of upgrades and service packs
- **Technical Support Service (TSS):** support on technical problems with SIMATIC IT software (standard support and other optional services)

- **Online Support:** a technical web site, providing information such as Frequently Asked Questions and technical documentation on SIMATIC IT products

Software Update Service (SUS)

This service provides automatic shipment of new versions and service packs when released. When a new version / service pack is available for shipping, it is typically shipped within one month.

One copy of the installation DVD is shipped for each Server covered by Software Maintenance.

Hot fixes (officially tested and released) are not shipped and must be downloaded from the Technical Support Service Web site.

Technical Support Service (TSS)

Siemens provides a dedicated technical support team for SIMATIC IT products.

The following options are available:

Standard support: 9 hours/day, 5 days/week

Premium support: 24 hours/day, 5 days/week

Advanced support: 24 hours/day, 7 days/week

The principal language of the SIMATIC IT hotline is English.

SIMATIC IT partners and customers covered by the Software Maintenance program are entitled to direct access to the TSS.

Access to the TSS

To be able to access the TSS, the customer needs to register as a user on the Technical Support Web site. Connect to <http://www.siemens.com/mes-simaticit/> and follow the **Technical Support Service** link.

The registration form must be completed with:

- Personal data
- The required company and plant information
- The Contract Number provided by Siemens Back Office when the contract is agreed.

Online Support

A customer who is a registered TSS user, can access the Technical Support Web site (<http://www.siemens.com/mes-simaticit/tss>), which contains technical information such as:

- Service conditions (Phone numbers, Working hours, Reaction times,...)
- SIMATIC IT knowledge base: a technical support database that includes practical service solutions from the Technical Support or the SIMATIC IT community

- SIMATIC IT software (e.g. hot fixes, software examples) and release notes that can be downloaded
- SIMATIC IT cross-industry libraries that can be downloaded (limited access to SIMATIC IT certified partners)
- SIMATIC IT product documentation that can be downloaded
- Frequently Asked Questions and useful tips.

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1 System Setup Tables

1.1 DB Info

ATVERSIONINFO

This table contains a list of database custom scripts that are installed on your database as part of project work.

ITVERSIONINFO

This table contains a list of standard product hotfixes and patches that are installed on your database.

ITDBPROFILE

This table contains information about all databases that are part of a 3-tier environment to exchange configuration data, frames and specifications.

For each database, the profile is stored (database type, allow glossary, allow frame changes).

In case there is no 3-tier information setup, there is only 1 record in this table (with the same owner id as the one in the preference table interspc_cfg). Typically, this database is marked as 'the' global database.

The following are only for internal use:

CTLICSECIDAUXILIARYOLD

CTLICSECIDOLD

CTLICSECIDAUXILIARY

CTLICSECID

CTLICUSERCNT

1.2 Grants

There are only grant tables for approvers, development managers, frame builders, limited users, mrp and view only users. Configurators automatically get access to all Interspec tables.

APPROVER

This table stores, for each database table, the access (select/insert/update/delete) granted to the APPROVER user profile. This table is only used during upgrade/creation.

DEV_MGR

This table stores, for each database table, the access (select/insert/update/delete) granted to the DEV_MGR user profile. This table is only used during upgrade/creation.

FRAME_BUILDER

This table stores, for each database table, the access (select/insert/update/delete) granted to the FRAME_BUILDER user profile. This table is only used during upgrade/creation.

GRANT_EXECUTE

This table stores, for each database package/procedure/function, which user profile is allowed to execute. This table is only used during upgrade/creation.

LIMITED

This table stores, for each database table, the access (select/insert/update/delete) granted to the LIMITED user profile. This table is only used during upgrade/creation.

MRP

This table stores, for each database table, the access (select/insert/update/delete) granted to the MRP user profile. This table is only used during upgrade/creation.

VIEW_ONLY

This table stores, for each database table, the access (select/insert/update/delete) granted to the VIEW_ONLY user profile. This table is only used during upgrade/creation.

1.3 Languages

ITLANG

This table stores all the languages that will be used within the database. The configured languages all get a number. By default, language 1 (main language) is set to English.

LANGUAGES

This table stores all possible languages the user can choose from to store in table itlang.

ITCULTUREMAPPING

This table maps the language IDs, which are stored by the ITLANG table, and the names of the dictionaries (which are placed in the Dictionaries folder under the physical location of the SmartClientServices website). E.g. If the dictionary file is RUS.dic, "RUS" is the culture name that must be entered in the ITCULTUREMAPPING table.

1.4 Preferences

INTERSPC_CFG

This table stores system preferences at database level. Some of the preferences can be modified by a configurator in the configuration module. Other preferences can only be updated directly on the database (using other tools).

One of the parameters is 'owner', which refers to the owner in ITDBPROFILE.

Please refer to System Settings.doc for more detailed information.

INTERSPC_CFG_H

This table stores details of who has changed a specific parameter in INTERSPC_CFG and when.

ITUSPREF

This is a preference table per user, especially for the web application.

ITUSPREFDEF

This is the preference table, especially for the web application, which holds the defaults for each preference.

2 Configuration Tables

In general: the column INTL is set to 1 when the data is entered in international mode (global database). When data is entered in a regional or local database, the column INTL is always set to 0.

In general: the internal IDs (e.g. property id) are based on sequences. When data is entered in international mode (global database), the international sequence is used, starting from 700000. For data entered in a regional or local database, the local sequence is used, starting from 1.

In general: most of the configuration tables have a status column. The default status ('active') is 0. When the status is 1, the configuration item is set to historic.

2.1 Classification

ITCLAT

This table contains all the attributes ('descriptors') assigned to a tree.

Type is either Dropdown (DD) or Treeview (TV). In case type is TV, then column code refers to the root node of the sub tree (material_class.code). In case type is DD, then column code refers to the code of the attribute (material_class.code).

ITCLCLF

This table stores the relationship between a node in the classification hierarchy and the classification attributes.

Column ID refers to the attribute ID.

Column PID refers to the tree view item ID.

Column CID refers to the attribute value ID.

Column DESCR refers to the attribute value description.

ITCLTV

This table stores the complete hierarchy for the classification tree view configurations.

Column PID refers to the parent ID.

Column CID refers to the child ID.

Column DESCR refers to the child description.

Column CCNT indicates the number of children.

Column CODE refers to the child code.

Column TYPE refers to the tree view root node.

ITCLD

This is a list of all classification trees. When column spec_group equals a spec type group, this is marked as a main tree. When this column contains free text, this tree is marked as a sub tree.

Column node refers to the column code in material_class. This is the root item.

MATERIAL_CLASS

This table contains all the classification nodes/attributes/attribute values.

MATERIAL_CLASS_B

For a specific classification node or classification attribute, you can define bubble help. This is stored in this table.

2.2 Event Management

ITEVENT

This table contains the list of the events. Negative IDs (for example, -1, -2) identify system provided events, while positive IDs identify custom created events.

ITEVENTTYPE

This table contains the list of the event types.

ITEVENTLOG

This table contains the event logs: event, transmission type, transmission datetime and message.

ITEMAIL

This table stores information used when sending notifications via e-mail.

2.3 Ingredient Data

ITING

This table stores the main ingredient information, where column ing_type is Ingredient (I), Chemical (C) or Both (B).

ITING_H

This table stores details of who has changed or created main ingredient information and when.

ITINGCFG

This table stores ingredient related data. Different types can be defined (column PID):

ID	Type
0	Registrations
1	Groups
2	Functions
3	CTFA
4	Synonyms
5	Note
6	Synonym Types

Column CID is the registration/group/... ID itself.

ITINGCFG_H

This table stores details of who has changed or created ingredient-related information and when.

ITINGCTFA

This table stores the link between a chemical (column ingredient) and a configured CTFA (column reg_id). Reg_id refers to PID 3 in ITINGCFG.

ITINGCTFA_H

This table stores details of who has changed or created CTFA links and when.

ITINGD

This table stores the link between an ingredient/chemical and ingredient-related information (registrations/groups/...).

