

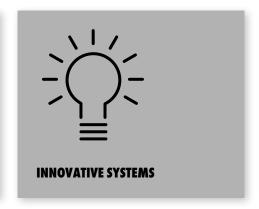
**WÜRTH Industrie Service** 

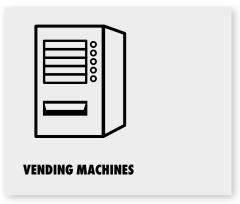
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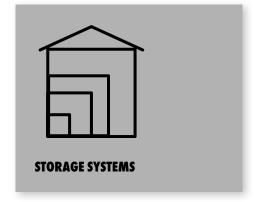
## **CONNECTED SYSTEMS**

for a holistic production and operational equipment supply

















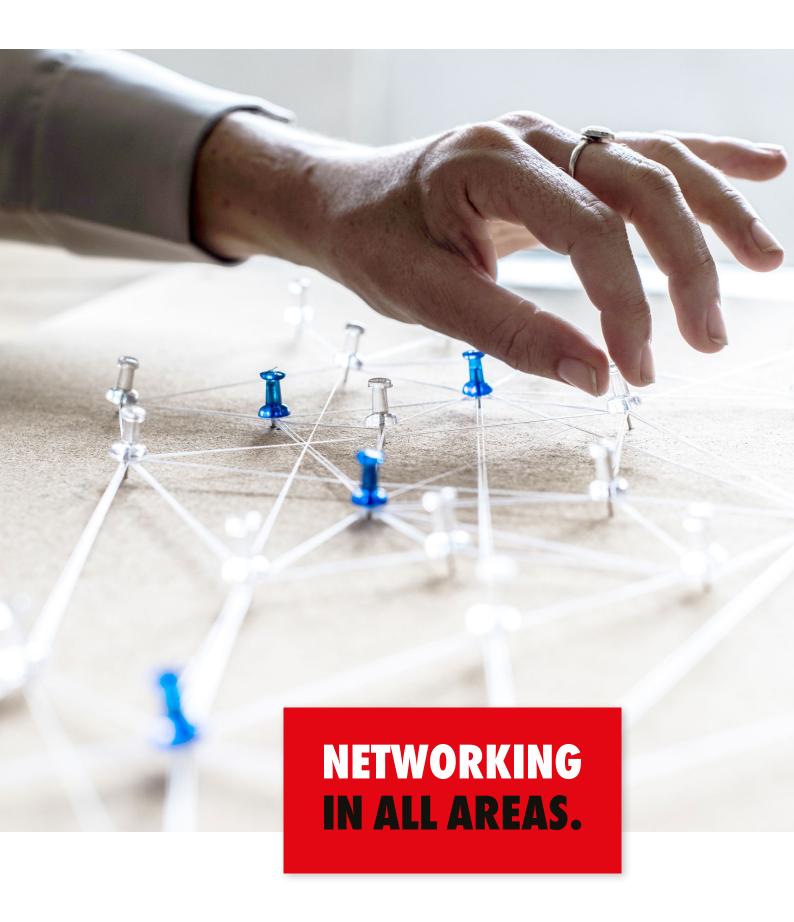




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### **FOREWORD**

Dear Customers of Würth Industrie Service,

It is our passion to provide the right product, in the right quantity, at the right time, at the right place, at the right price and in the right quality: simply by offering an optimal and automated C-Parts supply in the area of indirect and direct material for the production facilities of our customers worldwide.

Here we ask ourselves the following questions every day and reinvent ourselves again and again:

- How can maximum security of supply be achieved?
- How can stocks be optimised?
- How can valuable storage space be reduced?
- How can the cost of purchasing C-Parts be reduced?
- How can costs be reduced?
- How can transparent and automated communication be ensured?
- How can we create an individual concept for each customer?

#### The answer is simple, but complex at the same time:

With the connected and integrated system solutions of Würth Industrie Service Automated, Direct, Secure, Individual, for every industry. For every purpose, for any need of the customer.

In this brochure you can read which systems are available and how they offer our customers maximum security of supply. Contact our specialists at any time and request additional information on the individual systems.

ppa. Wolfram Zeitler

W. Late

Head of Key Account Management Würth Industrie Service GmbH & Co. KG





# HOLISTIC SUPPLY OF PRODUCTION AND OPERATIONAL EQUIPMENT

Manual ordering processes, the coordination of a large number of suppliers, countless goods deliveries and incoming goods bookings, unmanageable invoice checks and the almost impossible challenge of reacting to demand peaks are still on the agenda of many industrial companies. And there are still long routes for your staff that cost a lot of time and above all money.

#### Is that still relevant? Certainly not!

Würth Industrie Service supplies customers not only just-in-time, but also just-at-place: C-Parts. With certainty. The connected systems start directly at the point of demand and use in purchasing, procurement, maintenance, materials management, warehousing and production. The goals are clearly aimed at reducing procurement costs, optimizing processes, costs and maximizing time savings while at the same time ensuring maximum delivery reliability and minimizing capital tie-up.

#### From supplier to networked partner

Gone are the days in which the supply of C-Parts was characterized by a simple delivery of the required items. Rather, the supplier develops into a partner who is integrated into the entire process. Holistic systems, services and information tools form the basis for networking the digital and physical world and enable the requirements of industry 4.0 and logistics 4.0 to be met.



PROCUREMENT
COSTS
C-Parts

PURCHASE VOLUMES
C-Parts

**YOUR PROFIT** 

**SERVICE COSTS** 

PROCUREMENT COSTS

**C-Parts** 

VOLUMES

C-Parts





### **CLASSIFICATION OF THE SYSTEMS**

Each system has different advantages and features. For clarification purposes, each system is classified according to the criteria of degree of automation, type of requirement, quantity required and regularity of requirements. The selection of a suitable solution and the advantages of using the systems become clear.

#### **Degree of automation**

The degree of automation reflects order and process reliability. The higher the degree of automation of a system, the less effort is required for manual activities and the procurement of C-Parts. On the one hand, valuable time, lots of walking and costs can be saved; on the other hand, resources can be freed up and used for core tasks and activities.







Low degree of automation

Medium degree of automation

High degree of automation

#### Requirement type

The variety of items used in production, material management and intralogistics is large: These range from direct materials such as screws, washers, nuts, DIN/standard parts and drawing parts to indirect materials such as tools, lubricants and adhesives, batteries, work clothes and gloves. Here, too, various systems are suitable.







Direct material

Direct and indirect material

Indirect material

#### Required quantity

The required quantities of items can vary depending on the product, machine or plant to be manufactured. These range from very small quantities to large quantities. Depending on the required quantity, different systems are suitable.



1 100



Low required quantity

Medium required quantity

High required quantity

#### Regularity of requirements

The requirements can be different for various product groups and also for individual items: regular, fluctuating, seasonal or irregular. Here, too, our portfolio offers the corresponding solution.







Irregular

Fluctuating

Regular



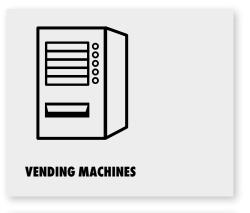


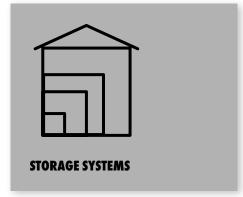


# IN THE RIGHT QUANTITY AND AT THE RIGHT TIME.

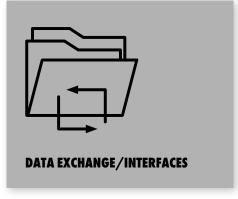




















### **KANBAN SYSTEMS**

#### The smart method for optimizing production processes

The highly flexible Kanban systems offered by Würth Industrie Service under the brand CPS®KANBAN help to create an effective and transparent storage system or production. The principle of the Kanban process originating in Japan is simple: a rolling two-bin system that provides C-Parts "just-in-time" directly at the point of use. The Kanban items are stored in the central warehouse of Würth Industrie Service and as soon as an empty bin is registered at the customers, a new bin is delivered to the customer in the next delivery cycle. Thus, the Kanban system offers the highest possible delivery reliability with reduced stock levels and the lowest possible capital commitment.

#### Kanban process at Würth – Reliable delivery of your small parts

The material flow in Kanban systems of Würth Industrie Service is managed via two bins, the Würth small load carriers W-KLT®2.0 (E-KLT). As information carriers within a Kanban process, a Kanban label is used in combination with various technologies for the automatic control of the production process. In the past, a hand scanner was used to trigger the demand; today, more than half of our customers use RFID-supported system solutions as standard for automated re-ordering, and in the future, further intelligent technologies can be used. The Kanban system of Würth Industrie Service can also be used for direct materials such as fasteners, fastening technology, DIN/standard parts as well as special and drawing parts and also for indirect needs such as MRO.

#### **Data management in Kanban process**

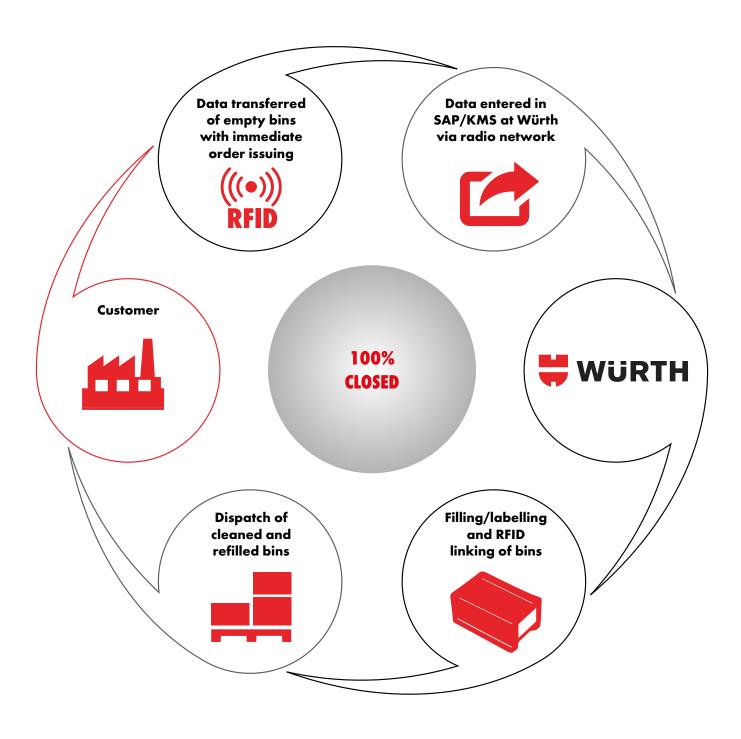
Each bin movement is recorded and documented so that information about the status in the Kanban system can be provided at any time. The basis for this is a specially developed Kanban Management Software (KMS), the specialized European Kanban logistics center in Bad Mergentheim as well as the barcode labels or RFID tags. Based on the data, all C-Parts are dispatched close to consumption, inventories and warehouse technology are regularly optimized and statistical data is updated. All data can also be accessed by customers via the WIS (CPS®ONLINE) information platform. At the same time, a large number of special and drawing parts as well as specific product groups can be processed effectively. The employees of Würth Industrie Service plan a specific and cost-optimized solution with the involvement of all departments, introduce the system together with the customers and support the product standardization of the C-Parts.

#### Different types of optimal Kanban control

The most suitable Kanban service solution for automatic replenishment is implemented according to the respective item and the individual work situation. In all cases the focus is on maximum availability of the right article, in the right quantity, at the right place and at the right time, directly in production. RFID technology has become an integral part of the efficient value-added supply chain of manufacturing companies. With RFID-Kanban, you can fully automate your procurement process and re-orders, manage your inventories leanly and identify fluctuations in demand at an early stage.



