

# TRACK & TRACE

TQS



FOR **MAXIMUM PROTECTION** AGAINST  
**DRUG COUNTERFEITING** ALONG THE  
ENTIRE **PHARMACEUTICAL SUPPLY CHAIN**

# TQS – THE OPTIMAL MODULAR TRACK & TRACE SYSTEM FOR GLOBAL SERIALISATION REQUIREMENTS

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Our comprehensive knowledge network is available to you anywhere in the world



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Single Pack Serialisation



**TQS-HC-A**  
Tamper-Evident/Serialisation/Weighing



**TQS-BP**  
Bundle Pack Aggregation



**TQS-CP**  
Case Aggregation



# THE GUARANTEE FOR PROCESS AND PRODUCT SAFETY: TQS – TRACEABLE QUALITY SYSTEM FROM WIPOTEC-OCS

## **TQS FAST TRACK – FULL SERIALISATION AND AGGREGATION SOLUTION WITHIN 6 WEEKS\***

The WIPOTEC-OCS Traceable Quality System (TQS) is a series of modular, high-tech machines. TQS shortens the time needed to implement a fully automated pharmaceutical product serialisation and aggregation packaging line. As a response to the impending EU FMD and the US DSCSA serialisation deadlines, preconfigured TQS Fast Track machines are now available to enable healthcare companies to meet serialisation and aggregation deadlines in the shortest time possible.

### **EASY AND INTUITIVE OPERATOR INTERFACE**

A single, user-friendly operator interface simplifies TQS machine setup and operation. The unique ConfigureFast feature enables visibility of all sub-components such as transport unit, printers and cameras via the operator interface's HMI screens. ConfigureFast significantly reduces human error, and machine setup times while increasing overall equipment efficiency.

### **COMPLIANCE WITH GLOBAL SERIALISATION REGULATIONS**

The systems have all the attributes necessary to meet the legal requirements in the USA, European Union, China and other countries worldwide. The code layout software of TQS Fast Track includes relevant code layouts and application identifiers that correspond to global regulations. If country regulations change, the software receives relevant updates to guaranty unprecedented and fast compliance with emerging or amended Track & Trace regulations.

### **EFFICIENT LINE MANAGEMENT**

You can administer all production steps from serialisation to pallet aggregation in one single system with the intuitive Line Manager Software. Thus, to operate the machine efficiently, it is not necessary to possess deep expert knowledge of the subcomponents or make an extensive investment in training and support of the operating personnel.

### **ACCURATE PRINTING AND VERIFICATION AT HIGH SPEED**

Integration of serialisation equipment to the packaging line should not come at the cost of the overall line efficiency. All TQS machines including the Fast Track portfolio are equipped with highly accurate printing and verification technology to enable high product throughput of up to 300 pcs/min with the lowest possible product reject ratio.

### **EFFICIENT DATA MANAGEMENT**

Another unique feature of TQS and also Fast Track is the ability to go beyond serialisation data and capture additional product attributes. These product attributes may include the weight and code quality. This additional data can be stored together with the product's unique serial number (TQS Traceability+).

### **STANDARDISED COMMUNICATION PROTOCOLS AND INTERFACES**

Across the whole production process, the open XML interfaces ensures flexibility when connecting to different Level 3 providers. This interfaces enables the seamless exchange of data between production, warehousing, and enterprise systems. The usage of this universal XML interface eliminates the needing to change or re-validate line equipment if the higher-level system needs to be updated.

\* Period of six weeks commences with order acceptance and ends before FAT (Factory Acceptance Test)



**Solution Partner**  
WIPOTEC-OCS  
GmbH



WIPOTEC-OCS is a solution provider to GS1 Germany and also a voting member of the GS1 Global Healthcare Solution Provider Network. We actively participate in joint ventures with the major pharmaceuticals and implement, the relevant targets and modifications regarding serialisation and aggregation.

WIPOTEC-OCS is a member of the Open SCS Working Group. This indicates our commitment to flexible options for the integration in existing production infrastructures, as well as to the philosophy of open and standardised connections to higher-level systems.



# COMBINED EXPERTISE UNDER ONE ROOF CUTTING-EDGE TECHNOLOGY MADE IN GERMANY

## WIPOTEC HEADQUARTERS



WIPOTEC-OCS is a sales and service company for dynamic, high-precision weighing and inspection solutions. As a wholly-owned subsidiary of the high-tech specialist WIPOTEC, which develops and produces all machinery solutions at its headquarters in Kaiserslautern, WIPOTEC-OCS has been setting global standards in the production lines of leading manufacturers for more than 30 years. Throughout the world, customers in the pharmaceutical, food and chemical industries and in the mail and logistics sectors highly appreciate the solutions provided by WIPOTEC-OCS.

## EXCELLENT SOLUTIONS FOR YOUR APPLICATION

WIPOTEC-OCS stands for sophisticated high-tech systems with maximum ease of use. The impressive product portfolio provides solutions for nearly all customer applications. If necessary, we take special requirements and conditions into account in supplying customized equipment.

## EXTRAORDINARY MANUFACTURING DEPTH, ALL SIDE BY SIDE

WIPOTEC-OCS contributes great importance to the in-house development of all necessary technologies as well as the in-house manufacturing of all core components. Consequently, we develop a depth of manufacturing that differentiates us from other vendors and makes us largely independent of suppliers, while forming the basis for our delivery reliability. At WIPOTEC, the entire value chain from basic research, to planning, design, and manufacture to sales and service is all under one roof. The benefit of short channels of communication is the guarantee of maximum flexibility in the implementation of every individual product configuration. No matter how unusual your application may be, we will show you a possible solution that is sure to convince you. That's what makes the difference.





# GLOBALY RESPECTED, INDEPENDENT, FLEXIBLE, AND INNOVATIVE: THAT IS WIPOTEC

- ✔ **GLOBALY RESPECTED PARTNER IN INDUSTRY FOR MORE THAN 30 YEARS**
- ✔ **WORLDWIDE PRESENCE THANKS TO NUMEROUS SUBSIDIARIES AND PARTNERS**
- ✔ **FOUNDER MANAGED COMPANY**
- ✔ **COMPANY WITH HIGH INNOVATION POWER THROUGH LARGE R&D EFFORT, INCL. BASIC RESEARCH**
- ✔ **ALL EXPERTISE COMBINED UNDER ONE ROOF**
- ✔ **IN-HOUSE PRODUCTION OF ALL KEY COMPONENTS**
- ✔ **BROAD PRODUCT RANGE FOR ALMOST EVERY APPLICATION**
- ✔ **BROAD EXPERIENCE IN IMPLEMENTING CUSTOMER-SPECIFIC SYSTEMS**
- ✔ **USE OF HIGH PRECISION WIPOTEC WEIGHING SYSTEMS FOR OPTIMUM PRODUCT QUALITY**
- ✔ **PARTNER OF GS1 AND MEMBER OF THE OPEN SCS WORKING GROUP**
- ✔ **OUTSTANDING SERVICE CAPABILITIES**

## **MORE THAN 2000 TRACK & TRACE PROJECTS WORLDWIDE**

Trust the professional industry experts at WIPOTEC-OCS with more than 2000 successfully completed Track & Trace projects worldwide. Our specialists will find the perfect solution for your requirements. We stand for top quality global serialisation and aggregation.