Column PID refers to column PID in table ITINGCFG, column CID refers to column CID in table ITINGCFG.

ITINGD_H

This table stores details of who has changed or created ingredient detail links and when.

ITINGGROUPD

This table is used to store links between groups (where column PID = main group, column CID = subgroup)

ITINGGROUPD_H

This table stores details of who has changed or created group links and when.

ITINGNOTE

This table stores the list of notes that can be linked to an ingredient.

ITINGNOTE_H

This table stores details of who has changed or created ingredient notes and when.

ITINGREG

This table stores the link between an ingredient (column ingredient) and a registration (column reg_id). Reg_id refers to PID 0 in ITINGCFG.

ITINGREG_H

This table stores details of who has changed or created registration links and when.

ITINGSYNTYPES

This table stores the links between the synonym types and the synonyms.

ITINGSYNTYPES_H

This table stores details of who has changed or created synonym types links and when.

2.4 Keywords

ITKW

This is the main keyword table, storing all keywords defined.

Column kw_type has the following possible values:

Value	Refers to...
0	Free Data
1	List
2	External Data

Column kw_usage has the following possible values:

Value	Refers to...
1	Linked with specification
2	Linked with reference text
3	Linked with object
4	Linked with manufacturer
5	Linked with plant

ITKW_H

This table stores details of who has changed or created keywords and when.

ITKWCH

This table contains the list of characteristics for keywords of type = 1 (list), independent of the keyword usage.

ITKWCH_H

This table stores details of who has changed or created keyword characteristics and when.

ITKWAS

This table stores the link between the keyword (column kw_id) and the characteristic (column ch_id).

ITKWAS_H

This table stores details of who has added or removed links between keywords and characteristics and when.

2.5 Property Layout

FORMAT

This table stores specific formatting rules to apply to a display format.

Column type has the following possible values:

Value	Refers to...
0	None
1	Date
2	Number
3	String

FUNCTIONS

These are validation functions to be applied to a display format.

LAYOUT_VALIDATION

This table contains the link between a display format and a validation function.

HEADER

This table contains a list of column headings.

HEADER_B

In this table, the bubble help for column headings is stored.

HEADER_H

This table stores details of who has added or changed a column heading and when.

ITSHLY

As soon as a display format is used in a specification, the link between single properties/property groups and the display format used is stored in this table. This information is used in the where used property screen (specification module).

LAYOUT

This table stores the individual display formats.

Possible values for the status field:

Value	Status
1	In Development
2	Current
3	Historic

PROPERTY_LAYOUT

This table stores the setup of each individual display format.

Column field_id refers to the database field in specification_prop and has the following possible values:

ID	Refers to...
1	Num_1
2	Num_2
3	Num_3
4	Num_4
5	Num_5
6	Num_6
7	Num_7
8	Num_8
9	Num_9
10	Num_10
11	Char_1
12	Char_2
13	Char_3
14	Char_4
15	Char_5
16	Char_6
17	Boolean_1
18	Boolean_2
19	Boolean_3
20	Boolean_4
21	Date_1
22	Date_2
23	Uom_id
24	Attribute

ID	Refers to...
25	Test method
26	Characteristic
27	Property
30	ch_2 (characteristic 2)
31	Ch_3 (characteristic 3)
32	Tm_det_1 (test method detail)
33	Tm_det_2 (test method detail)
34	Tm_det_3 (test method detail)
35	Tm_det_4 (test method detail)
40	Info

Note

When header has value 0, this means that the header is displayed. When header has value 1, this means that the header is not displayed.

2.6 Manufacturer

ITMFC

This table stores the manufacturer information (ID, description and type – which refers to table ITMTP).

ITMFC_H

This table stores details of who has added or changed manufacturer information and when.

ITMFCCKW

This table stores the keywords and keyword values assigned to a specific manufacturer.

ITMFCMPL

This table stores the link between manufacturer plant (column mpl_id) and the manufacturer. The manufacturer plant column is an ID, referring to table ITMPL.

ITMFCMPLKW

This table stores the keyword and keyword values assigned to a specific manufacturer / plant link. Again, the plant column is an ID, referring to table ITMPL.

ITMPL

This table stores the list of available manufacturer plants (ID and description).

ITMPL_H

This table stores the history of the ITMPL table, which contains the list of available manufacturer plants.

ITMTP

This table stores the available manufacturer types.

2.7 Messages

ITMESSAGE

This table holds, for each language, the messages that are shown in the client or in the error log when an error occurs. Most of the errors are Oracle errors or referential constraint errors.

2.8 Nutritional

ITCUSTOMCALCULATION

This table stores the list of custom calculations.

ITCUSTOMCALCULATION_H

This table stores the translations for the custom calculations.

ITCUSTOMCALCULATIONVALUES

This table configures a location on a frame to store a property that is used by a custom calculation.

ITFOOTNOTE

This table stores details of the footnotes used in the nutritional layout.

ITFUNCTION

This table stores the name of a variable used in a custom calculation.

ITNUTCONFIG

This table stores a value to be referenced in a custom calculation.

ITNUTEXPLOSION

This table contains the results of the nutritional explosion.

ITNUTLY

This table contains the list of nutritional display formats.

ITNUTLYGROUP

This table stores Group Names used in the nutritional layout.

ITNUTLYITEM

This table stores the setup of each individual display format. Column col_type is either Standard (1) or Comment (2). Column data_type is either numeric (0), string (1), date (2) or Boolean (3).

ITNUTLYTYPE

This table stores the layout types.

ITNUTPATH

This table contains the BoM path when starting the nutritional calculation.

ITNUTLYPROPERTYCONFIG

This table stores the property and attribute id of a specific nutrient in a reference specification.

ITNUTREFTYPE

This table contains all nutritional reference specs.

2.9 Process Data

PROCESS_LINE

This table contains the list of plant / line / configuration / process line revisions for which a user can define process data.

Columns description 2 to description 6 are no longer relevant.

PROCESS_LINE_H

This table stores details of who changed the plant / line / configuration and when.

PROCESS_LINE_STAGE

This table contains a list of stages defined for a plant/line/configuration/process line revision.

PROCESS_LINE_STAGE_H

This table stores details of who changed the defined stage and when.

STAGE

This table holds the list of stages.

STAGE_H

This table stores details of who has added or changed stage data and when.

STAGE_DISPLAY

This table stores the available display formats for one stage. Information about the display format is stored in the tables layout and property_layout.

STAGE_DISPLAY_H

This table stores details of who has added or removed the link between a stage and a display format and when.

STAGE_LIST

This table holds the available properties for one stage.

STAGE_LIST_H

This table stores details of who has added or removed the link between a stage and a property and when.

2.10 Smart Client

ITRDSTATUS

This table holds a list of statuses for R&D purposes.

ITRULETYPE

This table contains the modules that use rule sets.

ITSMCLSTEPS

This table stores the steps associated with the Smart Client controls if they are activated under the current license.

2.11 Specification Setup

ASSOCIATION

This table stores the available associations.

ASSOCIATION_H

This table stores details of who has added or changed associations and when. It also stores the association translations.

ATTRIBUTE

This table stores a list of attributes that are assigned to properties in the frame builder.

ATTRIBUTE_B

This table holds the bubble help assigned to the attribute.

ATTRIBUTE_H

This table stores details of who has added or changed attributes and when. It also stores the attribute translations.

ATTRIBUTE_PROPERTY

This table holds the link between properties and attributes.

ATTRIBUTE_PROPERTY_H

This table stores details of who has added or deleted the link between a property and an attribute and when.

CHARACTERISTIC

This table holds the list of characteristics.

CHARACTERISTIC_ASSOCIATION

This table holds the link between an association (e.g. Product Type) and a characteristic (e.g. Plastic).

CHARACTERISTIC_ASSOCIATION_H

This table stores details of who has added/deleted the link between an association and a characteristic.

CHARACTERISTIC_B

This table holds the bubble help assigned to a characteristic.

CHARACTERISTIC_H

This table stores details of who has added or changed characteristics and when. It also stores the characteristic translations.