## KANBAN PROCESS AT WÜRTH





### **RFID KANBAN**

#### A brief overview

#### **CPS®RFID** for maximum supply security

Faster, more transparent, more secure – Radio Frequency Identification, RFID for short, is a firmly established system for managing production material in the manufacturing industry and is a central component within an efficient value chain. Within industrial Kanban systems, Würth Industrie Service has made use of this technology for lean inventory management, automated mapping of repeat orders and identification of fluctuations in demand at an early stage. Thus, the systems from the CPS®RFID family contribute to an even higher supply security compared to conventional Kanban processes.

#### CPS®RFID - that stands for ...

- ... C-Product-Service with Radio Frequency Identification.
- ... Radio-controlled transmission of item and bin data directly from the customer's production facility to the central warehouse of Würth Industrie Service.
- ... Early detection of demand fluctuations.
- ... Automated re-ordering without scanning and manual entry.

The technology is quickly explained: The basis is an insensitive chip with antenna, the so-called RFID tag or RFID transponder, which is attached to the respective object in the C-Parts area as a label on the Kanban bin and is movable. Each tag can be identified by a unique number for data security. An RFID system also consists of a reading device for detecting the transponder and the sending unit for data transmission or for the automated reodering of C-Parts for production. The main difference between the systems lies in passive or active RFID transponders. While passive RFID transponders do not have their own power supply and the energy for sending the data is obtained from the energy field generated by the reader, active transponders have their own energy source, for example a battery, which triggers data transmission.

Würth Industrie Service operates both systems, but mainly favours systems with passive RFID transponders, as these are maintenance-free on the one hand. On the other hand, the integration of systems with passive transponders is seamlessly possible and no changes to customer processes are necessary.

More individuality for the security of the customers.
With the various RFID systems from Würth Industrie Service.



## **RFID KANBAN**

**iSHELF® ISHELF®FLEX iPLACER® iGATE iBOX**® **iPUSH® iBOX®FLEX iTAGBOX**® **KANBAN BINS KANBAN LABEL WIS PLATFORM iPALLET KANBAN SHELVES** 





That's how intelligent a shelf can be.





#### **Description**

The iSHELF® system stands for automatic ordering via an intelligent shelf on which an empty bin with an RFID tag is placed. This initiates immediate data transmission. The existing processes in the Kanban process remain unchanged. Due to the battery operation no power connection is necessary, so that the shelf can be set up freely in th production area.

#### **Uses and Advantages**

- Complete automation of the ordering process
- No additional space required
- Lean warehouse and inventory management
- Early reaction to fluctuations in demand
- Precise control of the flow of goods
- No manual entry required

#### **Special features**

- Fast changeover without modification of existing process
- Maximum flexibility due to different shelf sizes (iSHELF®flex)
- Operation of several shelves with one shelf

#### Additional documents

- Brochure CPS®RFID Kanban
- Brochure CPS® C-Parts. With certainty.
- Brochure Is your factory really lean?
- Website Keyword: Kanban systems

#### **Degree of automation**



#### Requirement type



#### Required quantity









Right where you need it.





#### **Description**

The iPLACER® connects the workstation with the production supply and promises maximum flexibility. The handy, battery operated module with integrated reader and transmitter unit can be installed anywhere and provides more transparency in the material flow through an automated reordering of C-Parts. Empty bins are captured by RFID technology and orders are placed where the items are consumed. This results in various application possibilities for the iPLACER®: as an ordering system directly at the workstation, as a autonomous, independent ordering system at any point of use or as replenishment control in the flow rack.

#### **Uses and Advantages**

- Fully automatic demand notification and ordering
- Flexible options for mounting-in production at the workstation or as part of assembly process
- Use as ordering and inventory management system
- Autonomous, independent and wireless system
- Transparency in the flow of goods
- Early identification of demand fluctuations

#### **Special features**

- Simple mapping of intralogistic processes
- Wireless system
- Can be used regardless of bin size

#### **Additional documents**

- Brochure iPLACER®
- Brochure CPS®RFID Kanban
- Brochure Is your factory really lean?
- Website Keyword: Kanban systems

#### **Degree of automation**



#### Requirement type



#### Required quantity

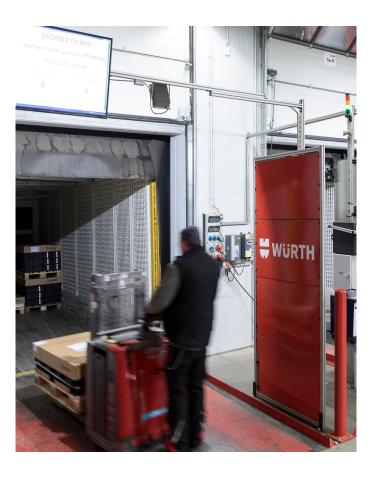






## **iGATE**

Might it be a little bit more?



#### **Description**

The iGATE enables the simultaneous recognition and data transmission of more than 200 bins. In addition to this bulk reading, incoming and outgoing goods can also be checked by the customer. The iGATE can be integrated into the logistical processes and offers the possibility to cover a multitude of processes.

#### **Uses and Advantages**

- Detection of a large number of empty bins
- Time saving with data acquisition
- Automatic replenishment control
- Flexibility of use

#### **Special features**

- Can be used as an ordering system or for logging customer-specific bins
- · Possibility of goods receipt and goods issue

#### **Additional documents**

- Brochure CPS®RFID Kanban
- Brochure Is your factory really lean?
- Website Keyword: Kanban systems

#### **Degree of automation**



#### Requirement type



#### **Required quantity**









Smart ordering. And little buttons.



#### **Description**

With iPUSH®, the order is triggered by pressing the button integrated into the RFID label on the bin or shelf. This enables automated re-ordering of products in packaging, cartons or on pallets.

#### **Uses and Advantages**

- Unwired, freely placeable
- Pressed = ordered
- Suitable for pallet kanban
- Speed and efficiency in ordering on site

#### **Special features**

- Flexible mounting options in production or assembly
- Applicable for items that do not fit into a Kanban bin (e.g. threaded rods)

#### **Additional documents**

- Brochure CPS® C-Parts. With certainty.
- Brochure CPS®RFID Kanban
- Website Keyword: Kanban systems

#### **Degree of automation**



#### Requirement type



#### **Required quantity**







## iBOX® iBOX®FLEX

The intelligent, flexible pallet box.





#### **Description**

At a separate storage location, the iBOX $^{\circ}$  is used to immediately transmit data via RFID of the C-Parts as soon as an empty bin is inserted. This enables process-integrated and simple data and order transmission. The capacity is up to 100 bins (size 3215). The iBOX $^{\circ}$ flex is the first pallet box that can operate two Kanban systems simultaneously in production. On the one hand, it includes an extendable drawer for all empty bins, which enables easy handling in production. On the other hand, the iBOX $^{\circ}$ flex has a separate side compartment for RFID tags from the kanban pallet.

#### **Uses and Advantages**

- High capacity for up to 100 bins (size 3215)
- One system for several supply concepts: Kanban bins (drawer front) and pallet Kanban (extendable side compartment for pallet cards)
- Process-integrated, simple data and order transmission
- Security of data transmission through a closed system

#### **Special features**

- Fast changeover without modification of existing processes
- Integration of the iBOX®flex into the Kanban rack

#### **Additional documents**

- Brochure CPS®RFID Kanban
- Brochure Is your factory really lean?
- Website Keyword: Kanban systems

#### **Degree of automation**



#### Requirement type



#### Required quantity











#### **Description**

Data is transfered immediately via the dropbox as soon as a RFID tag from the empty bin or a pallet card is positioned nearby the dropbox. The LED light indicates successful RFID reading. The automatic ordering of the C-Parts takes place by means of the RFID Kanban.

#### **Uses and Advantages**

- Low space requirement
- Freely selectable location
- Autonomous, independent and wireless system
- Secure and automatic ordering via RFID Kanban
- Suitable for pallet Kanban

#### **Special features**

- Flexible mounting options
- Optical signal during data acquisition

#### **Additional documents**

- Brochure CPS®RFID Kanban
- Brochure Is your factory really lean?
- Website Keyword: Kanban systems





#### Requirement type



#### **Required quantity**

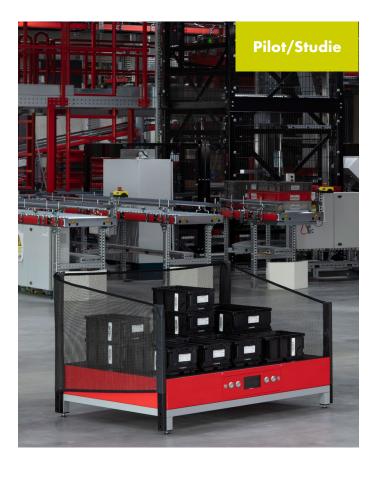






### **iPALLET**

Our RFID pallet box.



#### **Beschreibung**

Within the supply of production means, the portfolio of system solutions is extended by a study regarding the newly developed RFID pallet box. Compared to the RFID modules used so far, it is no closed system with flap for automatic order triggering, but an open system. The "pallet" continuously scans the environment and searches for new RFID tags to initiate the requirements accordingly. A display in combination with 4 LEDs will show the status of the Kanban supply in future. It is intended that the "pallet" will have a volume of 160 RFID tags which corresponds to a maximum of ten bin levels.

#### **Uses and Advantages**

- Permanent scanning of the environment for RFID tags
- Change of place possible at any time
- Status display through the use of the iDisplay

#### **Special features**

High volume of 160 RFID tags

#### **Additional documents**

- Brochure CPS®RFID Radio Frequency IDentification
- Website Keyword: Kanban systems



### **KANBAN BINS**

The right one for every application.





#### **Description**

Optimisation of storage space utilisation with innovative and patented Kanban bins, individually tailored to customer needs. Developed with the entire experience of over 20,000 industrial customers in Germany.

#### **Uses and Advantages**

- 6 different bin sizes from XS to XXL: W-KLT®2.0 Small load carriers in sizes (according to VDA standard)
   2115, 3215, 4115, 4315 W-KLT®2.0 XS/S Small bin W-KLT®2.0 XXL Large bin 6429
- Clear storage of C-Parts
- Easy access through two-stage front flap
- Optimized processes
- Optimum use of space

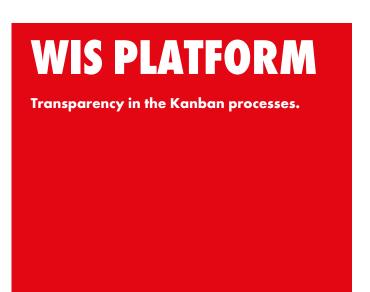
#### **Special features**

- Standardized with RFID tag
- Standardized sustainable bins with 30% biogranulate (sunflower seed shells)
- Mobility through bin clip

#### **Additional documents**

- Brochure W-KLT®2.0
- Brochure Is your factory really lean?
- Brochure iBin®
- Brochure iPLACER®
- Brochure Innovative Workplace Solutions
- Flyer Small-Sized-Bin
- Flyer Sustainable Bin
- Flyer W-KLT® 6429
- Website Keyword: Kanban bins





#### **Description**

Using the WIS platform, customers can access all logistics processes of their Kanban system at any time. Essential information such as filling status of bins, upcoming filling dates or the exact location of specific C-Parts in the course of production can be easily retrieved. Also order processes such as drop shipments via third-party suppliers are presented in a well-structured overview. A comprehensive track-and-trace function, entering relevant bin information automatically into the system, provides for full traceability: Where is the bin? When is it filled or delivered? What are the next steps? To clearly mark the bin's status and location, the new platform uses an intelligent color concept. Thanks to a multi-level authorization system, the WIS platform shows exactly the information and functions that are relevant for the respective user. The system can also define ordering and invoicing procedures and/or production-related data management for the according target group.