## **COME AND VISIT US!**

Interested in the high-tech solutions from WIPOTEC-OCS? Perhaps you would like to visit our ultra-modern plant. Our prominent market position is no accident, but rather the logical consequence of the creative and competent efforts made by our staff on behalf of our customers. Come and see for yourself. Just schedule an appointment for a tour with us!



# TQS: COMBINED EXPERTISE FOR YOUR CUSTOM APPLICATION

Track & Trace begins with the right advice on how the TQS system implements country-specific regulations. On this basis, our project engineers work out the best possible machine and line configurations with you. They support you throughout the order processing and help later on, along with our service department, in the installation of your production lines. This approach ensures project and customer-specific requirements are met and, equally, respected for a timely project completion.

## HIGH PRECISION PRODUCT TRANSPORT ENSURES OPTIMAL PRINT QUALITY

Designed specifically for the TQS product series, the top belt features continuous height and width adjustments to ensure the safe transfer of the folding boxes and provide the necessary forced guidance. The sprocket belts for the conveyor are coated with a special, high grip rubber surface that provides optimal hold of the packages. Small tolerances are balanced in elevation of the boxes.

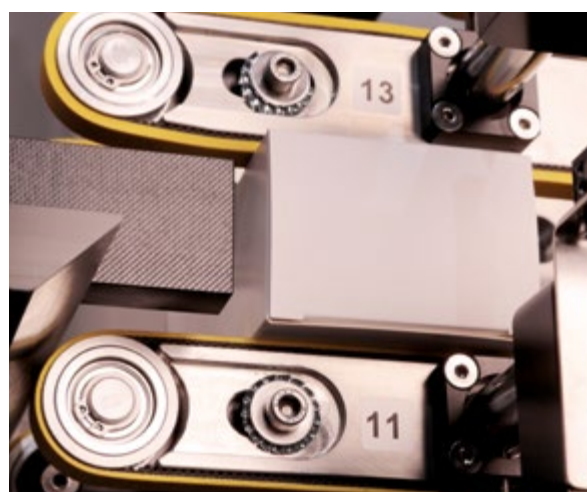
This construction eliminates slippage and movement of the packages during printing. In addition, this ensures highly accurate printing and verification, which can be increased even more with the aid of an optional synchronisation sensor. All TQS machines feature high precision product transport, which enables extremely accurate coding even at a high throughput rate.

The safe transport of all packages is ensured by the time-tested NT belt technology, which also serves as the basis of high precision weighing. The use of proven modular systems facilitates the implementation of a very broad range of product dimensions.

## IN-LINE GRADING

All TQS serialisation machines (TQS-SP and TQS-HC-A) are designed with a function that checks the print quality of the printed codes in line. This control (grading) takes place continuously during throughput of the packages and is based on ISO/IEC 15415 (for 2D Codes) and 15416 (for 1D Codes).

This evaluation is a good indicator of the print quality and is useful as a trend indicator. In-line grading does not replace the full-scale, standardised verification of the printing results.



Stable transfer positioning of folding boxes for best print results



CIP: 4053213000004  
EXP: 02 2019  
LOT: 321TQS



GTIN: 04053213000004  
SN: 6585HR7C08XNA5D  
EXP: 09.02.2019  
LOT: 321TQS



Global coding





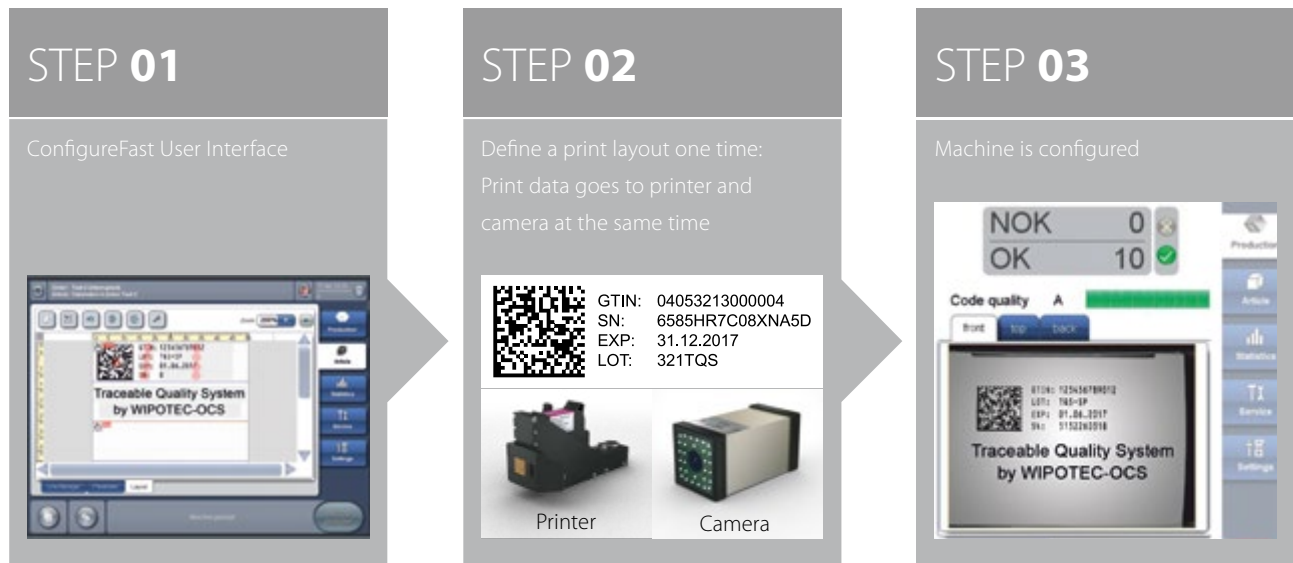
# TQS WITH ConfigureFast: EASY OPERATIONS VIA A SINGLE INTERFACE

TQS from WIPOTEC-OCS is the logical way to implement Track & Trace. The system is easy to use and, thanks to ConfigureFast, provides very impressive handling via a single user interface.

In TQS, ConfigureFast simultaneously generates content as well as print layout for the required labels. The print data is sent in parallel to the printer and to the image processing unit. This simple operation saves you the usual and sometimes complicated configuration of the various individual units. By means of the print data, the camera already has the accurate pixel information about the printed image. The error prone method of „teaching“ all the cameras via manually prepared print patterns is completely eliminated. The user saves time by working in just one system, fully integrated and centrally controlled from a touchscreen panel display.

The display gives a clear picture of extensive amounts of information. The user has everything directly in view and can interactively and easily make changes as authorised by the user rights.