CLASS3

Class3 stands for specification types. So this table stores a list of specification types. All specification types belong to a specific specification type group, which is stored in ITSTGRP.

CLASS3_H

This table stores details of who has added or changed specification types and when. It also stores the specification type translations.

CONDITION

This table stores the list of condition sets that can be assigned to a test method.

CONDITION_H

This table stores details of who has added or changed conditions and when. It also stores the condition translations.

GROUP_PROPERTY_LIMIT

This table stores upper and lower limits for process data (per property/uom).

ITPLGRP

This table holds a list of plant groups.

ITPLGRPLIST

This table stores which plants are assigned to a specific plant group.

ITPLKW

This table stores the keyword and keyword values assigned to a specific plant.

ITPRSOURCE

This table holds a list of part sources. Part source I-S is always available and refers to parts that have been created in Interspec, with no link to an ERP system. The other part sources normally indicate the ERP system (e.g. SAP, MFG) that is the master of the part information.

ITSTGRP

This table holds a list of specification type groups.

For ingredient declaration purposes, specification type group ING should always be available.

ITTMTYPE

This table stores the available test method types (required when assigning alternative test method to a specific property in the specification module).

ITUMC

This table stores the conversion factors between metric and non-metric unit of measures.

ITUMC_H

This table stores details of who has created, deleted or changed conversion factors between metric and non-metric unit of measures, and when.

LOCATION

This location refers to the physical locations available for a specified plant. Normally, this information comes from the ERP system.

PLANT

This table stores a list of plants to be assigned to a part. Again, the plant source refers to I-S when the plant is created in Interspec, with no link to the ERP system. Otherwise, this information comes from the ERP system. The ERP system name (e.g. SAP, MFG) is then stored as part source.

PRICE_TYPE

This table holds a list of price types and periods for which price information is available to parts. There is no GUI to fill this table. Normally, this information comes from the ERP system.

PROPERTY

This table stores a list of properties.

PROPERTY_ASSOCIATION

This table holds the link between a property and an association.

PROPERTY_ASSOCIATION_H

This table stores details of who has added or removed a link between a property and an association and when.

PROPERTY_B

This table holds the bubble help assigned to the property.

PROPERTY_DISPLAY

This table stores all available display formats for properties that are used as a single property.

PROPERTY_DISPLAY_H

This table stores details of who has added or removed a link between a property and a display format and when.

PROPERTY_GROUP

This table stores the list of property groups. For claims calculation, specific property groups are included.

Therefore, the column pg_type refers to:

ID	Refers to...
0	Other (Normal Property Group)
1	Positive Claim
2	Negative Claim

PROPERTY_GROUP_B

This table holds the bubble help assigned to the property group.

PROPERTY_GROUP_DISPLAY

This table stores all available display formats for property groups.

PROPERTY_GROUP_DISPLAY_H

This table stores details of who has added or removed a link between a property group and a display format and when.

PROPERTY_GROUP_H

This table stores details of who has added or changed property groups and when. It also stores the property group translations.

PROPERTY_GROUP_LIST

This table stores the properties assigned to a property group. Properties that have the Mandatory check box set to Y will be automatically imported into the Frame Builder when the 'Add Proposed' button is clicked.

PROPERTY_GROUP_LIST_H

This table stores details of who has added or removed a link between a property group and a property and when.

PROPERTY_H

This table stores details of who has added or changed properties and when. It also stores the property translations.

PROPERTY_TEST_METHOD

This table stores the test methods assigned to a property.

PROPERTY_TEST_METHOD_H

This table stores details of who has added or removed a link between a property and a test method.

SECTION

This table stores the list of sections.

SECTION_B

This table holds the bubble help assigned to a section.

SECTION_H

This table stores details of who has added or changed sections and when. It also stores the section translations.

SUB_SECTION

This table stores the list of subsections.

SUB_SECTION_B

This table holds the bubble help assigned to a subsection.

SUB_SECTION_H

This table stores details of who has added or changed subsections and when. It also stores the subsection translations.

TEST_METHOD

This table stores the list of test methods.

TEST_METHOD_CONDITION

This table holds the list of conditions assigned to a test method.

TEST_METHOD_CONDITION_H

This table stores details of who has added or removed a link between a test method and a condition and when.

TEST_METHOD_H

This table stores details of who has added or changed test methods and when. It also stores the test method translations.

TEXT_TYPE

This table stores a list of free text headers.

TEXT_TYPE_B

This table holds the bubble help assigned to a free text header.

TEXT_TYPE_H

This table stores details of who has added or changed free text headers and when. It also stores the free text header translations.

UOM

This table stores a list of unit of measures.

UOM_ASSOCIATION

This table stores the list of unit of measures assigned to an association (used for process data).

UOM_ASSOCIATION_H

This table stores details of who has created or removed a link between an association and a unit of measure and when.

UOM_B

This table holds the bubble help assigned to a unit of measure.

UOM_H

This table stores details of who has added or changed unit of measures and when. It also stores the unit of measure translations.

UOM_GROUP

This table stores the list of the groups of the Unit of Measures. These groups are the category of the UOM or Base UOM.

UOM_GROUP_B

This table stores the bubble help assigned to the group of the Base Unit of Measures.

UOM_GROUP_H

This table stores details of who has added or changed groups of unit of measures and when. It also stores the group of the Unit of Measures translations.

UOM_UOM_GROUP

This table stores the links between units of measure and groups.

UOMC

This table contains the associations between the units of measure, which are involved in the conversion, and the conversion factor. Each unit of measure involved in the conversion must belong to the same UOM group. The table configures the conversions from the base unit of measure to all units of measure within the same group.

UOMC_H

This table stores details of who has added/changed units of measure or conversion factors and when.

2.12 User/Access/Workflow

ACCESS_GROUP

This table stores the list of available access groups.

APPLICATION_USER

This table holds the information for all configured users (profile, email address...). When the column user_dropped is set to 'N' then an Oracle user with the same name as the user ID exists. Users with column user_dropped set to 'Y' do not exist as Oracle users and therefore cannot log on to the system.

ITAPI

This table holds a list of functions for which pre- and post functionality can be configured (column type = 1), a list of functions for the nutritional calculation (column type = 2) and a list of rounding rules for nutritional calculation (column type = 3). This list can be extended. For detailed information, please refer to Customizing the System.doc.

ITCF

This table stores standard and custom validation rules, which are executed upon status change (to be defined in ITSSCF). When the custom column equals 0, this means that it is a standard validation rule, which cannot be changed. Records with column custom set to 1 are validation rules that are custom defined. The column cf_type is either V (error, unable to change the status when the validation rule fails), W (warning, the user gets a message but is still able to change the status when the validation rule fails), PRE (used for pre-processing) OR POST (used for post-processing).

ITSSCF

In this table, the validation rules defined in ITCF are assigned to specific workflows and specific status changes.

When column workflow_id has value -1, this means that the validation rule will be executed, independently from the workflow that was assigned to the specification.

When column status_type is set to 1, the columns s_from and s_to refer to a status type (e.g. from DEVELOPMENT to SUBMIT). Otherwise columns s_from and s_to refer to an individual status (e.g. from Dev to Submit1).

Only rows that have a 1 in column allow_modify can be changed/removed.

ITSCCF

This table contains the status change custom code.

ITUP

When the user is defined as a plant access user, this table holds the list of plants the user is allowed to see.

ITUSCAT

This table holds a list of user categories (to be assigned to a user). This is pure informational.

ITUSLOC

This table holds a list of user location (to be assigned to a user). This is pure informational.

STATUS

This table stores the list of defined statuses.

Status type is fixed: DEVELOPMENT / SUBMIT / APPROVED / CURRENT / HISTORIC / OBSOLETE / REJECT.

The columns prompt_for_reason and reason_mandatory only apply to statuses of type SUBMIT.

STATUS_TYPE

This table stores the list of the status types.

USER_ACCESS_GROUP

This table holds the list of user groups assigned to an access group, together with the access (update allowed, mrp update).

USER_GROUP

This table holds the list of defined user groups.

USER_GROUP_LIST

This table holds the list of user (IDs) assigned to a user group.

