MANUAL DATA ENTRY IS OBSOLETE

- Product data is the capital of every company. But there are still companies that synchronize their data manually using isolated solutions.
  - They waste time inputting the same data multiple times at various points across the system, and this results in increased coordinating efforts between departments.
  - Identical parts are sometimes not recognized due to deviant manual entries, which can lead to losses in purchasing.
  - Ambiguous data can lead to purchasing and production errors.
- That is why effective and networked data management systems are indispensable for production companies.

EFFECTIVE DATA MANAGEMENT WITH PTC WINDCHILL® AS PDM-SYSTEM AND SAP® AS ERP-SYSTEM

- Only a product data management system (PDM) can efficiently process and manage complex technical data in the field of design engineering and development.
- One of the best-in-class existing solutions, with its versatile CAX interfaces, is PTC Windchill® from the maker of the CAD system PTC Creo®. The link-up of PTC Creo®, in particular, is unbeatable.
- For logistics and financial data, a high-performance ERP system is required. Among these ERP systems, SAP® is the market leader. Upper midsize firms as well as corporations use SAP® in every area of business. The comprehensive range of functionality allows every department in the company to work together.

BETWEEN TWO WORLDS

- Isolated operation of the two systems, SAP® and PTC Windchill®, is not enough to guarantee a smooth flow of data for optimum process support in the company. The two systems must be closely integrated.
  - The product structure must be displayed in parallel on both systems and kept up to date.
  - Changes must be maintained in a timely manner in both systems, to be able to reliably produce and plan.
  - Release and change processes for CAD drawings and CAD models must be supported across systems and sites.
  - Departments such as purchasing, production and marketing need to visualize released CAD data directly in SAP®.

SYNCHRONIZED DATA ACROSS DEPARTMENTS AND SYSTEMS THANKS TO IFConneX

- The IFConneX interface for SAP® allows seamless, cross-system modeling of engineering processes in the PTC Windchill® and SAP® systems.
- It is easy to operate using menus in PTC Windchill®. Interface functions can also be event-driven or called from within the PTC Windchill® workflow.
- By pressing a button, relevant parts in PTC Windchill® can be added as material master in SAP® or linked to existing material masters.
- For each CAD document relevant to SAP®, a SAP document is automatically generated through which SAP users can directly visualize models and drawings.
- The part structure can be automatically transferred to SAP® as a bill of material. If changes are made to the structure, this SAP® bill of material can be automatically updated in PTC Windchill®.
- This integration means that it is possible to implement a cross-system release and change process.
- IFConneX for SAP® is configurable and permits flexible and efficient adaptation to customer-specific data and processes.

IFConneX FOR SAP® CONNECTS

PTC WINDCHILL® WITH SAP®
TECHNICAL INFORMATION
IFConneX FOR SAP®

STANDARD FUNCTIONS OF THE SAP® INTERFACE

Supported objects in SAP®
- Document info record
- Material master record
- Bill of material
- Change master record
- Document structure
- Equipment
- Functional location

In PTC Windchill®
- Product
- Part
- Part structure
- CAD document
- Other documents
- Change request
- Change notice
- Promotion Request
- Baseline

SAP Document-management functions
- Creation of documents
- Changes to documents
- Set document status
- Change with change number
- Creation, read-out and deletion of object links
- Create, change document structures
- Document hierarchy
- Create new versions
- Read out status log
- Check-in / check-out an original (KPRO or other SAP archive)
- Generate a revision
- Classification
- Set permissions (ACLs)

SAP Material-master-record functions
- Create material master record
- Change material master record
- Maintenance of
  - Standard views and fields
  - Plant views
  - Classification
  - Object link
  - Basic data text
- Create a material revision
- Link a PTC Windchill-part with a material master record

SAP Bill-of-material functions
- Create bill of material in SAP®
- Change bill of material
- Usage, alternative
- Creation of plant views
- Position types L, N
- Variable-size items
- Text item
- Document item
- Synchronization of item numbers

SAP Change-management functions
- Create change master record
- Change the change master record
- Change document, material master record, bill of material with reference to change master record
- Create, change object management records
- Release of change master record

ADDITIONAL SAP® FUNCTIONS

User functions
- Additional user-defined BAPIs or function modules can be integrated on request.

PTC Windchill® Functionality
- Control options from PTC Windchill
  - SAP workspace menu
  - Action menu on the object
  - Display of SAP menu possible in other views
- Event-driven actions from PTC Windchill®
  - Attribute inspection at check-in
  - Change-management
  - Increase the life cycle
  - Generate new versions
  - Configurable initialization of attributes for save as event
  - Inspection of the number and/or file name from the rename-event
  - Create or release the change notification
  - A range of other events can be used
- Features in the PTC Windchill Workspace
  - Read system attributes
  - Read user-defined attributes
  - Write user-defined attributes
- Integration change management
  - Create change notice for SAP change master record
- Further functions in PTC Windchill®
  - Automatic renaming of CAD documents and parts according to corporate guidelines
  - Cancellation of an event, e.g. check-in
  - Feedback via the event manager
COUPLING OF MULTIPLE SAP® SYSTEMS
The interface makes it possible to connect multiple SAP® systems to one PTC Windchill® system.

OPERATING SYSTEM
The PTC Windchill - SAP interface is installed in the context of PTC Windchill®. The operating system conforms to the specifications for PTC Windchill®.

TECHNICAL REQUIREMENTS
SAP®
- TCP/IP connection between the PTC Windchill® server and the SAP application server or SAP gateway
SAP Server Version / Release
- SAP® from version 4.7 (BAPI technology)
- SAP® ERP from version 6.0 (PI technology)
- SAP Netweaver from 7.1
PTC Windchill®
- From version 10.1

ADDITIONAL SOFTWARE FOR THE INTERFACE
IFConneX Release Engine (IFRE)
Automated generation of visualization or exchange formats from PTC Creo® Parametric models and drawings in the background
- Calls to the Release Engine from PTC Windchill® or SAP®
- Extraction of the neutral formats (HPGL, TIFF, PDF, DXF, STEP, IGES) is configurable
- Support for multiple drawing sheets
- Stamping of PDF and TIF
- Application of a digital signature
- Reading or updating of PTC Creo® Parametric parameters that are relevant to SAP®
- Automated check-in of generated neutral formats in SAP®
- Bidirectional synchronization of the release process in PTC Windchill® and SAP®
- Automated notification via e-mail
- Stamping of additional information on drawings

Number generator (IFRE-NG)
- Automated assignment of part and document numbers
- Setup of multiple number generators
- Context-related number assignment
- Support for classifying number keys

Further modules of the Release Engine can be found in the Release Engine flyer.

TECHNICAL INFORMATION
IFConneX FOR SAP®

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Innoface is worldwide one of the leading providers of interfaces that link PTC Windchill® with ERP systems. Our solutions ensure a reliable flow of information between construction and logistics.