ConfigureFast lets you operate and control either our thermal ink jet (TIJ), or the CO<sub>2</sub> laser printer, or the thermal transfer printer (TTO) for the labels. The operator sees no difference in operating the various systems. The print layout is always generated in the simplest way. All of this means that it is very intuitive and easy to configure all of the TQS equipment.



” Aenova selected WIPOTEC-OCS as its Track & Trace System supplier because of the impressive technology, in particular, the very simple and easy to learn innovative operating concept. It is a great advantage that, because of the fully integrated ConfigureFast

operating software in all TQS modules, we no longer have to configure the individual print layout and image processor separately. This results in extremely short set up times and, as a consequence, substantially higher productivity in the lines.”

**Alexander Pohl**  
Technical Expert Packaging  
Aenova-Group

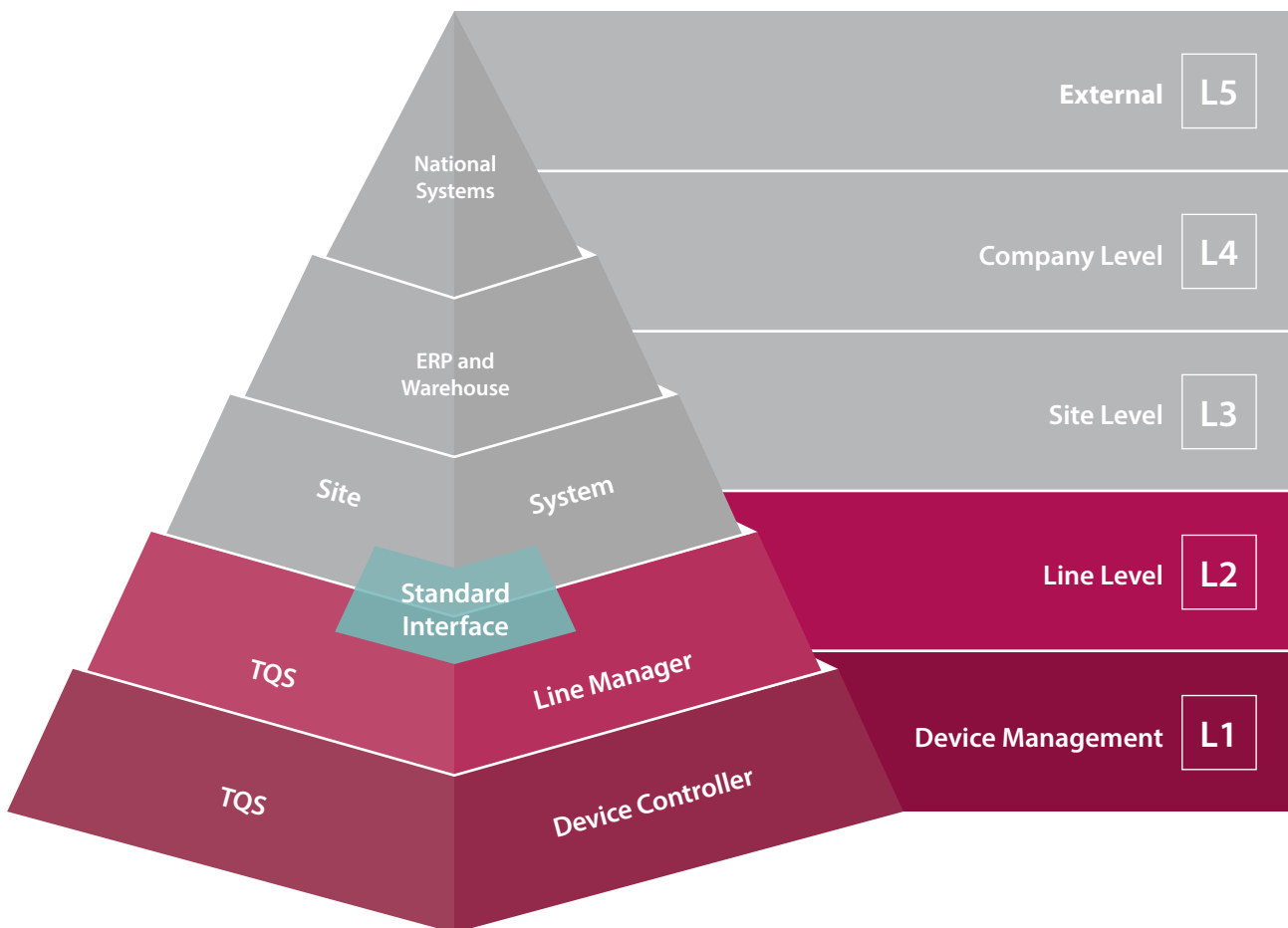
# TQS: OPEN XML-INTERFACES FOR SECURE AND DEPENDABLE DATA TRANSPORT

No matter what your current IT structure looks like, you must always integrate the required or generated Track & Trace data. The following applies: The lower the number of optional modules to be installed, the better the system will operate.

TQS relies on the use of open XML standard interfaces, avoiding the creation of any proprietary island solutions. The TQS Line Manager gives you the lowest possible IT overhead. The job order data can be input directly into the machine. The Line Manager runs on any TQS module on the line and can easily and conveniently connect to a variety of Level 3 providers.

The core of the Line Manager is the production database which stores the data during the production operations. In the event of a temporary server and network infrastructure failure, the production line is secured by means of a local buffer memory. The permanent data storage is performed only in the Level 3 systems.

## EASY INTEGRATION THROUGH A HIGHLY FLEXIBLE SOFTWARE SOLUTION DISTINGUISHED BY OPEN INTERFACES



# USER FRIENDLY SERIALISATION FOR USE IN SMALL SPACES

TQS SP

**TQS-SP** is a user friendly solution for the serialisation of individual cartons. The folding boxes are conveyed by a specially designed, double guided top band system that ensures stable positioning after leaving the cartoner.

The TQS top bottom band is fully adjustable in three dimensions to quickly and easily accommodate various carton formats. The labels are applied as required on the flaps (front or back side) or the top of the folding boxes. The TQS-SP can be installed into a line network with automated product feed or as a mobile stand-alone unit with manual supply. The unit can be retrofitted into any existing packaging line.

Thanks to ConfigureFast, identical print data is sent directly to the printer and to the camera's print imager. All system components are quickly and easily controlled from one single user interface without having to switch programs.

As an option for the TQS-SP, TQS-HC-A and TQS-BP, WIPOTEC-OCS supplies a fully automated grouping table that facilitates

placing the folding boxes or bundles into rows in preparation for packing or even aggregation to the next higher packaging level (for example, shipment carton). The grouping table does not require any separate setup. It is controlled from the TQS machine.