USER_WORKFLOW_GROUP

This table holds a list of user groups assigned to a specific workflow group.

WORK_FLOW

This table stores the individual status changes for each workflow type.

WORK_FLOW_GROUP

This table holds the main list of workflow types.

WORK_FLOW_LIST

This table holds the link between a specific workflow status and a user group. When the status is of type SUBMIT, then this information is used to determine who has to approve the specification. For each user group, column all_to_approve indicates whether all users have to approve (Y), or only one user has to approve (N), or no users have to approve (Z). For all other statuses, this table identifies who has to receive an email upon the status change.

WORKFLOW_GROUP

This table holds the list of configured workflow groups (to be assigned to a specification). All of them are based on a workflow type (column work_flow_id refers to table work_flow_group).

2.13 Food Claims

ITFOODCLAIM

This table stores the list of food claims.

ITFOODCLAIM_H

This table stores the food claim translations.

ITFOODCLAIMALERT

This table stores the food claim alerts.

ITFOODCLAIMALERT_H

This table stores translations of the food claim alerts. The table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international alerts, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODCLAIMCD

This table stores the food claim conditions.

ITFOODCLAIMCD_H

This table stores translations of the food claim conditions. The table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international conditions, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODCLAIMCRIT

This table stores the food claim criteria.

ITFOODCLAIMCRIT_H

This table stores translations of the food claim criteria. The table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international criteria, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODCLAIMCRITKEY

This table stores the food claim criteria key.

ITFOODCLAIMCRITKEY_H

This table stores translations of the food claim criteria key.

ITFOODCLAIMCRITKEYCD

This table stores the conditions used to compose Criteria Keys (used to link and filter objects).

ITFOODCLAIMCRITKEYCD_H

This table stores the translations of the conditions used to compose Criteria Keys (used to link and filter objects).

ITFOODCLAIMCRITKEYD

This table stores relations between:

- Criteria Keys
- A Criteria Key and other Criteria Key conditions (defined in ITFOODCLAIMKEYCD)

ITFOODCLAIMCRITRULE

This table stores the food claim criteria rules.

ITFOODCLAIMCRITRULE_H

This table stores translations of the food claim criteria rules. The table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international rules, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODCLAIMCRITRULECD

This table stores the food claim criteria rule conditions.

ITFOODCLAIMCRITRULECD_H

This table stores translations of the food claim criteria rule conditions. The table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international conditions, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODCLAIMCRITRULED

This table stores the claim criteria rule / condition relations. Currently, there is no option to define local or international relations, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODCLAIMD

This table stores the assignments of conditions, alerts, notes, labels and synonyms to claims, based on a set of criteria.

ITFOODCLAIMLABEL

This table stores the food claim labels.

ITFOODCLAIMLABEL_H

This table stores translations of the food claim labels. The table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international label text, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODCLAIMLOG

This table stores the list of Food Claim Saved Panels.

ITFOODCLAIMLOGRESULT

This table stores the summary results of each Food Claim Saved Panel.

ITFOODCLAIMLOGRESULTDETAILS

This table stores the detailed results of each Food Claim Saved Panel.

ITFOODCLAIMNOTE

This table stores the food claim Notes.

ITFOODCLAIMNOTE_H

This table stores translations of the food claim Notes. The table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international notes, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODCLAIMPROFILE

This table stores the list of nutritional profiles and data sources against which Food Claims will be evaluated in Step 2.

ITFOODCLAIMRESULT

This table stores the summary results for each selected Food Claim in each nutritional profile.

ITFOODCLAIMRESULTDETAIL

This table stores the detailed results for each selected Food Claim in each nutritional profile.

ITFOODCLAIMRUN

This table stores the list of Food Claims to evaluate, including comparison against nutritional profiles and /or data sources.

ITFOODCLAIMRUNCD

This table stores the list of entities associated with each food claim under evaluation (data is filtered based on user selections and configuration):

- Manual Conditions – values specified by the user (used in evaluation)(
- Notes
- Alerts
- Label texts
- Synonyms

ITFOODCLAIMRUNCRIT

This table stores the user selections used as data filters during evaluation:

- Food Type
- Reference Amount
- Keywords

ITFOODCLAIMRUNKW

This table stores the list of keywords under evaluation.

ITFOODCLAIMSYN

This table stores the list of claim synonyms.

ITFOODCLAIMSYN_H

This table stores translations of the food claim synonyms. The table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international synonyms, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

ITFOODTYPE

This table stores the list of food types.

ITFOODTYPE _H

This table stores translations of the food types. The following default data is provided when you create or upgrade the database:

- Food
- Meal
- Main dish

The ITFOODTYPE _H table has a numeric sequence as the primary key and is multi-language. Three triggers on the main table perform the translations.

Currently, there is no option to define local or international food types, however the flag INTL is provided in the database for future enhancements and is set to LOCAL as the default.

3 Frame Tables

3.1 Filter

ITFRMFLT

This table holds, for each frame filter ID, the selection criteria (values) that the user entered and saved.

ITFRMFLTD

This table holds the select frame filters that a user saved.

ITFRMFLTOP

This table holds, for each frame filter ID, the selection criteria (operator, e.g. =) that the user has entered and saved. Columns are the same as in table ITFRMFLT, but then with prefix 'LOG_'.

3.2 Revision Independent

FRAME_KW

This table holds the keywords and keyword values assigned to a frame.

ITFRMCL

This table stores the classification linked with a frame. For more information about the columns, please refer to ITPRCL.

ITFRMNOTE

This table stores the note assigned to a frame.

3.3 Revision Dependent

FRAME_HEADER

This table contains the main information (description/status/...) for all frames defined. The status column is always fixed: IN DEVELOPMENT (1), CURRENT (2), HISTORIC (3).

FRAME_PROP

This table lists, for each frame, the properties (either single properties or properties within a property group) with their defined values. Column sequence number indicates the order in which the properties appear within a property group. When the Mandatory check box is set to N, the property will not be added to the specification when a specification is created. This means the property is optional.

FRAME_SECTION

This table lists, for each frame, the frame setup. When the mandatory check box is set to N, the item will not be added to the specification when a specification is created. This means the item is optional.

Column section_sequence_no indicates the order in which the items should appear in the frame.

Different types:

ID	Type	Additional information
1	Property Group	Ref_id refers to property_group in frame_prop
2	Reference Text	Ref_id, ref_ver, ref_owner refers to ref_text_type, text_revision, owner in reference_text
3	BOM	Display format refers to BoM layout that is used
4	Single Property	Ref_id refers to property in frame_prop
5	Free Text	ref_id refers to the free text header (text_type) in frame_text ref_info indicates the initial height for editing the free text
6	Object	Ref_id, ref_ver, ref_owner refers to object_id, revision, owner in itoid
7	Process Data	
8	Attached Specification	
9	Ingredient List	Display_format: 1 = ingredient component list 2 = chemical component list
10	Base Name	Display format: 1 = ingredient base name 2 = chemical base name

FRAME_TEXT

This table contains the contents of the free text (as defined in frame_section).

ITFRMV

This table stores, for each frame, the defined masks.

ITFRMVAL

This table lists validation rules (properties that have to be filled in, etc.) for each frame. These validation rules are linked to a mask (column mask_id, table ITFRMV). In case there are no masks defined, the column is set to -1).

ITFRMVALD

For each validation rule defined, this column lists the individual rules to be applied upon status change (from DEVELOPMENT to SUBMIT).

ITFRMVPG

This table stores, for each mask defined, property items to which the mask should apply (cf. Table frame_prop). Column mandatory indicates whether the (optional) item should be mandatory (M) or should not be displayed at all (H).

ITFRMVSC

This table stores, for each mask defined, section items to which the mask should apply (cf. Table frame_section). Column mandatory indicates whether the (optional) item should be mandatory (M) or should not be displayed at all (H).

4 Specification Tables

4.1 Claims

ITCLAIMLOG

This table stores a list of saved claims.

ITCLAIMLOGRESULT

For each claim saved, this table holds the detailed information.