#### Review and analysis

To determine optimization potential regarding demand and consumption of C-Parts, the WIS platform offers comprehensive analysis functions. The software collects all bin and item data and generates descriptive diagrams on respective consumption volumes. In addition, the user can quickly retrieve the stock turnover of items. Thus, industrial customers can keep an eye on possible fluctuations in demand at any time and can react to unexpected bottlenecks ahead of time; for instance bins can be shipped to where they are needed from other storage locations. Furthermore, Würth Industrie Service offers the possibility to install an alert function in the system: If stock drops below a critical quantity, the platform will send a warning message or, upon request, even submit an order. To do so, it uses state-of-the-art RFID-Kanban systems. Transmitting data by radio frequency, the iSHELF®, an intelligent shelf, communicates the demand as soon as an empty bin is placed on the shelf. The WIS platform provides all information on all end devices. This ensures maximum supply security in the field of C-Parts.

- Status guery on screen and mobile device possible
- Highest possible transparency for processes and flow of goods
- Track-and-Trace function provides information about the filling and tracing of dates and items
- Comprehensive analysis functions (consumption quantity, turnover rate of certain items)
- Direct ordering for demand peaks possible



## WIS PLATFORM

Transparency in the Kanban processes.

#### **Special features**

- Multi-level authorization concept for employees
- 6 available language versions
- Complete overview of all plants and storage locations

#### **Additional documents**

- Brochure CPS® C-Parts. With certainty.
- Brochure Is your factory really lean?



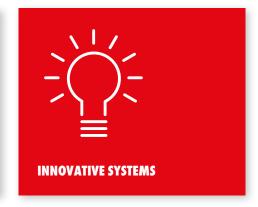


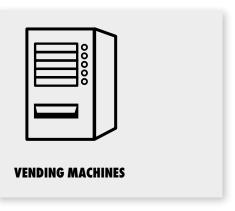


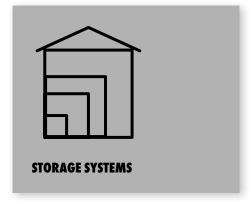


# IN THE RIGHT QUANTITY AND AT THE RIGHT TIME.





















### **INNOVATIVE SYSTEMS**

#### A brief overview

#### Systems network. Digital. Real. Transparent.

How we communicate, how we inform ourselves, how we buy - digitalisation is changing society, politics and the economy. With its innovative solutions, Würth Industrie Service has reached another milestone in C-Parts management and in industry 4.0.

#### Innovative systems – that stands for ...

- ... Revolution of materials management.
- ... C-Parts supply in real time.
- ... Maximum transparency in order processing.
- ... Automated re-ordering without scanning and manual entry.
- ... Simple commissioning without changing the processes or the shelving systems.
- ... An integrated data management.

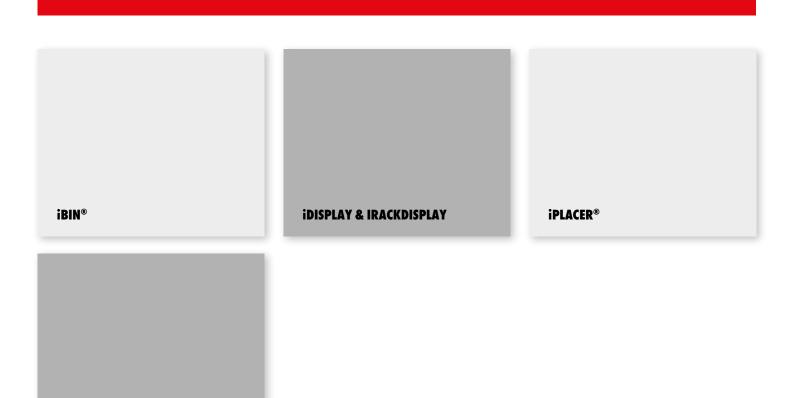
Würth Industrie Service uses the fantastic possibilities of digitalisation. Optimally tailored to the user.

Always one step ahead.
With the innovative solutions of Würth Industrie Service.



## **INNOVATIVE SYSTEMS**

**RFID KANBAN** 









#### **Description**

The iBin® is an optical ordering system. The quantity number and ordering information for the item can be obtained at bin level via the built-in camera and it is automatically transmitted to the merchandise management system. The module automatically takes a picture of the filling level several times a day and transmits the filling quantity contained in it. The system is self-sufficient, wireless and can be operated at the customer's site without any intervention in the network infrastructure. The consumption-related, individual and precise disposition enables an optimal warehouse use and a further stock reduction with reduced capital commitment.

#### **Uses and Advantages**

- Automated order triggering
- Autonomous and independent system
- Individual planning close to the point of use
- Overview of the bin contents
- Regular visual inspection by the counting function
- Less rack and floor space required

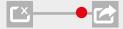
#### **Special features**

- Automatic inventory function
- Full transparency on consumption patterns through permanent inventory transfer
- Compatible with different bin sizes

#### **Additional documents**

- Brochure iBin®
- Brochure CPS® C-Parts. With Certainty.
- Brochure CPS®RFID Kanban
- Website Keyword: iBin®

#### **Degree of automation**



#### Requirement type



#### Required quantity







## iDISPLAY & iRACKDISPLAY

Systems network.

Digital, real, transparent.





#### **Description**

The multifunctional and digital rack label iDISPLAY not only replaces a label, but also offers a variety of interaction possibilities directly at the workstation. The iDISPLAY recognizes its position and transmits it to the ERP system of Würth Industrie Service. Each subsequent change of position as well as the removal of an iDISPLAY are detected and reported back to the linked app management CPS®MOBILE. By constantly comparing the position data, the shelf planning is automatically updated and graphically displayed.

#### **Uses and Advantages**

- Constant comparison of the position data
- Comprehensive rack planning and management
- Transparent exchange of data and information about location and status of bins
- Transparency in the flow of goods
- Use of Pick-by-light, Put-by-light

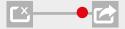
#### **Special features**

- Automated creation of a virtual shelf
- Item blocking function for the security in case of an error
- Individual adjustment of the display by the iDISPLAY designer

#### **Additional documents**

- Brochure CPS® C-Parts. With Certainty.
- Brochure CPS®RFID Kanban
- Website Keyword: iDISPLAY

#### **Degree of automation**



#### Requirement type



#### Required quantity









Right where you need it.





#### **Description**

The iPLACER® connects the workstation with the production supply and promises maximum flexibility. The handy, battery operated module with integrated reader and transmitter unit can be installed anywhere and provides more transparency in the material flow through an automated reordering of C-Parts. Empty bins are captured by RFID technology and orders are placed where the items are consumed. This results in various application possibilities for the iPLACER®: as an ordering system directly at the workstation, as a autonomos, independent ordering system at any point of use or as replenishment control in the flow rack.

#### **Uses and Advantages**

- Fully automatic demand notification and ordering
- Flexible options for mounting-in production at the worstation or as part of assembly process
- Use as ordering and inventory management system
- Autonomous, independent and wireless system
- Transparency in the flow of goods
- Early identification of demand fluctuations

#### **Special features**

- Simple mapping of intralogistic processes
- Wireless system
- Can be used regardless of bin size

#### **Additional documents**

- Brochure iPLACER®
- Brochure CPS® RFID
- Brochure Is your factory really lean?
- Website Keyword: Kanban systems

#### **Degree of automation**



#### Requirement type



#### Required quantity







## RFID KANBAN

For maximum security of supply.





#### **Description**

Lean inventory management, automatic ordering and early identification of demand fluctuations. Using RFID Kanban, the item and bin data are transmitted directly from the customer's production facility to the central warehouse of Würth Industrie Service.

#### **Uses and Advantages**

- Automated reordering
- Early detection of demand fluctuations
- Precise control of the flow of goods
- Information exchange in real time
- Lean warehouse and inventory management

#### Special features

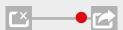
- No additional space required
- No manual entry required

#### **Additional documents**

- Brochure CPS®RFID
- Brochure CPS® C-Parts. With Certainty.
- Brochure Is your factory really lean?
- Website Keyword: Kanban systems

Further information on this topic RFID-Kanban can be found from page 10 onwards.

#### **Degree of automation**



#### Requirement type



#### **Required quantity**







## SMART WORKPLACE - HOW WILL THE ASSEMBLY WORKSTATION BE IN THE FUTURE?

#### Physical and digital logistics and system solutions – Smart Workplace

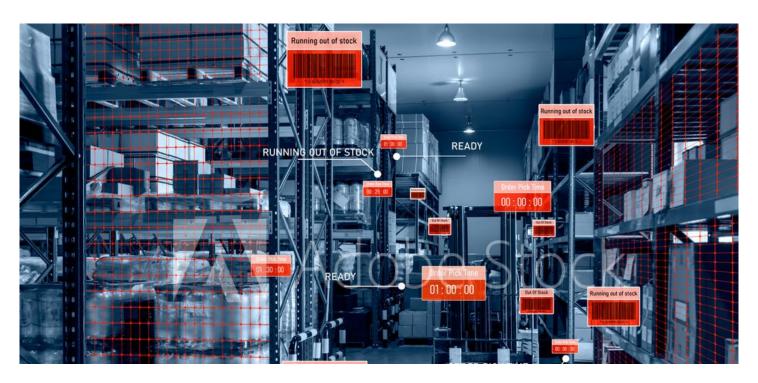
Assemblers and operators are exposed to number of challenges in the industry: unforeseeable events, increasing volatilities and shortage of resources, increasing requirements of flexibility and productivity. How will the nature of work be in the future? How will the assembly workstation of tomorrow look like? Would it not be better to rely on fully-automated systems, so that everything is there exactly when and where it is needed? Systems, which are connected, work hand-in-hand with people and are integrated with each other? Systems, which can react within seconds – even to unforeseeable events?

The answers to these questions lie in the physical and digital logistics and system solutions for production materials and operating materials of Würth Industrie Service GmbH & Co. KG. On one hand, the target is to design lean and simple workflows and processes in the supply chain to the extent possible. On the other hand, the focus is on man and his individual requirements: an ergonomic and precisely tailored work environment, support and simplification of his tasks as well as an intelligent connection of the processes between man and machine.

#### Smart Workplace - that stands for ...

- ... Automation and digitalisation of processes and workflows.
- ... Increase in productivity along the value-added chain.
- ... Customised and individual adaptation to the workplaces.
- ... Intelligent connection of system solutions .

#### Designing the workplace as per the 5S rules for maximum simplification of workflows.





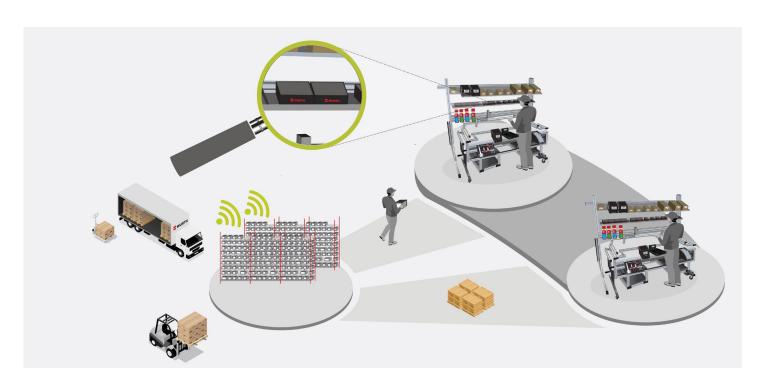
# CENTRALISED RFID SYSTEMS

An efficient process design is guaranteed by very small bins.