## MAIN FEATURES

- ✔ Stable transfer positioning of folding boxes and guided transport for safe and optimal printing and reading results
- ✔ TQS InkPrint printer with print head and fully integrated user guides
- ✔ TQS VIO1 camera with fully integrated user guides
- ✔ Flexible print head/camera mounting position
- ✔ Large 15" with touchscreen display and intuitive control menu (19" optional)
- ✔ Validation packets and documentation IQ/OQ, FDS, RA, TM (optional)
- ✔ Tool free format change

## YOUR BENEFITS

- ✔ All-in-one operations concept for quick and easy handling
- ✔ High throughput rate of up to 600 pcs/min (300 pcs/min is standard)
- ✔ Space-saving unit for quick integration and operational readiness helps achieve cost reductions



## TECHNICAL DATA

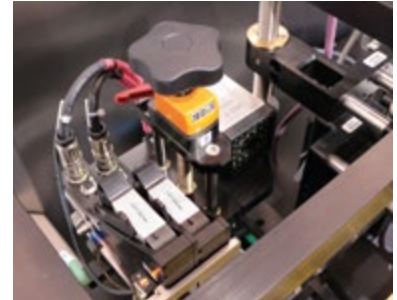
<b>Material of machine</b>	Stainless steel V2A/AISI 304
<b>Unit weight</b>	180 kg
<b>Production type</b>	IP54 <sup>1)</sup>
<b>Output</b>	300 pcs/min (optionally 600 pcs/min)
<b>Product length</b>	30-200 mm (optionally 20-300 mm)
<b>Product height</b>	10-150 mm (optionally 10-200 mm)
<b>Product depth</b>	40-200 mm (optionally 80-300 mm)
<b>Product transport height</b>	800-950 mm (optionally 700-840 / 900-1,050 mm)
<b>Rated voltage; Rated frequency</b>	L1/N/PE 100-240V; 50/60 Hz
<b>Connect load</b>	1 kVA
<b>Compressed air</b>	Approx. 6 bar 16 NI/min, quality class 5/3/3 to DIN ISO 8573-1

1) Water spray from above

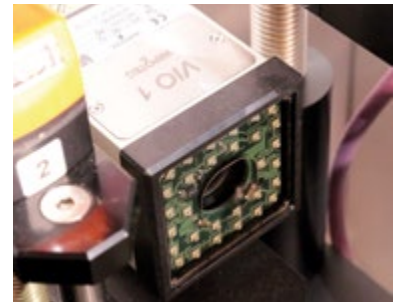
These specifications are reference values of the standard machine excluding application- or weighing-specific add-on parts. Extended performance data available on request.



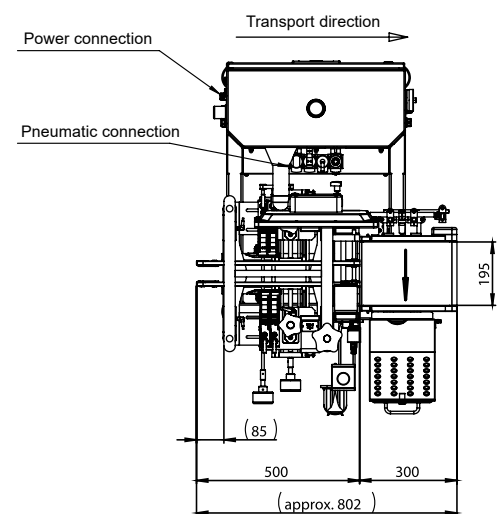
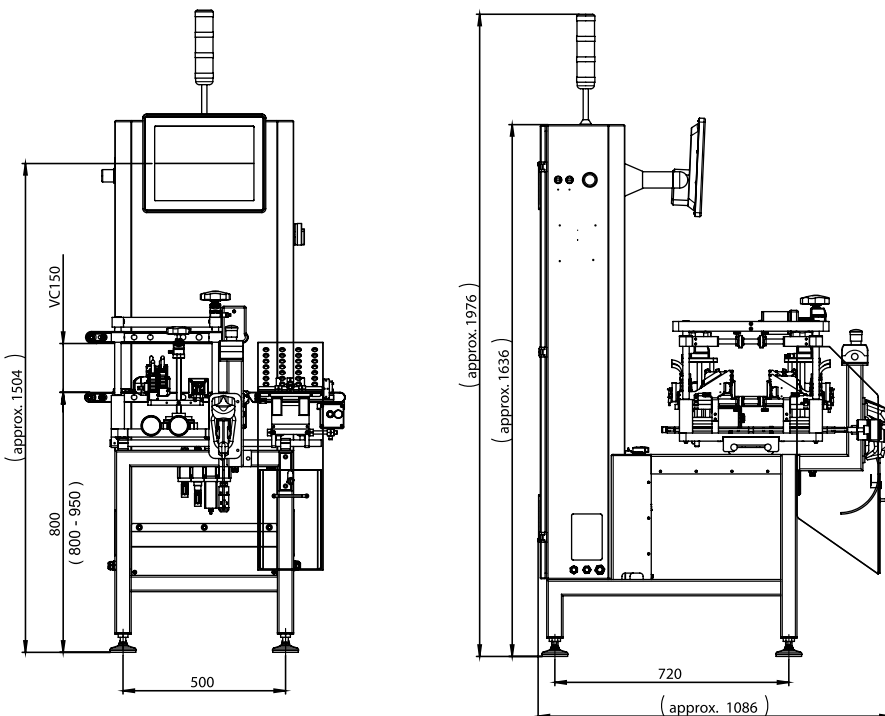
Other machine specifications  
→ Technical Data Sheet



Highest grades when printing



Continuous authentication of folding boxes



All entries in mm | Photo shows optional equipment

# SERIALISATION SOLUTION FOR NON ERECTED CARTONS

TQS SP

The **TQS-SP for flat boxes** from WIPOTEC-OCS was designed for offline coding and serialisation of flat cardboard blanks used in folding boxes for pharmaceuticals. It enables cost-efficient serialisation of small and medium batch sizes of pharmaceutical packaging that is to be pre-produced or hand-packed. As a centralised serialisation solution, the TQS-SP is a welcome alternative for inline serialisation of folding boxes on packaging lines with only low proportions of serialisation or a high number of job changes due to small batch sizes. The TQS-SP is ready for use immediately without any integration effort.

Convenient set-up and short changeover times: With the ConfigureFast cross-system operating concept from WIPOTEC-OCS, a common software interface can be used to control layout, transport and printing system as well as camera-based real-time verification of code and text. The proven transport system reliably guides the card-

board blanks through the system even at high speeds, thus enabling consistently precise printing results of the highest quality and positioning accuracy. The camera system of the TQS-SP uses 100% product inspection to detect all the print characteristics of the processed products. Cardboard blanks with incorrect or illegible

codes and texts are reliably ejected. The unit can process formats up to a width of 372 millimetres. Stepless format conversion when changing products can be carried out quickly. Successfully serialised cardboard blanks are transported to a stacker.