ITCLAIMRESULT

This table stores the results of the claim explosion.

This table is only used during the explosion. The table will be cleared on a regular basis.

ITCLAIMRESULTDETAILS

This table stores the detailed results of the claim explosion.

This table is only used during the explosion. The table will be cleared on a regular basis.

ITCLAIMEXPLOSION

This table is filled during the claim explosion.

This table is only used during the explosion. The table will be cleared on a regular basis.

4.2 Filter

ITCLFLT

This table holds, for each specification filter ID, the classification selection criteria (values) that the user entered and saved.

ITPFLT

This table holds, for each part filter ID, the selection criteria (values) that the user entered and saved.

ITPFLTD

This table holds the select part filters that a user saved.

ITPFLTOP

This table holds, for each part filter ID, the selection criteria (operator, e.g. =) that the user entered and saved. Columns are the same as in table ITFRMFLT, but then with prefix 'LOG_'.

ITSHFLT

This table holds, for each specification filter ID, the selection criteria (values) that the user entered and saved.

ITSHFLTD

This table holds the select specification filters that a user saved.

ITSHFLTOP

This table holds, for each specification filter ID, the selection criteria (operator, e.g. =) that the user entered and saved. Columns are the same as in table ITFRMFLT, but then with prefix 'LOG_'.

ITSPFLT

This table holds, for each where used property filter ID, the selection criteria (values) that the user entered and saved.

ITSPFLTD

This table holds the where used property filters that a user saved.

ITKWFLT

This table holds, for each specification filter ID, the keyword selection criteria (values) that the user entered and saved.

4.3 Label

ITLABELLOG

This table contains the saved labels, the result of the label generation.

4.4 Nutritional

ITNUTEXPORTEDPANELS

This table contains a list of nutritional panels that have been exported to specification(s).

ITNUTFILTER

This table contains a list of nutritional filters.

ITNUTFILTERDETAILS

For each individual filter, this table specifies the details.

ITNUTLOG

This table contains the parameters for the nutritional calculations that have been executed and saved.

ITNUTLOGRESULT

This table contains the individual results for the nutritional calculations that have been executed and saved.

ITNUTLOGRESULTDETAILS

This table contains the detailed results (per component/nutritional item).

ITNUTRESULT

This table contains the nutritional results.

ITNUTRESULTDETAIL

This table contains the detailed results (per component/nutritional item).

ITNUTROUNDING

This table contains all defined rounding rules.

4.5 Object

ITOID

This table holds detailed information about a specific object/image revision.

ITOIH

This table holds general information about an object or image (independently from the revision).

ITOIKW

This table holds keywords and keyword values assigned to a specific object/image.

ITOIRAW

In this table, the object contents itself it stored (column desktop_object).

OBJECT_TC_ITEM

This table contains the association between an Interspec object and a Teamcenter object.

4.6 Reference Text

REF_TEXT_KW

This table holds keywords and keyword values assigned to a specific reference text.

REF_TEXT_TYPE

This table holds the general information about a reference text (independent of the revision).

REFERENCE_TEXT

This table holds detailed information about a specific reference text/revision, including the text itself.

4.7 Revision Independent

EXEMPTION

Exemptions, temporary notes for e.g. the production, are stored in this table. The contents of this exemption will be sent through email (when email functionality has been setup).

ITPP_xxx

To improve performance when searching for part/plant relations, there is an ITPP_ table available for each plant (e.g. ITPP_DEV, ITPP_INTL). These tables just hold a reference to the part numbers that are linked with this plant.

ITPRCL

This table stores the classification stored against a part.

Column matl_class_id refers to column identifier in table material_class.

For tree view items, the hierarchy level defines the level of the node. The first level is 0.

For tree view items, level refers to column node in table itcld.

For tree view items, code refers to column code in table material_class

For attribute items, level and code both refer to column code in table itclat.

ITPRCL_H

This table stores details of who has added or changed classification data for a part and when. Each time, the complete classification data set is copied.

ITPRMFC

This table stores manufacturer information stored for a part.

ITPRMFC_H

This table stores details of who has added, changed or removed manufacturer information and when.

ITPRNOTE

This table holds the note assigned to a part.

ITPRNOTE_H

This table stores details of who has added or changed a note and when.

ITPROBJ

This table lists a reference to objects/images that are attached to the part.

ITPROBJ_H

This table stores details of who has added or removed object/images and when.

PART

This table holds the main part information. As soon as a specification is based on this part, the column part_type will be populated with the specification type (class3_id in specification_header). Part_source references to ITPRSOURCE and is I-S when the part is created in Interspec.

PART_COST

This table holds price information for a part. When a part is created, price type 'IS manual' is automatically inserted. There is no GUI to import other price information. Normally, this information comes from the ERP system.

PART_L

This table holds the description translations for parts.

PART_LOCATION

This table holds the physical location information for parts. There is no GUI to fill in this table. Normally, this information comes from the ERP system.

PART_PLANT

This table stores the link between parts and plants.

PED_GROUP

This table holds a list of planned effective date groups, to be able to change the planned effective date for a range of specifications.

SPECIFICATION_KW

This table holds the keywords and keyword values assigned to a specification.

SPECIFICATION_KW_H

This table stores details of who has created or deleted keywords assigned to a specification and when.

ITIMP_MAPPING

This table stores, per user, the column and data mapping used for the import data functionality.

4.8 Revision Dependent

APPROVER_SELECTED

This table stores the users that have been selected to approve the specifications contained in the table SPECIFICATION_TO_APPROVE.

The records contained in these 2 tables are valid until the specification is approved.

APPROVAL_HISTORY

This table stores the complete approval history for specifications (together with a link to the reason table when applicable).

ATTACHED_SPECIFICATION

This table holds the list of specifications that are attached to a specification.

When column attached_revision is set to 0, this indicates that the specification is attached as a phantom.

EMAIL_MESSAGE

This table stores email messages that have to be processed.

The following types of email messages can appear (column email_type):

Type	Explanation
S	Status change
E	Exemption created
C	Exemption changed
D	Planned effective date changed

ITCMPPARTS

This table stores the list of specifications that a specific user selected for the multi specification compare.

ITPRPL_H

This table stores how has added, changed or deleted the part/plant relations for a part and when.

ITSHBN

This table stores the base name of the specification.

ITSHDESCR_L

This table holds the specification description in all languages for a specification.

ITSHEXT

When creating a specification based on a frame that has marked some sections as being extendable, this table is filled in.

ITSHLNPROPLANG

For a multi-language specification, this table stores property data associated with a specific plant / line.

ITSHQ

This table stores the list of specifications that a specific user added to the multi operation list.

ITSHVALD

When creating a specification based on a frame/mask that has validation rules applied, this table is filled in.

REASON

This table holds the reason for issue and reason for rejection for all specifications.

SPEC_PED_GROUP

This table holds a list of specifications for a planned effective date group.

SPECIFICATION_CD

This table stores the test method condition for a specific property/attribute.

SPECIFICATION_HEADER

This table contains the main information (description/status /...) for all specifications, together with the reason.

SPECIFICATION_ING

This table contains the ingredient or chemical component list.

When column declare is set to 1, the component must be included in the ingredient declaration.

When using lower level ingredients, the column pid refers to the parent component.

SPECIFICATION_ING_LANG

For a multi language spec, translations of ingredient component list columns level and comment are stored in this table.

SPECIFICATION_LINE

This table holds a process data hook to the plant / line / configuration / process line revision. It also stores the link to the BoM section that contains the items to be used in the process section.

SPECIFICATION_LINE_PROP

This table stores the process data per plant/line/configuration/process line revision/stage for the specification (both property and BoM data).

When the property field is set to -1 (column value_type = 2) then the fields component_part, quantity, uom, alternative and bom_usage are filled with the BoM item information.

When the property field is set to 0 (column value_type = 1) then the text field is filled.

Otherwise (column value_type = 0), these fields are not relevant.

The structure for properties is the same as in table specification_prop: 10 numeric fields, 6 character fields, 4 Boolean fields and 2 date fields. The display format, which is stored in table process_line_stage, decides which fields are filled and displayed.