#### **Description**

The material procurement can be customised exactly to the requirements and consumption of manufacturing customers through digital supply concepts - without interference or human intervention! Manual workplaces are made flexible by deploying very small bins and RFID Kanban systems for decentralised supply at individual assembly station. An efficient process design is guaranteed by very small bins W-KLT®2.0 XS and S of Würth Industrie Service. The very small bins following the VDA norm are integrated into the mother bin W-KLT®2.0 for shipping to the customer. They can be used for all bin sizes in a seamless and modular manner according to the modular principle in the existing bins in RFID Kanban. By equipping the centralised storage location with RFID Kanban, you can completely automate your procurement and reordering process, manage inventories in a lean manner and identify the demand fluctuations early, for example, with intelligent shelf iSHELF® or small pallet box iBOX®.

- Maximum availability of your C-Parts at storage location and on the line
- Transparent purchasing processes and reduced procurement costs
- Low capital commitment
- More flexibility in your value-added chain
- Reduction of manual error sources
- Carefully targeted control of flow of goods





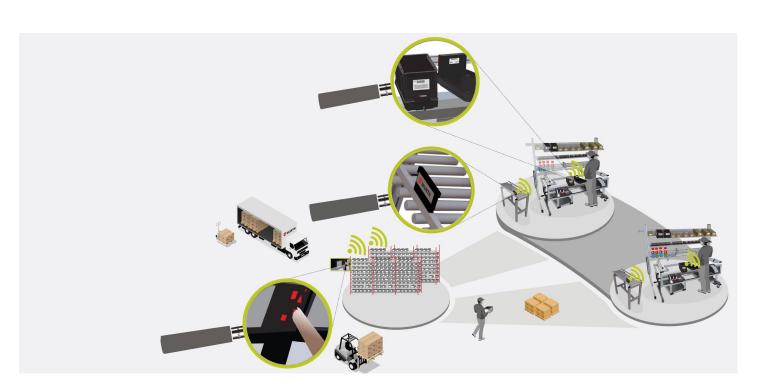
## DECENTRALISED WORKPLACE SUPPLY

The automation and linking of centralised storage and decentralised workplaces.

#### **Description**

The automation and linking of centralised storage and decentralised workplaces can be merged further by implementing RFID technology - for example, with a module that is only as big as a smartphone, an innovative battery-operated iPLACER® of Würth Industrie Service. iPLACER® can be directly installed at the workplace. An order is triggered automatically, when the empty bin passes through the RFID tags, which are normally affixed to all the Würth small load carriers W-KLT® 2.0 or very small load carriers W-KLT® 2.0 S. Another innovative solution with similar objective is the scale system iScale. iSCALE is a sensor-controlled scale, which is directly connected with the Kanban bin and is independently movable. On the basis of the weight, the system notifies the requirements of production materials and other small parts digitally - from the customer's point of use directly to the ERP system of Würth Industrie Service and ensures an exact automated replenishment.

- Maximum availability of your C-Parts directly at the place of use
- Transparent purchasing processes and reduced procurement costs
- Increase in productivity by eliminating routes
- More flexibility in your value-added chain
- · Early identification of fluctuations in demand
- Reduction of manual error sources
- Carefully targeted control of flow of goods





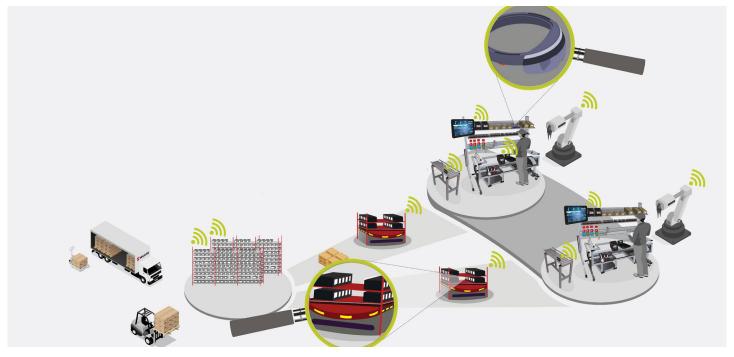
## INTELLIGENT SUPPLY

Intelligente Vernetzung von Mensch und Maschine.

#### **Description**

It is always worthwhile to look beyond at the research for future developments. Since 2013, Würth Industrie Service has been closely working together with Fraunhofer Institute for Material Flow and Logistics (IML) and developing solutions for material procurement of tomorrow. The company is able to implement technology trends for an efficient C-Parts management in a timely and precise manner by actively working together. An example here is the pilot project on iDISPLAY. This digital rack label contains all the information such as bin type, items, customer material number, storage location, quantity and batch. Using the pick-by-light function, the items can be easily and quickly searched onsite. In addition to iDISPLAY as a practical system for orientation within storage management, other assistance systems can be used, for example to help the operator during assembly. Assembly assistance systems can control the operator's work steps and even guide him - especially in the case of highly varied assembly with many different C-Parts. In addition, autonomous vehicles such as shuttles can be used, which take over the intralogistic supply between the central Kanban storage location and the decentralised workstation completely independently and serve the operator with exactly the parts that are actually needed.

- Increase in productivity by reducing non-value-adding activities
- Focus on core activities
- Holistic data management
- Intelligent connection of man and machine
- Self-triggering, intelligent systems
- Use of autonomous vehicles for intralogistics









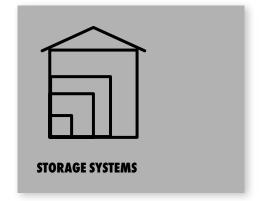
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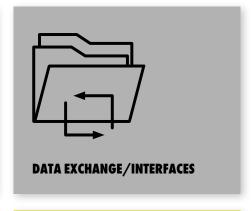




















### **VENDING MACHINES**

#### A brief overview

#### Significant reduction of procurement costs

Consumables such as personal protective equipment, tools or machines with irregular, unplannable requirements play an important role in the company's cost and efficiency balance sheet. It is not the cost of material that has an impact, but rather the procurement or lack of auxiliary and operating material, which cost a lot of time and money. With its automated solutions, Würth Industrie Service offers an integrated concept for MRO and indirect materials – from supply, storage and stocking to fully automatic replenishment.

#### Automatic Systems – that stands for ...

- ... Automated ordering processes for indirect material.
- ... Optimized warehouse and inventory management.
- ... Decentralized material supply.
- ... 24 hours availability of goods.
- ... Streamlining of processes.

With vending machines Würth Industrie Service helps its customers to achieve more productive material management. Thanks to their modular structure, these systems offer maximum flexibility for automated, transparent and time-independent stock availability.

Simplified! Standardized! Cost-optimized! Maximum safety in materials management. With the vending machines from Würth Industrie Service.



## **VENDING MACHINES**

ORSY®MAT FP	ORSY®MAT RT	ORSY®MAT HX
ORSY®MAT WGT	ORSY®MAT CHE	ORSY®MAT CBL
ORSY®PUSH	REFILLO®MAT	



### **ORSY®MAT FP**

The vending machine for commodities and consumables.



#### **Description**

The ORSY® mat FP (FP = Flap) enables the storage and provision of goods and consumables as required, individually adapted to the respective work situation. Together with the customer, an individual and modular automated system tailored to the work situation is created. The innovative control system communicates directly with the ERP system of Würth Industrie Service and thus permits transparent inventory management and replenishment of indirect materials.

#### **Uses and Advantages**

- 24 hour stock availability due to decentralised location of operating materials in the production process
- Automatic order entry
- Overview and transparency of consumption and costs
- Modular design
- Secured access with RFID card, PIN code or barcode identification
- Full logistics service possible
- Technical support via remote maintenance
- Access-restricted storage of high-value items

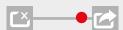
#### **Special features**

- Available in ten variants with up to 72 flaps
- Well suited for the handling of loaned goods
- Issue of complete packaging units
- Quickly find the right items

#### **Additional documents**

- Brochure ORSY®mat
- Brochure Is your factory really lean?
- Website Keyword: Vending machine

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **ORSY®MATRT**

Rotation-based vending machine.



#### **Description**

The automatic rotation machine (RT = Rotation) stands out due to its flexibility in the variety of items, combined with maximum security due to the individual authorization concept. The system is suitable for storing, stocking and dispensing indirect materials, measuring and testing equipment, as well as other high-quality items.

#### **Uses and Advantages**

- 24 hour stock availability due to decentralised location of materials in the production process
- Automatic order entry
- Overview and transparency of consumption and costs
- Modular design
- Secured access with RFID card, PIN code or barcode identification
- Full logistics service possible
- Technical support via remote maintenance
- Access-restricted storage of high value items

#### **Special features**

- Individual composition according to assortment variety, item size and quantity requirements
- Configurable for 4 to 48 compartments per level
- 10 levels are available, up to 384 different items
- Output of complete packaging units or per piece

#### **Additional documents**

- Brochure ORSY®mat
- Brochure Is your factory really lean?
- Website Keyword: Vending machine

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **ORSY®MAT HX**

The helix-based vending machine.



#### **Description**

The optimal solution for the individual removal of auxiliary and operating materials such as gloves and screwdrivers, spare parts, rechargeable batteries, construction materials, protektive equipment and much more. The automatic spiral machines (HX = helix) are optimally adapted to the requirements in terms of assortment variety, item size and quantity and can be seamlessly integrated into the material supply.

#### **Uses and Advantages**

- 24 hour stock availability due to decentralised location of operating materials in the production process
- Automatic order entry
- Overview and transparency of consumption and costs
- Modular design
- Secured access with RFID card, PIN code or barcode identification
- Full logistics service possible
- Technical support via remote maintenance
- Access-restricted storage of high-value items

#### **Special features**

- Up to 48 products and 1,000 units in one machine
- High item variety due to flexible number of spirals and spiral sizes
- Quickly find items through "display" effect

#### **Additional documents**

- Brochure ORSY®mat
- Brochure Is your factory really lean?
- Website Keyword: Vending machine

#### **Degree of automation**



#### Requirement type



#### Required quantity











#### **Description**

The ORSY® mat WGT recognises article withdrawals on the basis of integrated load cells, which store the weight of the deposited article. This technology allows you to remove individual articles independently of the packaging unit. In addition, it is possible to remove several articles from the machine at the same time - as is the case with an ordinary material cabinet. As soon as the machine is closed after removal, it automatically counts the article stock. This gives you a full stock overview at all times. Due to load cells in different sizes, the system is suitable for the management of almost all auxiliary and operating materials. Even large-volume items such as protective suits, leather gloves or large grinding wheels can be optimally stored in the ORSY® mat WGT.

#### **Uses and Advantages**

- 24 hour stock availability due to decentralised location of operating materials in the production process
- Automatic order entry
- Overview and transparency of consumption and costs
- Access-restricted storage of high-value items

#### Special features

- One machine offers space for a maximum of 80 different articles.
- If several vending machines with weighing systems are used, they are networked with each other

#### **Additional documents**

- Brochure ORSY®mat
- Brochure Is your factory really lean?
- Website Keyword: Vending machine

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **ORSY®MAT CHE**

The automatically hazardous substance system.



#### **Description**

The hazardous materials system ORSY®mat CHE is used for the safe, legally compliant and clear storage of hazardous materials. Like the other ORSY®mat models, the system also recognizes article withdrawals and automatically triggers reorders if necessary. This means you can also rely on a secure supply of chemical-technical products.