## MAIN FEATURES

- ✔ Reliable transport of the non erected cartons due to a specially developed transport system
- ✔ TQS-InkPrint printing system with print heads and fully integrated operator guidance
- ✔ 100% correct printing results due to full-surface optical print verification
- ✔ Rejection of faulty products into lockable rejection bin
- ✔ Large 15" with touchscreen display and intuitive control menu (19" optional)

## YOUR BENEFITS

- ✔ Cost-efficient serialisation of small and medium batch sizes of folding boxes
- ✔ Centralised solution without on-site integration effort
- ✔ All-in-one operating concept for fast, easy handling
- ✔ High throughput: up to 250 cardboard blanks/min
- ✔ Large product range thanks to adjustable format changing position

## TECHNICAL DATA

<b>Material of machine</b>	Stainless steel V2A/AISI 304
<b>Unit Weight</b>	300 kg
<b>Production Type</b>	IP54 <sup>1)</sup>
<b>Output</b>	250 pcs/min
<b>Product length</b>	Up to 430 mm
<b>Product depth</b>	Up to 372 mm
<b>Product transport height</b>	800-950 mm (optionally electrically height adjustable)
<b>Rated voltage; Rated frequency</b>	L1/N/PE 100-240V; 50/60 Hz
<b>Connect load</b>	1 kVA
<b>Compressed air</b>	Approx. 6 bar 16 NI/min, quality class 5/3/3 to DIN ISO 8573-1

1) Water spray from above

These specifications are reference values of the standard machine excluding application- or weighing-specific add-on parts. Extended performance data available on request.



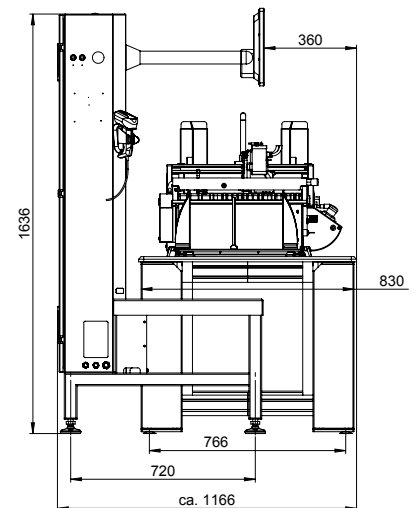
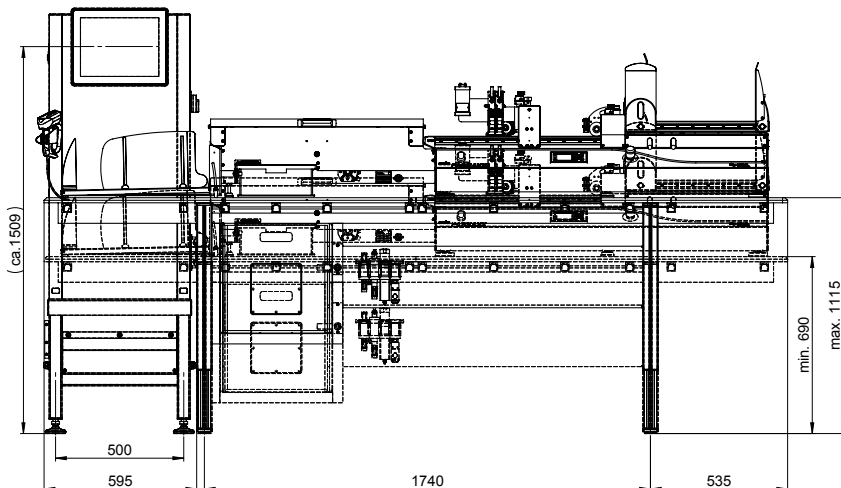
Other machine specifications  
 → Technical Data Sheet



Stack processing of non erected cartons



Print process of the non erected carton



All entries in mm | Photo shows optional equipment



# SERIALISATION AND WEIGHT INSPECTION – CUSTOMISED FOR YOUR NEEDS

TQS HC-A

**TQS-HC-A** continues the convenient features of TQS-SP in terms of product management and serialisation, expanding them with a final completeness check by means of weight. Optional modules integrate the functionalities of our compact Tamper-Evident technology and country-specific vignette applicator.

The folding boxes are received from the upstream cartoner over a perfectly synchronised, adjustable top belt. This high precision product transport is the basis for smoothly guided coding and final verification. Products with faulty codes are discharged into a separate, lockable container in front of the weighing belt. Products with a faulty weight use a second ejection system directly behind the weighing belt.

Thanks to ConfigureFast, identical print data is sent directly to the printer and to the camera's print imager; all system components are quickly and easily controlled from one single user interface without having to switch programs. A more detailed description of the check-weigher component is provided in the HC-Avantgarde brochure.

As a supplement to TQS HC-A, WIPOTEC-OCS supplies a fully automated grouping table that facilitates placing the folding boxes or bundles into rows in preparation for packing or even aggregation to the next higher packaging level (for example, shipment cartons). The grouping table requires no separate configuration as it is controlled by the respective TQS machine.



## MAIN FEATURES

- ✔ Stable transfer positioning of folding boxes and guided transport for safe and optimal printing and reading results
- ✔ TQS InkPrint printer with print head and fully integrated user guides
- ✔ TQS VIO1 camera with fully integrated user guides
- ✔ Flexible print head/camera mounting position
- ✔ High-tech Weigh Cells from WIPOTEC Weighing Technology for high precision weighing
- ✔ Large 15" touchscreen display and intuitive control menu (19" optional)
- ✔ Validation packets and documentation IQ/OQ, FDS, RA, TM (optional)
- ✔ Tool free format change

## YOUR BENEFITS

- ✔ All-in-one operations concept for quick and easy handling
- ✔ Compact, high-tech, multi-functional unit for optimal productivity
- ✔ High throughput rate of up to 600 pcs/min (300 pcs/min is standard)
- ✔ Maximal integration flexibility through modular design

## TECHNICAL DATA

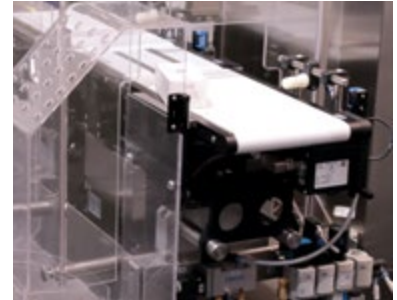
<b>Material of machine</b>	Stainless steel V2A/AISI 304
<b>Unit weight</b>	400 kg (with tamper-evident 600 kg)
<b>Production type</b>	IP54 <sup>1)</sup>
<b>Output</b>	300 pcs/min (optionally 600 pcs/min)
<b>Weighing range</b>	Up to 750 g (optionally up to 1,500 g)
<b>Product length</b>	30-120 mm (optionally 20-220 mm)
<b>Product height</b>	10-150 mm (optionally 10-200 mm)
<b>Product depth</b>	40-200 mm (optionally 80-300 mm)
<b>Product transport height</b>	800-950 mm (optionally 700-840 / 900 -1,050 mm)
<b>Rated voltage; Rated frequency</b>	L1/N/PE 100-240V; 50/60 Hz
<b>Connect load</b>	1 kVA
<b>Compressed air</b>	Approx. 6 bar 16 NI/min, quality class 5/3/3 to DIN ISO 8573-1

1) Water spray from above

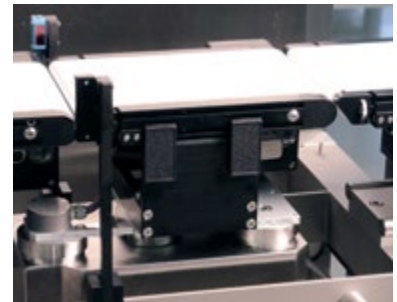
These specifications are reference values of the standard machine excluding application- or weighing-specific add-on parts. Extended performance data available on request.