SPECIFICATION_LINE_TEXT

This table stores the free text process data per plant/line/configuration/process line revision or stage for the specification.

SPECIFICATION_PROP

This table stores property data for the specification.

The structure is the same as in table specification_line_prop: 10 numeric fields, 6 character fields, 4 Boolean fields and 2 date fields. The display format, which is stored in table specification_section, decides which fields are filled and displayed.

Column sequence_no is used to set the correct order of the properties within a property group (as defined in table frame_prop).

Upon creation of a specification, only items that are marked 'Mandatory' in the frame or in the chosen mask are copied into the specification_prop table.

SPECIFICATION_PROP_LANG

For a multi language spec, translations of char_1 to char_10 and info are stored in this table.

SPECIFICATION_SECTION

Whereas table frame_section specifies the setup of the frame, this table specifies the setup of the specification, based on the frame.

Upon creation, only section items that are marked Mandatory in the frame or in the chosen mask are copied into the specification_section table.

Column section_sequence_no indicates the order in which the items should appear in the section list and section viewer.

Different types:

ID	Type	Additional Information
1	Property Group	Ref_id refers to property_group in specification_prop
2	Reference Text	Ref_id, ref_ver, ref_owner refers to ref_text_type, text_revision, owner in reference_text
3	BOM	Ref_id is not relevant, BoM information is stored in bom_header / bom_item

ID	Type	Additional Information
		Display format refers to BoM layout that is used
4	Single Property	Ref_id refers to property in specification_prop
5	Free Text	ref_id refers to the free text header (text_type) in specification_text ref_info indicates the initial height for editing the free text
6	Object	Ref_id, ref_ver, ref_owner refers to object_id, revision, owner in itoid
7	Process Data	Ref_id is not relevant, process data information is stored in specification_line / specification_line_prop / specification_line_text
8	Attached Specification	Ref_id refers to ref_id in table attached_specification
9	Ingredient List	Ref_id is not relevant, ingredient component list data is stored in specification_ing Display_format: 1 = ingredient component list 2 = chemical component list

SPECIFICATION_STAGE

This table holds a process data hook to the stages within a plant/line/configuration or process line revision.

SPECIFICATION_TEXT

This table contains the contents of the free text (as defined in specification_section).

SPECIFICATION_TM

This table stores the alternative test method information for a specific property/attribute.

SPECIFICATION_TO_APPROVE

This table stores the specifications that have been submitted for approval. In particular, it contains the specifications in status Submit, whose approvers belonging to one or more user groups in an editable work flow have been specified (*i.e.* a work flow containing groups with options ALL Selected and/or ONE editable).

SPEC_ACCESS

Upon logging in the system, the system stores the list of access groups the user has access to, together with the type of access (read only or update allowed, status change allowed or not).

STATUS_HISTORY

This table holds the complete status history for a specification, together with a link to the reason table if applicable.

USERS_APPROVED

When a specification is in status SUBMIT and users start to approve the specification, this table is updated. Once the specification is approved, the entries for the approved specification / revision are removed.

SPECIFICATION_TC_ITEM

This table contains the associations between Interspec specifications and the Teamcenter items.

4.9 Smart Client

ITRULESET

This table contains the save rule set.

Column rule_type refers to table ITRULETYPE.

5 BoM Tables

5.1 Configuration

ITBIT

This table stores the available item categories per part source.

There is no GUI to fill in this table.

ITBOMLY

This table stores the list of BoM display formats.

Column layout_type specifies where the display format is used: Report (1), Bom Item (2), Bom Header (3)

ITBOMLYITEM

This table stores the setup of each individual display format.

Column field_id refers to the database field in bom_header or bom_item and has the following possible values:

ID	Refers to...
1	Part
2	Description
3	Plant
4	Quantity
5	UOM
6	Conversion UOM
7	Conversion Factor
8	Yield
9	Assembly Scrap
10	Component Scrap
11	Lead Time Offset
12	Relevancy To Costing
13	Bulk Material
14	Item Category
15	Issue Location

ID	Refers to...
16	Calculation Flag
17	Bom Item Type
18	Operational Step
19	Minimum Quantity
20	Maximum Quantity
21	Fixed Quantity
22	Revision
23	Item Number
24	Part Source
25	Character 1 (255 digits)
26	Character 2 (255 digits)
27	Bubble PLC Code
28	Conversion Calculated Quantity
30	Numeric 1
31	Numeric 2
32	Numeric 3
33	Numeric 4
34	Numeric 5
40	Character 3 (40 digits)
41	Character 4 (40 digits)
42	Character 5 (40 digits)
50	Boolean 1
51	Boolean 2
52	Boolean 3
53	Boolean 4
60	Date 1
61	Date 2
70	Association 1
71	Association 2
72	Association 3
80	Alternative Priority
81	Alternative Grouping Name
90	Replace By Localized Item Flag

ITBOMLYSOURCE

This table stores the link between the BoM display formats and the part sources.

ITBU

This table stores the list of available BoM usages (independent of the part source).

Note

A BoM usage ID cannot be 0.

5.2 Data

BOM_HEADER

This table stores the BoM header information for a specification.

The calculation flag field has the following possible entries: no calculation (N), only calculate BoM header base quantity (Q), only calculate BoM header base conversion (C), both calculate BoM header base quantity and BoM header base conversion (B).

Bom Type is an optional field that has the following possible entries: quantity bom (FQ) and percentage bom (FP).

BOM_ITEM

This table stores, for each bom header available, the individual bom items with all information.

When component_revision is empty, this means the component part has been added as a phantom (which is the default).

ITATTEXPLOSION

When doing a bom explosion with the 'explode attachments' flag set, the attachments are stored in this table. This table is only used during explosion and is cleared on a regular basis.

ITBOMEXPLOSION

This table contains the details for a BoM explosion.

Field recursive_stop is set to 1 when it appears that a recursive bom has been set up.

Field access_stop is set to 1 when the user does not have access to the item.

This table is only used during explosion and is cleared on a regular basis.

Note In ITBOMEXPLOSION not only alternative items are stored but also BoM headers (which have no priority). Thus, no default value is provided for the column ALT_PRIORITY.

ITBOMIMPLOSION

This table contains the details for a BoM implosion (where used specification).

Field recursive_stop is set to 1 when it appears that a recursive BoM has been set up.

Field access_stop is set to 1 when the user does not have access to the item.

This table is only used during explosion and is cleared on a regular basis.

ITBOMPATH

When a BoM path is set up during the BoM explosion, the path that the system should follow is stored in this table.

This table is only used during explosion and is cleared on a regular basis.

Note In ITBOMPATH not only alternative items are stored but also BoM headers (which have no priority). Thus, no default value is provided for the column ALT_PRIORITY.

ITINGEXPLOSION

When performing an ingredient explosion, all relevant ingredient information is entered in this table.

This table is only used during explosion and is cleared on a regular basis.

6 Reporting Tables

6.1 Reporting Configuration

ITADDON

This table stores a list of generic and reporting add-ons.

ITADDONAC

This table stores the access rights for each add-on granted to a given user in a given user group

ITADDONARG

This table stores the arguments to be passed to the reporting or generic add-on.

ITADDONRQ

This table stores all requests of generic and reporting add-on executions.

This table will be cleared on a regular basis.

ITADDONRQARG

This table stores, for all requests, the arguments to be passed.

This table will be cleared on a regular basis.

ITADDONTYPE

This table stores the list of reporting add-on types.

ITREPAC

For all custom reports defined, the access pro user/user group is stored in this table.

Upon generating the list of reports:

When access_type is set to All Users (A), the system ignores the columns user_group and user_id.

When access_type is set to User (U), the system looks at the column user_id.

When access_type is set to User Group (G), the system looks at the column user_group.

ITREPARG

For custom reports of type '1 Arguments', '2 Arguments', '3 Arguments' and 'X Arguments', the arguments defined are stored in this table.

ITREPD

This table stores the list of all custom reports defined.

Reporting types can be maintained in the table itreptype.

For client/server reports that are not of the general report type, the info column contains the data window that will be used as output.