#### **Uses and Advantages**

- 24 hour stock availability due to decentralised location of operating materials in the production process
- Automatic order entry
- Overview and transparency of consumption and costs
- Access-restricted storage of high-value items

#### **Special features**

- The ORSY®mat CHE is available in two sizes and is suitable for both cans and canisters
- The number of levels is variable so that the storage space is optimally used

#### **Additional documents**

- Brochure ORSY®mat
- Brochure Is your factory really lean?
- Website Keyword: Vending machine

#### **Degree of automation**



#### Requirement type



#### Required quantity







## ORSY®MAT CBL

The vending machine for cables.



#### **Description**

The current study of the cable dispenser is about an automated supply concept for the specific product group of cables, wires, strands and installation material. Like all ORSY® mat models, the ORSY® mat CBL handles the entire procurement and logistics process – from delivery, storage and stockpiling to fully automated replenishment.

#### **Uses and Advantages**

- 24 hour stock availability due to decentralised location of operating materials in the production process
- Automatic order entry
- Overview and transparency of consumption and costs
- Access-restricted storage of high-value items

#### **Special features**

- The automatic cable dispenser is suitable for dispensing products on reels and in cardboard boxes with millimetre accuracy
- The product output is possible with a diameter of 3mm to 16mm and a width of 100mm to 500mm

#### **Additional documents**

- Brochure ORSY®mat
- Brochure Is your factory really lean?
- Website Keyword: Vending machine

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **ORSY®PUSH**

Material storage.





#### **Description**

Some consumables you don't need all the time. But if you do, then immediately. That's exactly what ORSY®Push is for, the first material rack and hazardous materials warehouse that orders on its own. The perfect complement to existing solutions in materials management and maintenance. Fast change of the product range and the packaging types, use as bin and box system, as warehouse for chemical-technical products or also as roll rack: ORSY®Push means maximum flexibility and efficient use of space.

#### **Uses and Advantages**

- Structured and clearly arranged storage of consumables with medium demand
- Reduction of procurement and storage costs
- Automated data transfer and reordering also in the material store
- Elimination of manual orders
- Fast removal of the required items

#### **Special features**

- Maximum safety through measurement sensors
- Re-storage of products that were not needed

#### **Additional documents**

- Brochure ORSY<sup>®</sup> Storage management
- Brochure ORSY®mat
- Website Keyword: Automated material storage

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **REFILLO®MAT**

Reusable system:
Refill instead of throwing away.





#### **Description**

Are different aerosol cans used in the customer's production and is a system for the automated refilling of spray cans required?

Wanted, found: REFILLO® mat, the safe and economical system for automatic refilling of aerosol cans with active ingredients and compressed air. The motto is: refill automatically, save automatically.

#### **Uses and Advantages**

- Safe storage of hazardous materials
- Economical reusable system
- Automatic refilling of spray cans
- Closed system without vapour leakage
- Cost reduction through acceptance of large containers
- Elimination of disposal costs

#### **Special feature**

Use of compressed air as a propellant agent

#### Additional documents

Website Keyword: Returnable system

#### **Degree of automation**



#### Requirement type



#### Required quantity







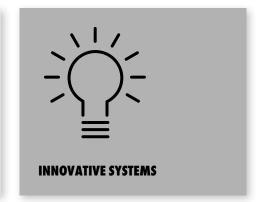


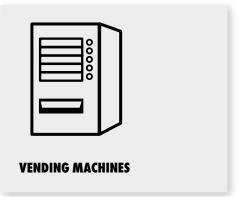


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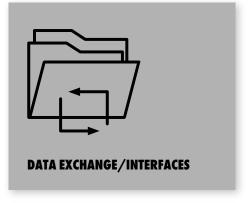
**RFID KANBAN** 

















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### **STORAGE SYSTEMS**

#### A brief overview

#### Storage efficiently solved!

Whether protective equipment, tools or machines: The procurement of such consumables is difficult to plan and often requires considerable effort. In addition to full-service solutions for production materials, Würth Industrie Service also offers the storage systems, the optimal solution for unplannable and irregular requirements. Thanks to its modular structure, these systems offers the flexibility for automated, clear and direct order processing of requirements. We also ensure ergonomic design and seamless supply at the workstation. Whether hanging profile, bin clip, hard foam insert or even workbenches, assembly stations and work chairs – we ensure more safety, and a higher degree of organisation.

#### Storage Systems - that stands for ...

- ... Modular shelf management for space optimization
- ... Maximum process reliability through transparent stock overview and control
- ... Cost reduction in procurement
- ... Optimal use of existing storage space
- ... Scanner-supported, automatic ordering systems such as the Würth Scanner

The storage systems combine efficient, automated procurement with maximum flexibility in the stocking and dispensing of auxiliary and operating materials.

The solution for consumer goods and consumables with irregular requirements.



# **STORAGE SYSTEMS**

ORSY <sup>®</sup> PUSH	ORSY <sup>®</sup> MOBIL	ORSY®RACK
ORSY®FLEX	ORSY®BULL	ORSY®ONLINE
REFILLO®MAT	HAZARDOUS MATERIALS CABINETS	WORKPLACE SOLUTIONS



## **ORSY®PUSH**

Material storage.





#### **Description**

Some consumables you don't need all the time. But if you do, then immediately. That's exactly what ORSY®Push is for, the first material rack and hazardous materials warehouse that orders on its own. The perfect complement to existing solutions in materials management and maintenance. Fast change of the product range and the packaging types, use as bin and box system, as warehouse for chemical-technical products or also as roll rack: ORSY®Push means maximum flexibility and efficient use of space.

#### **Uses and Advantages**

- Structured and clearly arranged storage of consumables goods with medium demand
- Reduction of procurement and storage costs
- Automated data transfer and reordering also in the material store
- Elimination of manual orders
- Fast removal of the required items

#### Prerequisites at the customer

- Maximum safety through measurement sensors
- Re-storage of products that were not needed

#### **Additional documents**

- Brochure ORSY® Storage management
- Brochure ORSY®mat
- Website Keyword: Automated material storage

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **ORSY®MOBIL**

Brings functionality to trips.





#### **Description**

You do not want to do without functionality, efficiency and safety when you're on the move? ORSY® mobil was developed for this purpose: a work environment tailored to the needs, equipped with all the tools and materials needed by the customer on site.

#### **Uses and Advantages**

- Mobile access to all materials on the move
- Vehicle equipment at the highest level
- Top service including professional planning andwarranty

#### **Special feature**

 Individual equipment as required: high-quality machines, tools and all necessary materials

#### **Additional documents**

- Brochure Innovative Workplace Solutions
- Brochure Is your factory really lean?
- Website Keyword: Vehicle equipment

#### **Degree of automation**



#### Requirement type



#### Required quantity







## ORSY®RACK

Material storage.



#### **Description**

Developed in close cooperation with the customers of Würth Industrie Service, this modular system of individually assembled shelf components meets even special requirements and can be optimally adapted to the required C-Parts. With the Würth Scanner, individual storage locations marked with a barcode are simply recorded and the reordering via the online shop is triggered. Maximum process reliability in the storage.

#### **Uses and Advantages**

- Transparent inventory overview and control at any time
- Orderly and clean material storage
- Simple processing without loading existing internal structures
- Cost reduction in procurement
- Optimal use of existing storage space
- Quick access

#### **Special feature**

 Can be used as an automatic ordering system through the use of the Würth Scanner

#### **Additional documents**

- Brochure ORSY® Storage management
- Website Keyword: Shelving system

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **ORSY®FLEX**

Modular construction.



#### **Description**

The optimised rack ensures order with system. The innovative shelving system with the modular design provides flexible design options. For example, each floor can be used individually. The shelving system is also available with many accessory items: side panels, rear wall, three different door heights, various shelves, dividers, four drawer variants, modules for cartridges, modules for threaded rods, REFILLOmat® modules, modules for canisters and suitcase pull-out.

#### **Uses and Advantages**

- Four different rack depths
- Simple assembly
- Modular construction
- Ideal visual extension with our ORSY®mat systems
- Thanks to ground clearance now movable

#### **Special feature**

- There are four different rack depths
- The depths 350 mm, 680 mm and 830 mm replace the original ORSY® W®KLT rack
- The 500 mm depth is used for the variations of the ORSY®1 rack series

#### **Additional documents**

- Brochure ORSY® Storage management
- Flyer ORSY®Flex Regale
- · Website Keyword: Shelving system

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **ORSY®BULL**

The great box.





#### **Description**

Whether for stationary use in the workshop, warehouse or at the workplace, as system equipment for service and delivery vehicles or as mobile workshop on construction sites: ORSY®BULL is the mobile system box for almost any application. Massive use for workshop, construction site, warehouse and vehicle.

#### **Uses and Advantages**

- Extremely stable, flexible and mobile
- Simple input and output options
- Wide range of accessories

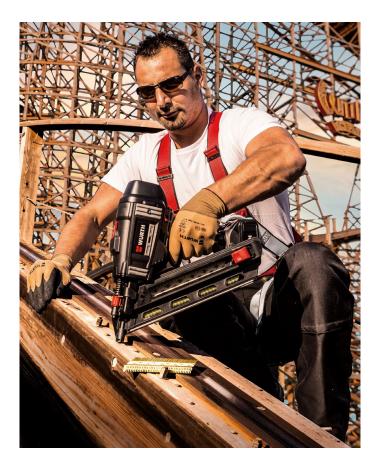
#### **Special feature**

 Available in four versions: Top loader, front loader, drawer box, combination box



## **ORSY®ONLINE**

Fast management for the machinery and equipment fleet.



#### **Description**

With ORSY® online fleet management, we offer our customers the opportunity to lease equipment and machines from a portfolio of more than 150 products and thus keep their own machinery up to date at all times. This relieves the customer of the burden of managing his equipment and helps to keep track of all the machines used. Annoying enquiries, checking and paying for cost estimates and invoices for repairs are a thing of the past.

#### **Uses and Advantages**

- No administrative expense
- No unexpected costs
- No unnecessary downtimes

#### **Special feature**

Always the latest and optimally maintained devices

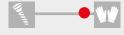
#### Additional documents

Website Keyword: Resource Management

#### **Degree of automation**



#### Requirement type



#### Required quantity







## **REFILLO®MAT**

Automated refilling of spray cans.





#### **Description**

Are different aerosol cans used in the customer's production and is a system for the automated refilling of spray cans required? Wanted, found: REFILLO®mat, the safe and economical system for automatic refilling of aerosol cans with active ingredients and compressed air. The motto is: refill automatically, save automatically.

#### **Uses and Advantages**

- Safe storage of hazardous materials
- Economical reusable system
- Automatic refilling of spray cans
- Closed system without vapour leakage
- Cost reduction through acceptance of large containers
- Elimination of disposal costs

#### **Special feature**

Use of compressed air as a propellant agent

#### Additional documents

Website Keyword: Returnable system

#### **Degree of automation**



#### Requirement type



#### Required quantity







## HAZARDOUS MATERIAL CABINETS

For legally compliant storage.



#### **Description**

The hazardous material cabinets are used for the correct positioning of chemical products. Various system solutions are offered in the CPS®CHEMICAL area: Whether safety cabinets, material cabinets or environmental/chemical cabinets, everything that is required for legally compliant storage is available.

#### **Uses and Advantages**

- Legally compliant storage in the work area
- Safety cabinet with classic or smooth-running
- One-hand wing door technology
- Safety cabinets are available in different types, e.g. for flammable liquids, for mixed storage of acids, alkalis and flammable hazardous substances and much more.

#### **Special feature**

 Possibility of integrating collecting trays which are welded liquid-tight in accordance with the Water Resources Act (WHG) – in accordance with the Steel Tray Directive (Stawa-R)

#### **Additional documents**

Website Keyword: Hazardous materials



# WORKPLACE SOLUTIONS

Flexible design of your workstation.