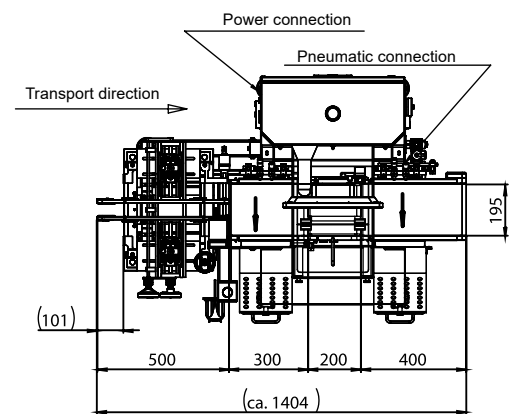
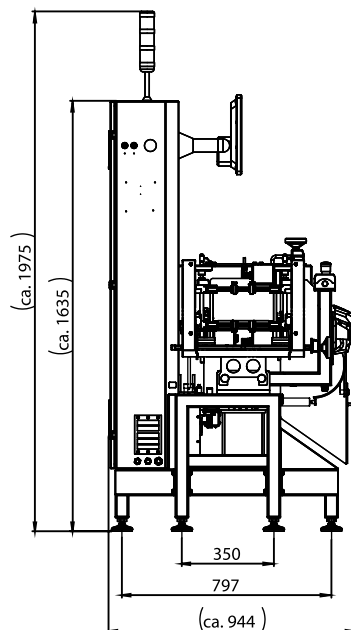
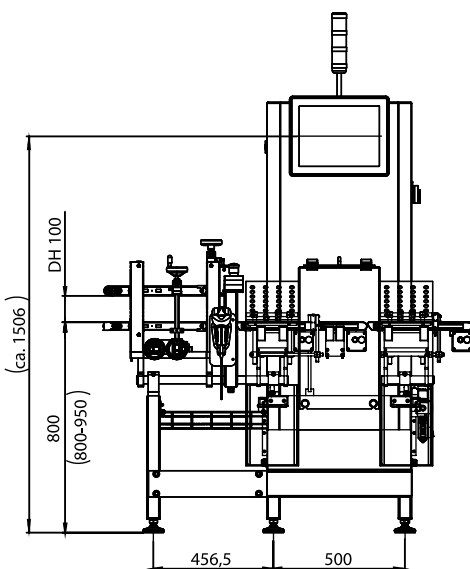
Other machine specifications  
→ Technical Data Sheet



Dependable ejection of faulty containers



WIPOTEC Weighing Technology - High precision weighing with EMFR Weigh Cells



All entries in mm | Drawing shows sample version

# SERIALISATION, WEIGHT INSPECTION, AND TAMPER-EVIDENT LABELS FOR YOUR PRODUCT SAFETY

**TQS HC-A**

**TQS-HC-A**, equipped with Tamper-Evident labeling systems on both sides, allows you to serialize the folding boxes, to verify the print, to seal the insertion flaps with Tamper-Evident labels, to apply vignettes from above, to discharge products according to diverse sort rules, and to determine the weight – all during throughput operations.

Country-specific labels or vignettes are applied by means of compact labeling units. Alternatively, the system can also be equipped with optional thermal transfer printers to print in-line batch or serialisation data. What this means for you: All foreseeable regulations regarding serialisation worldwide can be met with just one space-saving and user-friendly machine.

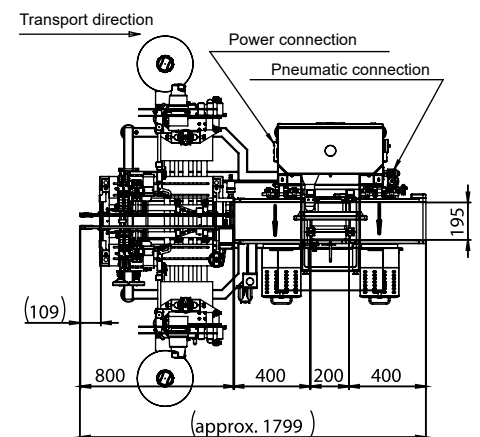
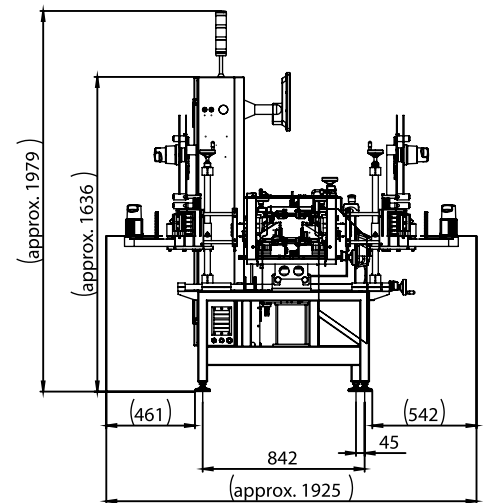
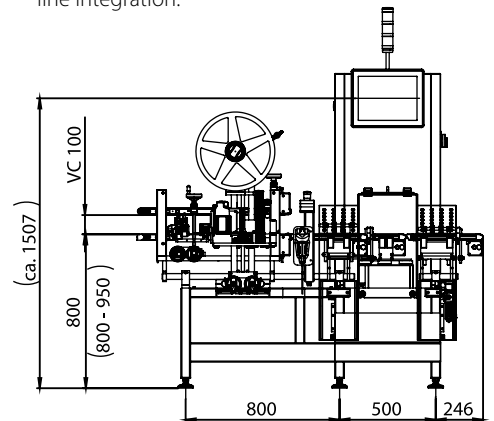
Optionally TQS-HC-A can be ordered with full enclosure. This guarantees the security of the process route; no operator can intervene in the ongoing process while the machine is operating. The replacement of consumables for printer, vignette or tamper-evident applicators, including all machine settings, can be carried out

from one side only, which makes operation easier, especially when dealing with line integration.