ITREPDATA

For reports based on the general report, this table contains the setup of the contents (which sections should be included / excluded ...).

Column nrep_type can contain:

Value	Meaning
esc	Show empty section
esp	Show empty property
Rfi	Show reason for issue
Rfr	Show reason for rejection
asc	Include all sections
eft	Show empty free text
Kw	Show keywords
eat	Explode attachments
sem	Show empty section message
Irt	Include reference texts
Cl	Show classification
suppl	Supplier report
mfc	Show manufacturers
pobj	Show objects assigned to part
tm	Show test methods details
stpb	Have page break after each process line
hdrb	Show border around the report header
note	Include part note
bomalt	Show alternative BoM items
Cobj_x[x]	Include external objects

ITREPG

This table stores a list of report groups.

ITREPITEMS

For reporting add-ons, this table stores the selected reporting blocks.

ITREPITEMTYPE

For reporting add-ons, this table stores the available reporting blocks.

Following reporting blocks are standard:

Value	Explanation
As	Attached Specifications
Bom	Bill Of Material
Cl	Classification Section
Ft	Free Text
Ftr	Main Report Footer
Hdr	Main Report Header
Ing	IngredientList
Kw	Keyword section
Lp	ProcessData
Mfc	Manufacturer Section
note	Note
Oi	Object Images
Pg	Property Group
pobj	Attached Objects
Rfi	Reason for issue
Rfr	Reason for Rejection
Rt	Reference Text
schdr	Section
scihdr	Section Item
Sem	Section Empty Message
Sp	Single Property

ITREPL

This table stores the link between the report and the report group(s).

ITREPNSTDEF

For client/server reports, this table defines the layout and contents of all the different blocks.

Nrep_type can contain:

Value	Explanation
-------	-------------

Value	Explanation
att	Attached Specification
bmh	BoM Header (retrieval)
bmp	Header Logo (bitmap)
bn	Base Name
Bom	Bill of Material
bomh	BoM Header (layout)
Cl	Classification
cobj_1[1]	Custom object (1)
cobj_1[2]	Text custom object (1)
cobj_2[1]	Custom object (2)
cobj_2[2]	Text custom object (2)
cobj_3[1]	Custom object (3)
cobj_3[2]	Text custom object (3)
cobj_4[1]	Custom object (4)
cobj_4[2]	Text custom object (4)
cobj_5[1]	Custom object (5)
cobj_5[2]	Text custom object (5)
data	Section List
Eatt	Explode Attachments
Ft	Free Text
Ftr	Report Footer
Hdr	Report Header
Ing	Ingredient List
Kw	Keywords
Obj	Object
objnv	Non-Visual Object
pagepos	Position Page indicator
Pl	Process Line
proc	Stored Procedure
Rep	Number of lines
Rfi	Reason For Issue
rfr	Reason For Rejection
Rt	Reference Text
Rta	<Any> Indicator
Rtd	Reference Text Header
Sc	Section / Subsection

Value	Explanation
Sp	Single Property
St	Stage
Stft	Stage Free Text

ITREPRQ

This table stores all requests of custom report executions.

This table will be cleared on a regular basis.

ITREPRQARG

This table stores, for all requests, the arguments to be passed.

This table will be cleared on a regular basis.

ITREPSQL

For client/server custom reports for which arguments are required, this table stores SQL statements that are used to fill the drop-down lists in the argument screen.

ITREPTEMPLATE

This table contains the HTML and PDF syntax for each template defined. Type refers to itrepitemtype.

ITREPTYPE

This table stores the list of available report types.

The standard reporting types are:

ID	Reporting Type
1	Spec / Rev
2	Spec / Rev / Section
3	1 Arguments
4	2 Arguments
5	3 Arguments
7	X Arguments
8	BOM Report
100	General Report

6.2 Reporting Data

FRAMEDATA

For all data of a property, there is only 1 row in frame_prop. To improve the performance of reporting, the property data is duplicated, but then row-wise. For each cell, a new record is created in framedata.

For date fields, column value_dt is filled.

For numeric fields, column value is filled.

For all fields, column value_s (string value) is filled.

SPECDATA

For all data of a property, there is only 1 row in specification_prop. To improve the performance of reporting, the property data is duplicated, but then row-wise. For each cell, a new record is created in specdata.

For date fields, column value_dt is filled.

For numeric fields, column value is filled.

For all fields, column value_s (string value) is filled.

SPECDATA_PROCESS

For all data of a property, there is only 1 row in specification_line_prop. To improve the performance of reporting, the property data is duplicated, but then row-wise. For each cell, a new record is created in specdata_process.

For date fields, column value_dt is filled (column value_type is set to 1 when the date is not filled and 2 when the date is filled).

For numeric fields, column value is filled (column value_type is set to 0).

For character and Boolean fields, the string value (value_s) is filled (column value_type is set to 1).

For all fields, column value_s (string value) is filled.

For component part quantity, column quantity is filled (column value_type is set to 2).

For text, column value_s is filled (column value_type is set to 4).

7 Logging Tables

7.1 Job Log

ITJOB

This table stores the logging of database jobs.

The table contains logging of current to x days ago. Older logging is automatically removed. The number of days is a database preference.

ITJOBQ

This table stores the detailed logging for mop operations.

This table is only used upon execution of the mop operation and is cleared on a regular basis.

ITQ

This table stores all mop operations.

This table is cleared on a regular basis.

SPECDATA_CHECK

This table contains the logging of the specdata check procedure. There is no GUI available to view this logging.

7.2 Error Log

ITERROR

This table contains errors caused by the client/server application, the web application, the database or some custom applications.

Column msg_type is set to 0 for errors, 1 for warnings and 2 for information.

The table contains logging data from x days ago until the current time. Older logging is automatically removed. The number of days is a database preference.

7.3 Audit Trail

IT_TR_JRNL

This table logs all translation changes of glossary data.

Id_type has one of the following values:

Value	Explanation
as	Association
at	Attribute
c3	Specification Type
cd	Condition
ch	Characteristic
hd	Header
if	Ingredient Function
ig	Ingredient Group
in	Ingredient
is	Ingredient Synonym
ni	Ingredient Note
ob	Object
pg	Property Group
rt	Reference Text
sb	Subsection
sc	Section
sp	Property
tl	Test Method Long Description
tm	Test Method
tt	Free Text
um	Unit of Measure

ITAGHS

This table logs all general access group management changes.

ITAGHSDetails

This table logs all detailed access group management changes.

ITBOMJRNL

This table logs all changes to BOM MRP fields.

ITESHS

This table logs all electronic signatures.

ITFRMDEL

This table stores details of who has deleted a frame and when.

ITFRM_H

This table contains information on when frame data has been changed.

ITOIHS

This table contains the audit trail of objects/images.

ITREPGHS

This table logs all general report group changes.

ITREPGHSDetails

This table logs all detailed report group changes.

ITREPHS

This table logs all general reporting management changes.

ITREPHSDetails

This table logs all detailed reporting management changes.

ITRTHS

This table stores the electronic signature data with regard to reference text management.

ITSCHS

This table contains logged information on who has changed data, in which section and when.

ITSCUSRLOG

This table contains logged information on who has opened which section and when.

This table is cleared on a regular basis.

ITSH_H

This table contains logged information on when part data has been changed.

ITSHDEL

This table stores details of who has deleted a specification and when.

ITSHHS

This table stores the electronic signature data with regard to specification status changes.

ITSPPHS

This table contains logged information on who has changed property data and when.

ITSSHS

This table logs all general status management changes.

ITSSHSDETAILS

This table logs all detailed status management changes.

ITUGHS

This table logs all general user group management changes.

ITUGHSDETAILS

This table logs all detailed user group management changes.

ITUS

This table contains logged information on when a user has been created and removed.

ITUSHS

This table logs all general user management changes.

ITUSHSDETAILS

This table logs all detailed user information changes.

ITWGHS

This table logs all general workflow group management changes.

ITWGHSDETAILS

This table logs all detailed workflow group management changes.