#### **Workplaces**

Flexibility and ergonomics are the two main aspects for modern workplaces. The range is diverse and includes assembly and packing stations as well as mobile supply trolleys. Comprehensive advice and a tailor-made workstation concept are essential: from the drawing to the prototype to the series and beyond.

#### **Ergonomic work chairs**

Work chairs used in production must be able to withstand special requirements, which may vary depending on the working environment. A Würth work chair makes sitting and getting up comfortable and restricts freedom of movement as little as possible.

#### **Anti-fatigue mats**

Anti-fatigue mats stimulate more movement at standing work-places. The feet adapt almost imperceptibly to the springy mat surface. These gentle movements promote circulation. The adaptation to the flexible mat ensures that the muscles in the feet and calves contract. Similar to walking and running, blood is pumped from the veins into the heart.

#### **Additional documents**

- Brochure Innovative Workplace Solutions
- Flyer WAPS®
- Website Keyword: Workplace systems

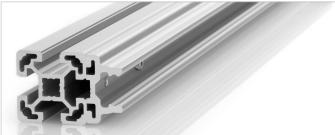


# WORKPLACE SOLUTIONS

Flexible design of our workstation.







#### **Description**

The demands on the working environment are increasing. So is the need to make all work equipment available exactly where it is needed: on the shelf, at the storage location or directly at the production line. Thanks to the perfectly coordinated solutions, storage, work and assembly locations as well as vehicles can be integrated flexibly, ergonomically and individually into the value chain.

#### Flexible attachment system CLIP-O-FLEX®

The system adapts to every requirement with its rail profiles. It can be suspended at various angles of inclination and is easy to move.

- Many handling and combination possibilities
- Optimum use of working space
- Fast retooling

#### Rigid foam insert OPT-I-STORE®

Individually designed rigid foam inserts offer even more order in the workplace, either individually or in combination with factory equipment.

- Quick access to tools and small parts
- Safe transport, protected storage

#### Würth aluminium profile system WAPS®

The Würth aluminium profile system supports the flexible, ergonomic and individual design of storage, work and assembly areas as well as vehicles.

- Compatible to Bosch (SB) and Item (SI)
- More than 150 profile variants and more than 500 connector variants

#### **Additional documents**

- Brochure Innovative Workplace Solutions
- Flyer WAPS<sup>®</sup>
- Website Keyword: Workplace systems



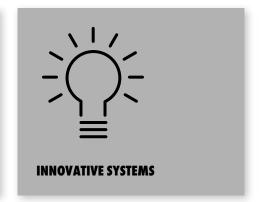


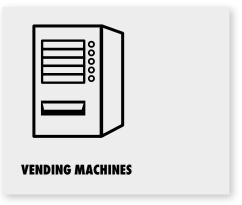


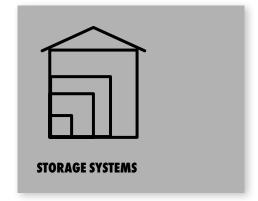
# IN THE RIGHT QUANTITY AND AT THE RIGHT TIME.























## **E-BUSINESS**

#### A brief overview

#### Digitization - A Gift from Heaven

Würth – that is the cooperation and work of people to person. But of course Würth Industrie Service also offers a wide range of useful and practical services online. Everything that makes the work of our customers easier. The coordination of several manual ordering processes, a large number of suppliers, countless deliveries and a large number of invoicing processes cost a lot of time and money, which could also be used for core processes and activities. With E2E – E-Business to Efficiency, customers get support to achieve greater efficiency in purchasing through electronic solutions.

#### E2E - E-Business to Efficiency - that stands for ...

- ... All electronic solutions from Würth Industrie Service for fast, independent ordering.
- ... Maximum ease and efficiency when purchasing products.
- ... The networking of services: stationary mobile, digital, personal.
- ... Fully automated business processes.

The advantages of online shopping are not limited to private use.

Electronic solutions for maximum efficiency in industry.



# **E-BUSINESS**

WÜRTH ONLINE SHOP

WÜRTH SCANNER

WÜRTH APP

WÜRTH SUBSCRIPTION

WÜRTH ONLINE SERVICES

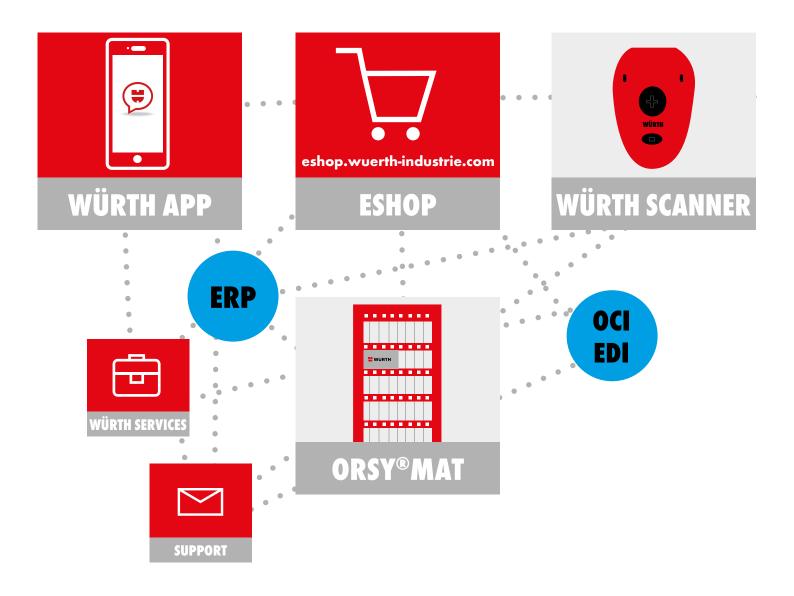




#### **Description**

In recent years, the globalization of customer structures and processes has played an increasingly important role in companies. This is precisely why Würth Industrie Service offers integrated, electronic procurement solutions for the automated transfer and exchange of data, independent of time zone and country. All E-Business solutions can be put together individually for the production and MRO needs of the customers.

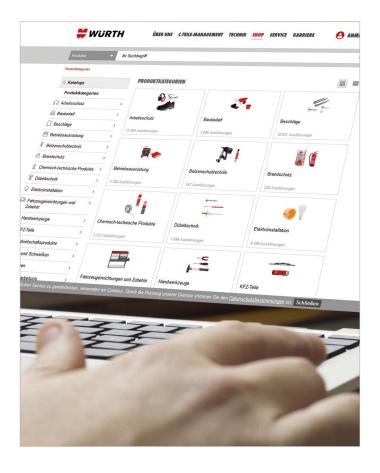
#### Connected, electronic solutions from Würth Industrie Service at a glance:





# WÜRTH ONLINE SHOP

We are only one click away.



#### **Description**

At the Würth Online Shop customers will find the online shop of Würth Industrie Service – the number one ordering medium for production and operating materials.

#### **Uses and Advantages**

- Order: Via the full text search, scanner entry, product hierarchy or screen selection
- Inform: More than 150,000 products and many services
- 24 hours a day, 7 days a week
- Benefit: Inventory function, cost center assignment, order overview and tracking, data sheets (SDB, TDB), approval process, browsing catalogue, inventory check, OCI integration and much more

#### **Special features**

- Würth App (information on page 61)
- Click & Collect: Order in one minute, pick up at the Würth branch office in one hour!

#### **Additional documents**

- Brochure E2E E-Business to Efficiency
- Website Keyword: E-Procurement
- https://eshop.wuerth-industrie.com

#### **Degree of automation**



#### Requirement type



#### Required quantity







# WÜRTH SCANNER

Always a hit!



#### **Description**

Easy, safe and fast ordering: Use the Würth Scanner to capture the barcodes whenever and wherever you like. Simply scan the item information from the rack, from the ORSY® packaging or read the barcode in the catalogue and you have all the required order details available online, for as long as the customer wishes.

#### **Uses and Advantages**

- Transfer of the collected information to the shopping cart in the Würth Online Shop for checking and/or supplementing purposes
- Simple assignment of cost centers, order numbers part numbers and delivery addresses
- Order transfer to the system of Würth Industrie Service at the push of a button

#### **Special feature**

Individual barcode catalogs

#### **Additional documents**

- Brochure E2E E-Business to Efficiency
- Website Keyword: E-Procurement

#### **Degree of automation**



#### Requirement type



#### Required quantity







# **WÜRTH APP**

The eShop to go.





#### **Description**

Absolutely mobile: The Würth App. The optimal solution for service technicians or in case of urgent needs. Via the product search or the barcode scanner function of the app, the customer has access to the complete product range from anywhere. A smartphone and access are sufficient for an optimal ordering process.

#### **Uses and Advantages**

- Access to the complete range of over 150,000
- Products on the road
- Click & Collect order in one minute, pick up at the Würth branch office in one hour

#### **Special feature**

Practical Barcode-Scanner-Function

#### **Additional documents**

- Brochure E2E E-Business to Efficiency
- Website Keyword: E-Procurement

#### **Degree of automation**



#### Requirement type



#### **Required quantity**







# WÜRTH SUBSCRIPTION

Regular delivery. Directly into the house.





#### **Description**

Do you have a regular and recurring need for products? Then the Würth subscription is just the thing for you. Create once and then simply subscribe to Würth products, get them delivered regularly and reduce storage costs.

#### **Uses and Advantages**

- Exclusively in the Würth Online Shop
- Regular delivery
- Selection of over 150,000 products
- Can be changed at any time
- Free of charge and without period of notice

#### **Special feature**

Individual delivery rhythm

#### Additional documents

- Brochure E2E E-Business to Efficiency
- Website Keyword: E-Procurement

#### **Degree of automation**



#### Requirement type



#### **Required quantity**







# WÜRTH ONLINE SERVICES

What else can we do for you?



#### **Description**

The Würth Online Shop offers a wide range of services to make your daily work easier. Save time, reduce effort and profit from the extensive know-how of experts. Around 100 online services are available in the online shop.

#### **Uses and Advantages**

- Over 100 Online Services
- Practical, continuous access

#### Special features/Excerpt from the services

- PPE Manager (individual glove, skin protection, eye protection, respiratory protection, hearing protection and PPE overall plans)
- Isi!! Hazardous materials management (safety data sheets, risk assessment, operating instructions and hazardous materials index)
- ORSY®fleet (machine leasing and fleet management for the equipment fleet)

#### **Additional documents**

- Brochure E2E E-Business to Efficiency
- Website Keyword: E-Procurement



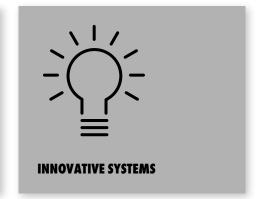




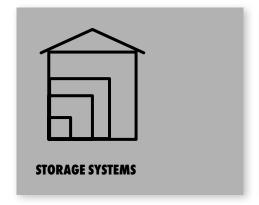
# IN THE RIGHT QUANTITY AND AT THE RIGHT TIME.



**RFID KANBAN** 



















## DATA EXCHANGE/INTERFACES

#### A brief overview

#### Electronic data exchange - Integrated. Automated. Connected.

We not only make sure that the C-Parts are at the right place at the right time – but also that the corresponding data and information are available. These are reached everywhere. Maximum transparency with minimum effort. Electronic data exchange ensures that the customer's ERP system can be linked to Würth's ERP system – e.g. or via EDI.

This ensures that the customer always has an overview, the familiar environment and complete transparency. No matter whether order, delivery or invoice process. This makes processes even leaner!