## TQS-HC-A with Tamper-Evident technology



Other machine specifications  
→ Technical Data Sheet



All entries in mm | Drawing shows sample version





# THE MOST COMPACT ALL-IN-ONE SERIALISATION MACHINE IN THE WORLD

TQS HC-A

Products with faulty coding are ejected ahead of the weighing belt into a separate lockable container. Products with a faulty weight use a second ejection system directly behind the weighing belt. The intuitive operation of all components is conveniently and centrally organised in a single interface. This means that all system components are directly, quickly, and easily controlled by a single software interface, without any program changes.

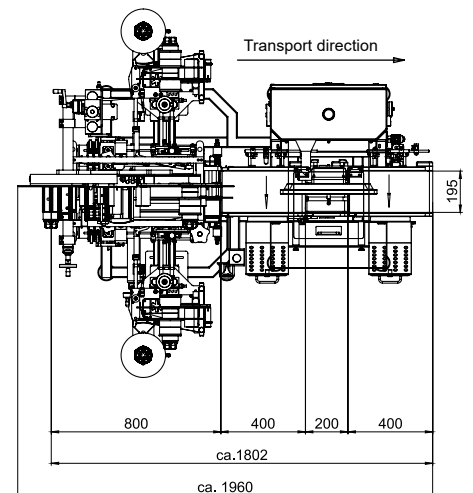
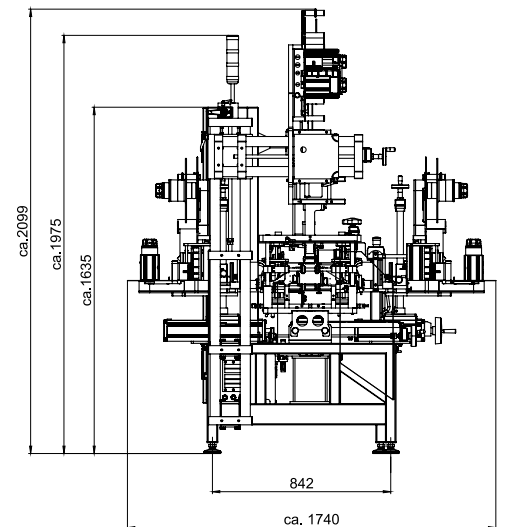
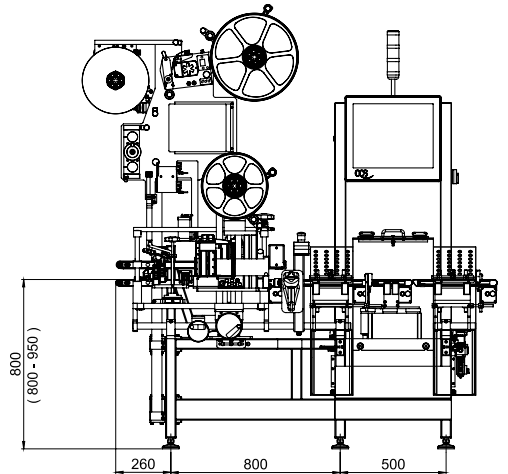
Five functions (serialisation, Tamper-Evident seal, vignette labeler, additive label printing, weighing) in one unit are what make TQS-HC-A the most compact serialisation machine worldwide. Easily integrated as a space-saver in the tightest production environments, it also has an outstanding price performance ratio in comparison with individual components.



Other machine specifications  
→ Technical Data Sheet

## TQS-HC-A

All-in-one with Tamper-Evident technology and vignette labeler



All entries in mm | Drawing shows sample version

# SIMPLE AGGREGATION OF SETS/BUNDLES – FLEXIBLE AND FORMAT-INDEPENDENT

TQS BP

**TQS-BP** is perfectly equipped for the simple implementation of the first aggregation level. The system enables the serial numbers from multiple single packages to be combined to form one unique serial number for the set.

The model has a format independent transport and reading system. The bundles are received directly from the bundler or, can also be manually introduced. The machine's intelligent code ID provides optimal flexibility, even with any eventual variations in geometry.

Regardless of whether the packaged sets are rounded by stretch wrapping, shrink wrapped, or fully overwrapped, they can be reliably and safely read by means of the optional UV camera.

As a supplement to TQS-BP, WIPOTEC-OCS supplies a fully automated grouping table that facilitates placing the sets or bundles into rows in preparation for packing or even aggregation to the next higher packaging level (for example, shipment cartons). The grouping table requires no separate configuration as it is controlled by the respective TQS machine.



## MAIN FEATURES

- ✔ Fully integrated label printer and applicator unit, incl. camera control
- ✔ High performance TQS VIO 2 camera for precise code verification
- ✔ Handheld scanner for manual read in and changing aggregation hierarchies
- ✔ Reliable discharge by means of the traction pusher
- ✔ Large 15" with touchscreen display and intuitive control menu (19" optional)
- ✔ Validation packets and documentation IQ/OQ, FDS, RA, TM (optional)
- ✔ Camera mounts front and back (optional)
- ✔ Tool free format change

## YOUR BENEFITS

- ✔ All-in-one operations concept for quick and easy handling
- ✔ Space saving design facilitates integration in existing lines
- ✔ High throughput rate (up to 90 pcs/min, 30 pcs/min standard) enables significant increase in productivity

## TECHNICAL DATA

<b>Material of machine</b>	Stainless steel V2A/AISI 304
<b>Unit weight</b>	210 kg
<b>Production type</b>	IP54 <sup>1)</sup>
<b>Output</b>	30 pcs/min (optionally 90 pcs/min)
<b>Product length</b>	30 mm (optionally to 350 mm)
<b>Product height</b>	10-200 mm
<b>Product depth</b>	40-200 mm (optionally 80 mm-300 mm)
<b>Product transport height</b>	800-950 mm (optionally 700-840 / 900-1,050 mm)
<b>Rated voltage; Rated frequency</b>	L1/N/PE 100-240V; 50/60 Hz
<b>Connect load</b>	1 kVA
<b>Compressed air</b>	Approx. 6 bar 16 NI/min, quality class 5/3/3 to DIN ISO 8573-1

1) Water spray from above

These specifications are reference values of the standard machine excluding application- or weighing-specific add-on parts. Extended performance data available on request.