ITWTHS

This table logs all general workflow type management changes.

ITWTHSDETAILS

This table logs all detailed workflow type management changes.

JRNL_SPECIFICATION_HEADER

This table contains logged information on who has changed specification header data and when.

8 Temporary/Working Tables

8.1 Frame Change Management

FT_ATTACH_SPEC

Just before the frame is refreshed, the attached specification information of the specification is stored in this temporary table, in order to be able to execute the frame change management rules of type attached specification. As this is just temporary, the revision of the specification is not stored.

FT_BASE_RULES

This table stores all frame change management rules.

Object type can have the following types:

ID	Type
1	Property Group
2	Reference Text
4	Single Property
5	Free Text
6	Object
8	Attached Specification

Fields `old_column` and `new_column` are only relevant for object_type 1 and 4.

When `old_column` and `new_column` are set to 0, the data of all columns (`num1` to `num10`, `char1` to `char6`, `boolean1` to `boolean4`, `date1`, `date2`, `test method`, `info field...`) is transferred to the target specification.

When `old_column` and `new_column` are not 0, only one specific field will be copied. For information on the internal IDs, please refer to `PROPERTY_LAYOUT`.

FT_BASE_RULES_H

This table stores details of who has created, changed or removed frame change management rules, and when.

FT_FRAMES

In this table, the link between a frame change management rule group and a frame change (e.g. one specific version to another version or one frame to another frame) is stored.

FT_FRAMES_H

This table stores details of who has created or removed the link between frame change management rules and frame lists and when.

FT_RULE_GROUP

Frame change management rules are grouped. The list of available frame change management rule groups is stored in this table.

FT_RULE_GROUP_H

This table stores details of who has created, changed or removed frame change management groups and when.

FT_SPEC_PROP

Just before the frame is refreshed, the property information of the specification (specification_prop) is stored in this temporary table, in order to be able to execute the frame change management rules of type single property/property group. As this is just temporary, the revision of the specification is not stored.

FT_SPEC_PROP_LANG

Just before the frame is refreshed, the translated property information of the specification (specification_prop_lang) is stored in this temporary table, in order to be able to execute the frame change management rules of type single property/property group. As this is just temporary, the revision of the specification is not stored.

FT_SPEC_SECTION

Just before the frame is refreshed, the section item information of the specification (specification_section) is stored in this temporary table, in order to be able to execute the frame change management rules. As this is just temporary, the revision of the specification is not stored.

FT_SPEC_TEXT

Just before the frame is refreshed, the free text information of the specification (specification_text) is stored in this temporary table, in order to be able to execute the frame change management rules of type free text. As this is just temporary, the revision of the specification is not stored.

FT_SPEC_TM

Just before the frame is refreshed, the alternative test method information of the specification (specification_tm) is stored in this temporary table, in order to be able to execute the frame change management rules of type single property / property group. As this is just temporary, the revision of the specification is not stored.

FT_SQL

For complex frame change management rules, it is required to define an SQL rule. The SQL syntax is stored in this table (without a semicolon to end the statement).

FT_SQL_H

This table stores details of who has created, changed or removed SQL rules and when.

8.2 Data Import

ITIMPBOM

This table stores the BOM data to be imported when the Import Data is used.

This table is only used upon importing and will be cleared on a regular basis.

ITIMPLOG

This table stores the result of the import upon use of the Import Data.

There is a difference between errors (log_type = E) and information (log_type = I).

This table is only used upon importing and will be cleared on a regular basis.

ITIMPPROP

This table stores the property data to be imported upon use of the Import Data.

This table is only used upon importing and will be cleared on a regular basis.

8.3 Reporting

FRAMEDATA_SERVER

Upon creation of a frame and upon changing property values in a frame, a new entry is stored in this table. This triggers an alert that starts the processing of the new frame data. The result is stored in the table framedata. Once data is processed, the date_processed column will be filled.

This table is cleared on a regular basis.

ITCSTREPSH

For some custom reports in which a stored procedure loads the data, the developer can link additional part codes (e.g. attached specs) to be used within the report.

This table is cleared on a regular basis.

ITSHCMP

This table stores the result of a specification comparison.

This table is cleared on a regular basis.

ITTSRESULTS

This table stores the results of a text search (where used text).

This table is cleared on a regular basis.

ITWEBRQ

This table stores all requests of custom reports executed in the web client.

This table is cleared on a regular basis.

SPECDATA_SERVER

Upon creation of a specification and upon changing property values in a specification, a new entry is stored in this table. This triggers an alert that starts the processing of the new specification data. The result is stored in the table specdata. Once data is processed, the date_processed column will be filled.

This table is cleared on a regular basis.

9 Interface Tables

9.1 3-Tier

ITDATEOFFSET

Because the parent database may be located in a different time zone, this table specifies the time difference between the system time and the system time on the parent database.

This table is refreshed when data is imported.

ITENSSLOG

This table holds status change information of glossary data that is imported.

Column en_tp can contain the following data:

Value	Explanation
As	Association
At	Attribute
Ch	Characteristic
Hd	Header
In	Ingredient
Kc	Keyword Characteristic
Kw	Keyword
Pg	Property Group
Sb	Subsection
Sc	Section
Sp	Property
Tm	Test Method
Tt	Free Text
um	Unit Of Measure

ITIMP_LOG

This table logs when a frame, object, reference text or specification is imported.

SPEC_PREFIX

For each prefix defined in spec_prefix_descr, this table stores which databases should receive which international specifications.

SPEC_PREFIX_ACCESS_GROUP

Creation of specifications with a specific prefix is limited to some access groups. This configuration is stored in this table.

SPEC_PREFIX_DESCR

This table holds the list of defined prefixes. A prefix is either global (G) or regional (R).

UPDATE_HISTORY

The import of glossary data, specification data and frame data is based on timestamps. Only changes made in a parent database after the last import will be imported. Therefore, this table contains the last import date for all of the import types.

9.2 ERP

ITERPKW

This table contains the mapping between ERP keyword IDs and the Interspec keyword ID. This is used when importing external keywords from the ERP system.

ITEXPORTBOM

This is a temporary table that contains the specifications for which the bill of material information has to be exported to the ERP system.

This table is cleared on a regular basis.

ITIMP_CHANGES

This table holds part data changes (description, UOM, part/plant relations...) upon import of master data from the ERP system.

ITLANGMAPPING

This table holds the mapping between the ERP language ID and the Interspec language description.

An extra record should always exist to identify which ERP language ID should be used to the Interspec master description. To do this, IS_LANG is set to 'DEFAULT'.

ITSAPPLRANGE

In case BoM data is exported to the ERP system, the file name ends with Rx.bom, in which x refers to the plant range. The definition of those plant ranges is stored in this table.

ITSAPPLRANGE_SS

This table stores which BoM status and BoM usage values need to be exported to the ERP system upon export of bill of material data.

9.3 LIMS**ITLIMSCONFDT**

This table stores the description to be used for Unilab fields.

ITLIMSCONFKW

This table stores the link between an Interspec keyword and a Unilab standard attribute.

ITLIMSCONFLY

This table stores, for each display format/display format revision, the link between the Interspec fields (eg. min) and the Unilab fields.

ITLIMSJOB

This table contains all specifications/plants that are ready to be exported to Unilab. Column result_proceed indicates whether the specification is not yet transferred (NULL), whether the specification has been transferred but the transfer did not succeed (0) or whether the specification has been transferred successfully (1).

ITLIMSJOB_H

This table contains all specifications / plants that have been transferred to Unilab.

ITLIMSPLANT

For all Interspec plants that need to transfer data to Unilab, this table contains the connect string to identify to which Unilab database the data should be transferred to and the language indicator for the descriptions.

ITLIMSPKEY

For each parameter profile, Unilab stores up to 5 parameter profile keys. The value is defined in column path. Either not applicable (0), the sample type (sample type), the plant (plant) or specification property data (sectionID#subsectionID#propertygroupID#propertyID#fieldName).

ITLIMSTMP

This table contains, for each Unilab object (sample type, parameter profile, parameter, etc) the Unilab template ID to be used.