#### Electronic data exchange - that stands for...

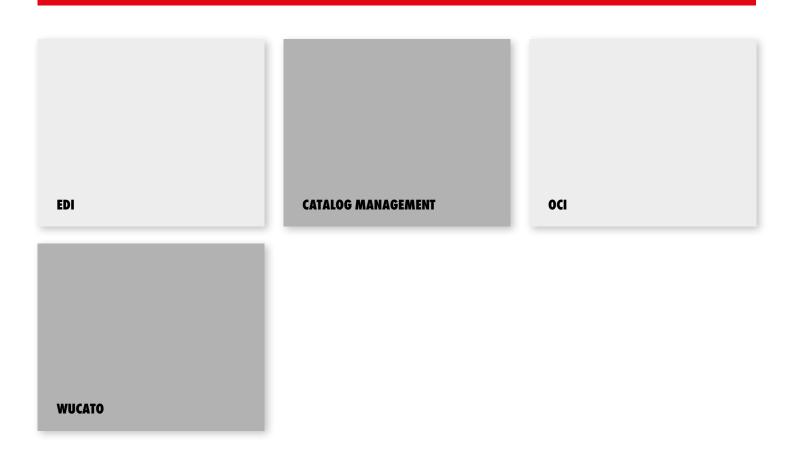
- ... Communication between different systems
- ... Streamlining of processes
- ... Maximum supplier bundling
- ... An integrated data management

Not only do electronic solutions create more efficiency, but the networking of all solutions ensures maximum process transparency and maximum savings in time and costs.

Electronic connection for more efficiency.



# DATA EXCHANGE/INTERFACES



#### Data exchange/Interfaces



### EDI

Electronic data interchange. Integrated, Automated. Networked.



#### **Description**

Electronic data interchange stands for the communication between the customer's systems and those of Würth Industrie Service. EDI is very easy to understand. EDI replaces paper documents with electronic documents. The data is transmitted in a defined standard format. Both sides, sender and receiver, can read the document.

#### **Uses and Advantages**

- Standardized messages in various translation forms like EDI- FACT, VDA, XML, SAP/IDOC as well as products like OFTP, ISDN/TCP, FTP, GXS (GEIS), X.400, HTTP/S, SFTP, AS2, SMTP
- Orders, order confirmations, delivery notes, invoices
- Fast data flows
- Avoidance of input errors
- Low handling expenditure

#### **Special feature**

Individual connection solutions possible

#### **Additional documents**

- Brochure E2E E-Business to Efficiency
- Website Keyword: Data exchange

#### **Degree of automation**



#### Requirement type



#### Required quantity







## CATALOG MANAGEMENT

We support you!



#### **Description**

Does the customer already use catalog management software or a multi-supplier platform? Then Würth Industrie Service supports with electronic catalogue data. In addition, the Würth Scanner can be used in cooperation with renowned service providers, in order to use the scanner directly or with the help of the OCI interface. Possible data formats are:

- BMEcat 2.1
- Datanorm
- Punchout
- eCl<sup>®</sup>ss
- UNSPSC

#### **Uses and Advantages**

- Reduction of process costs due to an automatic order processing
- Comprehensive transparency of ordering processes
- Simple development of new procurement sources
- Flexible purchasing around the clock

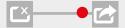
#### **Special feature**

 Individual assortment and direct access to products of well-known manufacturers

#### **Additional documents**

- Brochure E2E E-Business to Efficiency
- Website Keyword: Catalog Management

#### **Degree of automation**



#### Requirement type



#### Required quantity





#### Data exchange/Interfaces



OCI

Digital teamwork at its best.



#### **Description**

Does the customer have an OCI interface? Then Würth Industrie Service can quickly and easily connect the Würth Online Shop to the customer's system. The advantages of the Würth Online Shop remain fully usable:

Scanning, cost center allocation, daily updated range and much more.

#### **Uses and Advantages**

- Fully connected system
- Faster data flows
- Maximum transparency and traceability
- Standardized processes

#### **Special feature**

 Direct connection of the Würth catalogue to the customer's ERP system

#### **Additional documents**

- Brochure E2E E-Business to Efficiency
- Website Keyword: Catalog Management

#### **Degree of automation**



#### Requirement type



#### **Required quantity**







### **WUCATO**

We're in!



#### **Description**

The online procurement platform WUCATO for medium-sized industrial and commercial customers bundles the products of a multitude of suppliers in 16 product categories with more than 500,000 products. With WUCATO, customers cover their needs via a central platform and thus optimize their purchasing processes.



#### **Uses and Advantages**

- Reduction of process costs due to an automatic order processing
- Comprehensive transparency of ordering processes
- Simple development of new procurement sources
- Flexible purchasing around the clock
- Optimization of purchasing processes

#### **Special feature**

Internal multi-supplier platform

#### **Additional documents**

- Brochure E2E E-Business to Efficiency
- Website Keyword: Data interchange

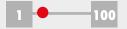
#### **Degree of automation**



#### Requirement type

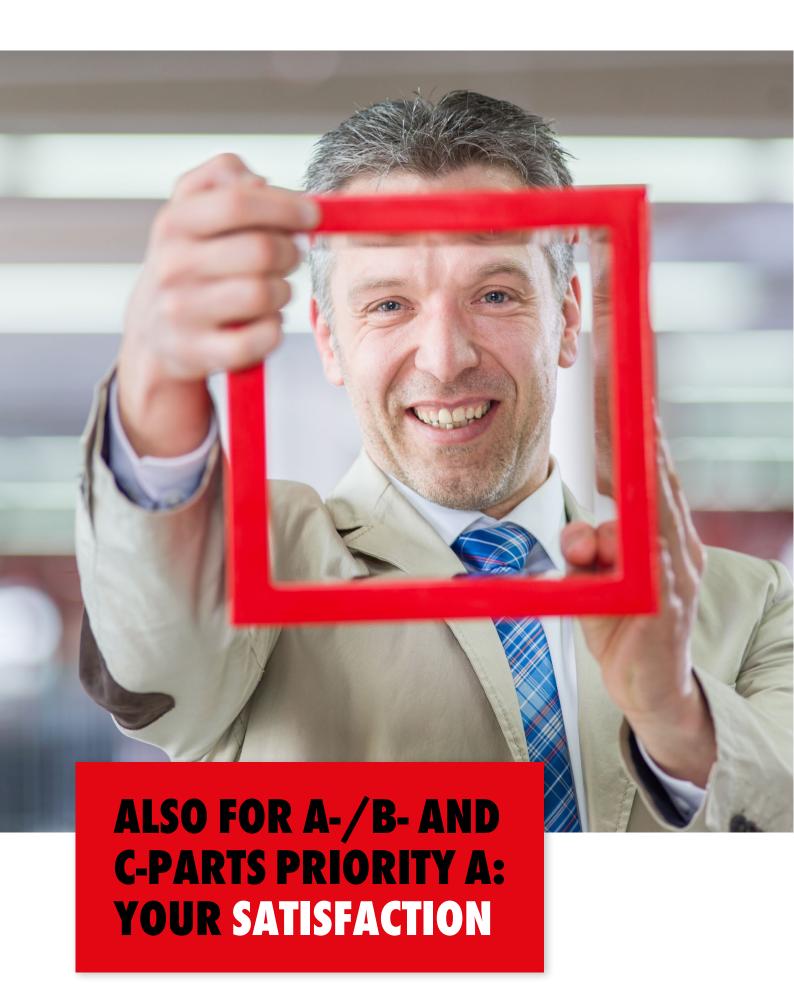


#### **Required quantity**







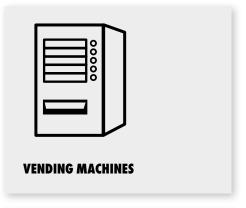


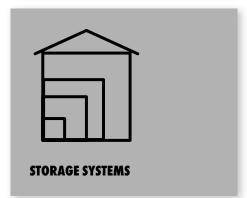


# IN THE RIGHT QUANTITY AND AT THE RIGHT TIME.





















### **SUPPLIER INTEGRATION**

#### A brief overview

#### Holistic Supplier Integration CPS®miLOGISTICS

The variety of needs in production, logistics and materials management has no limits. In addition to the Würth product range, CPS®miLOGISTICS offers the possibility to integrate non-Würth parts, product groups and suppliers into the C-Parts systems. With the various versions under the brand name CPS®miLOGISTICS, it is possible to make items available in combination with the procurement and supply solutions. The customer decides the type and scope of the products.

#### Holistic Supplier Integration – That stands for ...

- ... Storage handling and Supplier integration by Würth Industrie Service.
- ... Supplier integration via third-party processing in the Kanban system.
- ... Independent administration of products and suppliers in the Kanban system.

#### Automation and digitization made easy. With CPS®miLOGISTICS.

#### **CPS®MISTOCK CPS®MIDROPSHIP CPS®MISELF** Transport logistics On-site-Logistics-Service On-site-Logistics-Service Invoice handling Invoice handling Complaint handling Complaint handling Disposition Disposition Backoffice support Backoffice support Master data management Master data management Master data management Demand assessment Demand assessment Demand assessment Supplier integration through third-party Independent management of products order processing using the Kanbo and suppliers using the Kanban system system





# **SUPPLIER INTEGRATION**

**CPS®MISELF** 

PRODUCT GROUPS CPS®MISTOCK CPS®MIDROPSHIP



## FROM C-PARTS PARTNER TO INTEGRATED DATA MANAGER

In the following visualization, the process steps are described in the various forms of processing.



#### **CPS®MIDROPSHIP**



#### **CPS®MISELF**



**Export** 

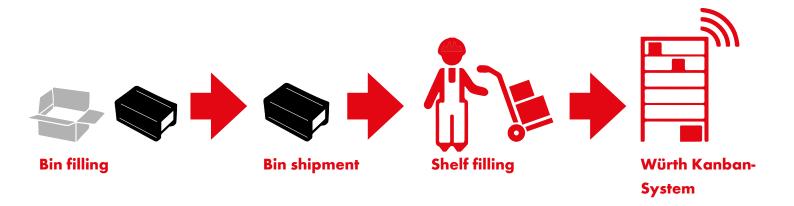
**Order placement with suppliers** 

**Shipping of goods** 

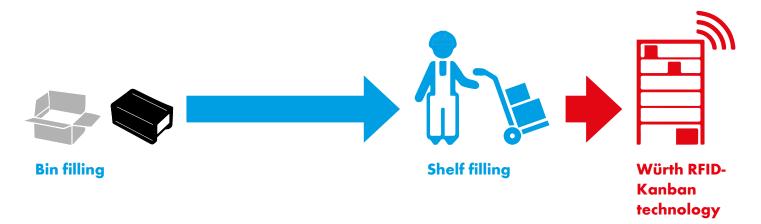


### **FOR YOUR C-PARTS**

Is taken over: By Würth, by Partner suppliers or by the customer.









# PRODUCT GROUPS

Partner for your individual product range.

#### **Description**

Würth Industrie Service has been cooperating with various partners for years for various product groups. This guarantees a smooth processing, a comprehensive service as well as the availability of the items. Due to special storage regulations, specific QA inspections and excessive handling costs, not all items are included in the classic Würth product range held in stock. A selection of product groups in which we work together with selected, long-term suppliers is shown on this page.

COMPONENTS/ PROFILES

**FITTINGS** 

MEASURING TECHNOLOGY

PRINT/ ADVERTISING TECHNOLOGY

ROLLER BEARINGS

**STAINLESS STEEL** 

**TOOLS** 

**CLAMPS** 

HYDRAULIC COMPONENTS

PACKAGING MATERIAL

**PROTECTIVE FILM** 

SEALING TECHNOLOGY

STAMPED/SHEET METAL FLEXIBLE PARTS

TURNED/MILLED PARTS

ELECTRONIC COMPONENTS

IDENTIFICATION SYSTEMS

PNEUMATIC COMPONENTS

RIVETING TECHNOLOGY

**SPECIAL SCREWS** 

STEEL/LONG GOODS

VIBRATION TECHNOLOGY

#### **Suppplier Integration**



# CPS® MILOGISTICS

Fully integrated.

#### Everything from a single source. A holistic concept.

Supply chain management is not only possible for C-Parts, but also for other parts - A- and B-Parts - thanks to the CPS®miLOGISTICS concept. This gives the customer transparency over the complete requirements, at the same time automating scheduling and logistics processes and bundling suppliers. The customer can concentrate on the core tasks in production, purchasing and merchandise management.

#### CPS®miSTOCK: Warehousing and supplier integration by Würth Industrie Service

- Integration of further suppliers, products and product groups into existing processes
- Maximum supply security and reliable delivery times through stocking in the Würth warehouse
- Reduction of capital commitment and space savings in the customer's own warehouse
- Supplier reduction and uniform invoicing
- Avoidance of production downtimes
- Release of capacities along the entire supply chair

#### CPS®miDROPSHIP: Supplier integration via third-party processing in the kanban system

- Integration of further suppliers, products and product groups into existing processes
- Automated disposition and inventory management
- Reduction of capital commitment and space savings in the customer's own warehouse
- Comprehensive logistics service
- Supplier reduction and uniform invoicing
- Avoidance of production downtimes
- Release of capacities along the entire supply chain
- High supply security through qualified suppliers and automated processes

#### CPS®miSELF: Independent management of products and suppliers in the Kanban system

- Integration of further suppliers, products and product groups into existing processes
- Use of the innovative Würth system technology, e.g. CPS®RFID, for further suppliers and products
- Maximum inventory reduction and space utilization
- Supply security through simple, automated demand assessment of requirements and merchandise planning
- Unchanged purchase conditions
- Holistic data management
- Various options for integration into your own process landscape
- Basic: Independent reordering through digital provision of bin information
- Advanced: Independent master data management and statistics brough the use of the provided platform solution
- Excellence: Supplement through interface connection and automated reordering



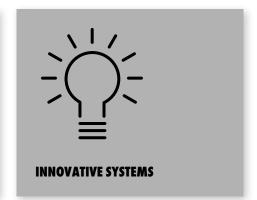


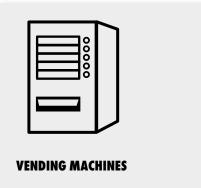


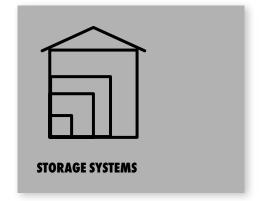
# IN THE RIGHT QUANTITY AND AT THE RIGHT TIME.



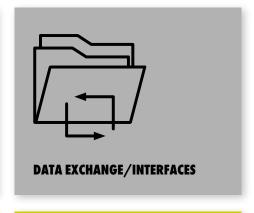
**RFID KANBAN** 



















## ON-SITE SERVICE/PROVISIONING

#### A brief overview

#### Customer proximity always in focus

More used than you thought and the storage is suddenly empty? Don't worry. The nearest Würth branch is maximum 30 minutes away or the container at the construction site provides immediate replenishment of consumables.

#### On-site-Service - That stands for ...

- ... 24 hours availability of goods.
- ... Shopping at anytime and anywhere.
- ... Security of supply, covering immediate needs with the most common consumables.
- ... Everything from a single source: storage, delivery, reordering and logistical handling of C-Parts.
- ... Bundling of suppliers and purchasing processes.
- ... Storage of the container between projects.
- ... No waste of material on the construction site.
- ... Technical planning with space-optimised implementation.
- ... Security of supply for customer projects.

When purchasing consumables, on-site service or provision is a worthwhile alternative.

#### Always there, where the customer needs us.



# ON-SITE SERVICE/PROVISIONING

NETWORK OF BRANCHES

WINWORK®

CONTAINER SOLUTIONS

AUTOMATED MATERIAL

**DISPENSING** 

#### **On-Site Service/Provisioning**



# NETWORK OF BRANCHES

Würth is there for its customers – over 500 branches in Germany.



#### **Description**

The nearest Würth branch is a maximum of 30 minutes away. Thanks to a Germany-wide network of branches, bottlenecks can be easily covered. On site, 5,000 clearly sorted items are available for immediate use. In addition, employees of Würth Industrie Service are available for advice and practical assistance in branch offices in Germany as well as in production sites in Switzerland, Great Britain, Poland, Israel and the Netherlands.

#### **Special features**

- Germany-wide branch network
- Over 5,000 items available immediately
- Shopping around the clock

#### **On-Site Service/Provisioning**







#### **Description**

The Würth Industrial NetWORK, WINWORK®, is a global network of Würth Industrial companies strategically coordinated to meet the individual, cultural demands of our industrial customers with worldwide production sites. The WINWORK® consists of more than 60 companies in 40 countries, which act as partners for our customers with several worldwide locations.

#### **Special features**

This integrated approach ensures comprehensive, personal consultation, fast and smooth information transfer and seamless integration and implementation of C-Parts solutions on our customers' international production lines. There is a high level of commitment and support at a consistently high standard of quality and service.

#### **Additional documents**

Website Keyword: Würth Industrial Network



# CONTAINER SOLUTIONS

Quality on site.



#### **Description**

Whether storage of C-Parts, PPE, small electronic parts or consumables: with container solutions, the products are where they are needed. The transport, assembly and equipping of the container are taken over by Würth Industrie Service. Within the containers, the logistics systems ORSY®, Kanban and E-Commerce can be handled.

#### **Uses and Advantages**

- Professional installation
- Secure fastening during transport
- Meets all safety requirements
- Maximum security of supply
- No waste of material on the construction site

#### **Special feature**

Available in the desired colour and with company logo

#### **Additional documents**

Website Keyword: Shelving systems with containers

#### **Degree of automation**



#### Requirement type



#### **Required quantity**







## AUTOMATED MATERIAL DISPENSING

The full operation!





#### **Description**

The automated material dispensing ORSY®CRIB is set up in the company, as a kind of in-house Würth branch, so that production equipment, auxiliary and operating materials are directly available to the customers at one location. The system is tailored to the individual needs of the customer and secured against access with various authorization levels, making C-Parts processing extremely efficient and independent. Around the clock, completely transparent.

#### **Uses and Advantages**

- Structured and clearly arranged storage of consumables with medium demand
- Reduction of procurement and storage costs
- Automated data transfer and reordering also in the material store
- Elimination of manual orders
- Fast removal of the required items

#### **Special features**

- Access-secured storage of high-quality items
- Multi-level authorization concept

#### **Additional documents**

Website Keyword: Automated material dispensing

#### **Degree of automation**



#### Requirement type



#### Required quantity







#### **ALL SYSTEMS AT A GLANCE**

#### **RFID KANBAN**

#### **INNOVATIVE SYSTEMS**

#### **VENDING MACHINES**

#### STORAGE SYSTEMS

#### iSHELF®/iSHELF®flex

Degree of automation Requirement type Required quantity Regularity



#### iBin®

Degree of automation Requirement type **\*** Required avantity 1 100 Regularity **⊕** ⊖



**ORSY®mat FP** 

Required quantity Regularity



#### **ORSY®Push**

Degree of automation Requirement type Required auantity Regularity



#### **iPLACER®**

Degree of automation Requirement type **4** Required quantity 1 - 100 Regularity **⊕** ⊖



Degree of automation Requirement type **4** Required quantity 1 100 Regularity **⊕**⊕⊖

#### **ORSY®mat RT**

Degree of automation Requirement type **4** Required quantity 1 100 Regularity **⊚**—•○

#### **ORSY®mobil**

Degree of automation Requirement type **\*** Required quantity 1 ---- 100 Regularity **⊕** ⊖

#### **iGATE**

Degree of automation **4.** Requirement type Required quantity 1 - 100 **⊕**⊖ Regularity



Degree of automation **4** Requirement type Required quantity 1 100 **⊕** ⊖ Regularity

#### **ORSY®mat HX**

Degree of automation **₹ → ₩** Requirement type Required quantity 1 - 100 Regularity **◎** → ○

#### **ORSY®Racks**

Degree of automation **\*** Requirement type Required quantity 1 - 100 **⊕** ⊖ Regularity

#### **iPUSH®**

Degree of automation **\*** Requirement type Required quantity 1 00 **◎ ○** ○ Regularity

#### **RFID Kanban**

Degree of automation **11** Requirement type Required quantity **0** 100 • () Regularity

#### **ORSY®mat WGT**

Degree of automation Requirement type ₹ <del>•</del>₩ Required quantity 1 100 Regularity **⊚ → ○** 

#### **ORSY®mat**

Degree of automation Requirement type Required quantity 1 00 **⊕** ⊖ Regularity

#### iBOX®/iBOX®flex

Degree of automation **\*** Requirement type **Required quantity** 1 100 **⊕**⊖ Regularity

#### **ORSY®mat CHE**

Degree of automation Requirement type **₹ Required quantity** 1 00 Regularity **-•**○

#### **ORSY®online**

Degree of automation Requirement type Required quantity 1 00 **⊕**⊕⊖ Regularity

#### **ITAGBOX**®

Degree of automation Requirement type **\*** Required quantity 1 00 Regularity **∅ •** ○

#### ORSY®mat CBL

Degree of automation Requirement type **4 Required quantity** 1 100 Regularity **⊕**⊖

#### **REFILLO®mat**

Degree of automation Requirement type Required quantity Regularity **⊕**⊖

#### **WIS platform**

Degree of automation Requirement type ₹ <del>---</del>₩ Required quantity 1 100 Regularity **⊚ ⊸** ○

#### **ORSY®Push**

Degree of automation Requirement type 1 100 Required quantity Regularity ⊕⊖



#### **ALL SYSTEMS AT A GLANCE**

#### **E-BUSINESS**

#### Würth Online-Shop

Degree of automation Requirement type Required quantity

#### 1 100 Regularity

#### Würth Scanner

Degree of automation Requirement type **1** Required quantity 1 100 Regularity

Degree of automation **4.** Requirement type Required quantity **⊕** ⊖ Regularity

#### Würth Subscription

Degree of automation Requirement type Required quantity Regularity

#### DATA EXCHANGE/ **INTERFACES**

#### EDI

Degree of automation Requirement type Required quantity Regularity

#### **Catalog management**

Degree of automation Requirement type Required quantity **⊚** • ○ Regularity

#### OCI

Degree of automation **4** Requirement type 1 100 Required quantity **⊕**--0 Regularity

#### **WUCATO**

Degree of automation Requirement type Required quantity Regularity

#### **SUPPLIER INTEGRATION**

#### **CPS®miSTOCK**

Degree of automation Requirement type Required quantity Regularity

#### **CPS®miDROPSHIP**

Degree of automation Requirement type **1** Required quantity **1**00 Regularity **⊚**—•○

#### **CPS®miSELF**

Degree of automation Requirement type Required quantity Regularity

#### ON-SITE SERVICE/ **PROVISIONING**

#### **Container solutions**

Degree of automation Requirement type **\*** Required quantity Regularity

#### **Automated material dispensing**







## THE DIRECT LINE

I will be happy to answer any questions you may have.

Name	
Area/Department	
Telephone number	
E-Mail	

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### **CONNECTED SYSTEMS**

#### for a holistic production and operational equipment supply

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