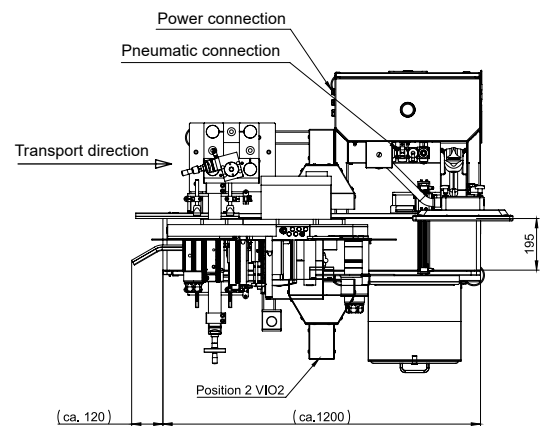
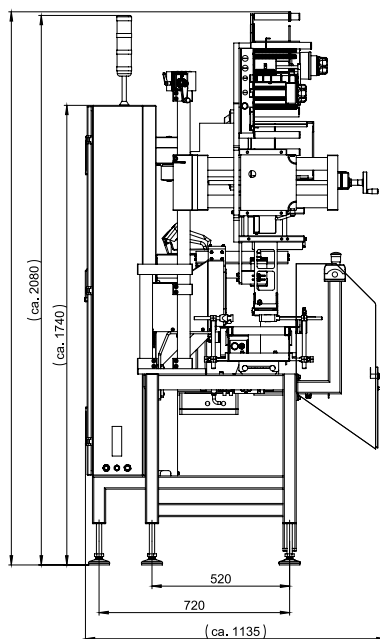
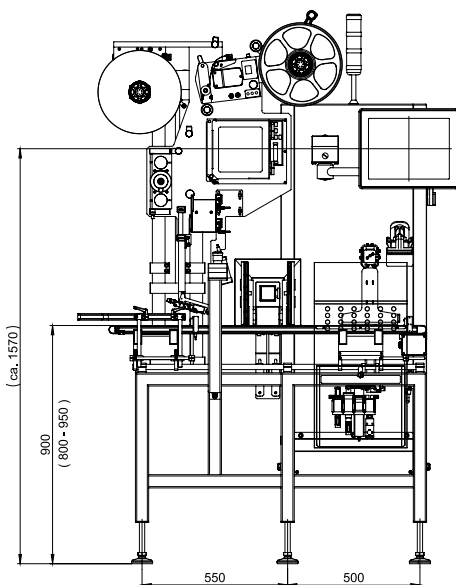
Other machine specifications  
Technical Data Sheet



Professional labeling with TQS-BP



Option: fully automated grouping table



All entries in mm | Drawing shows sample version

# THE PERFECT SEMI-AUTOMATIC AGGREGATION FOR SHIPMENT CARTONS AND PALLETS

TQS CP

**TQS-CP** stands for the successful semi-automatic aggregation of manually repacked folding boxes. It lets you conveniently assign units from a lower level (folding box or bundle) to a higher packaging level (shipment carton).

The operator places the packaged units layer-by-layer in the shipment carton. Each completed layer is then photographed from above by the fully integrated camera. The camera automatically moves to the preset height for packing in order to always ensure the proper focus

distance. After the defined number of layers and units has been reached, the aggregation level is completed and a label is automatically generated.

TQS-CP also manages the next packaging level (for example, shipment cartons on

pallets). The aggregation of the pallets can be managed in parallel by the optional TQS-MP-EXT. The operator is supported by the integrated display on the mobile scanner.



## MAIN FEATURES

- ✔ Industrial scale labeler on adjustable height table
- ✔ State of the art camera for multicode-reading from above and fully integrated operator guidance
- ✔ Large 19" with touchscreen display and intuitive control menu
- ✔ Ergonomic design with adjustable product table height
- ✔ Validation packets and documentation IQ/OQ, FDS, RA, TM (optional)
- ✔ Weighing platform (optional)
- ✔ Tool free format change

## YOUR BENEFITS

- ✔ All-in-one operations concept for quick and easy handling
- ✔ Safe and reliable aggregation of every single product
- ✔ Greater value from one machine for the aggregation of shipment cartons and pallets (optional)



## TECHNICAL DATA

<b>Material of machine</b>	Stainless steel V2A/AISI 304
<b>Unit weight</b>	280 kg
<b>Production type</b>	IP54 <sup>1)</sup>
<b>Product dimension (W x D x H)</b>	600 x 400 x 550 mm (optionally 840 x 560 x 550 mm)
<b>Product table height</b>	500 - 800 mm adjustable
<b>Rated voltage; Rated frequency</b>	L1/N/PE 100-240V; 50/60 Hz
<b>Connect load</b>	0,8 kVA

1) Water spray from above

These specifications are reference values of the standard machine excluding application- or weighing-specific add-on parts. Extended performance data available on request.



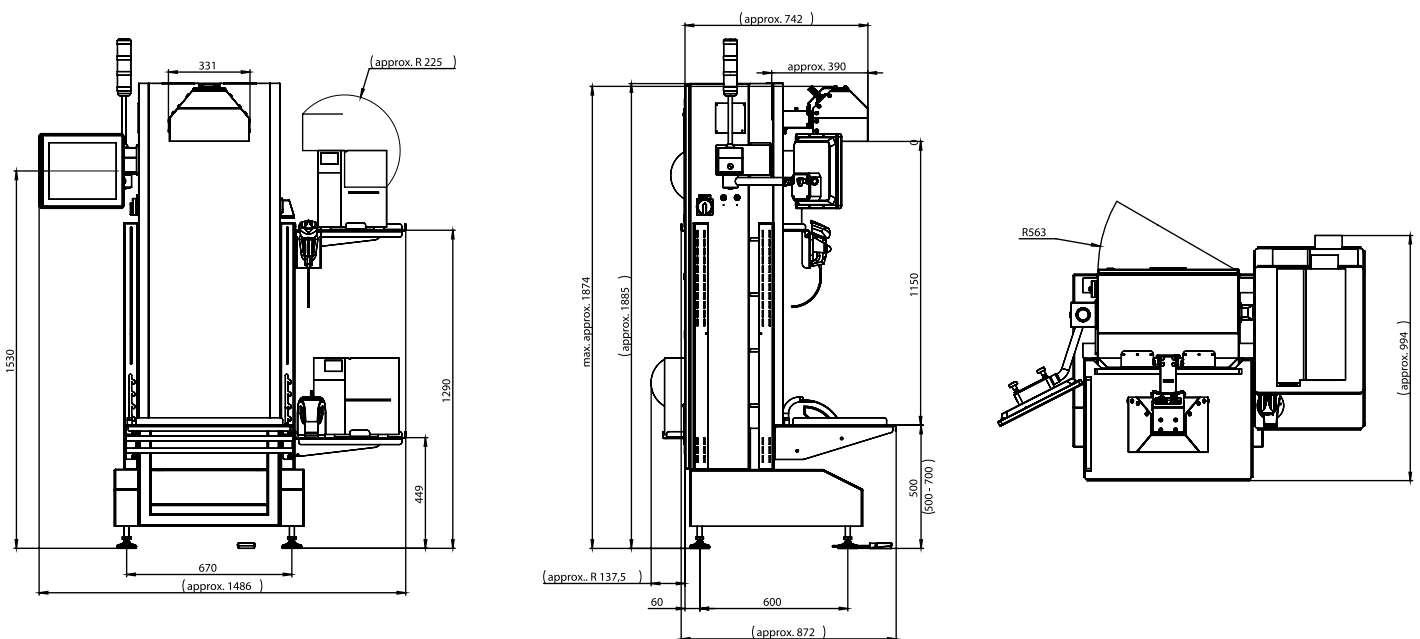
Other machine specifications  
→ Technical Data Sheet



High resolution camera for full surface images



Optional: TQS-MP-EXT for pallet aggregation



All entries in mm | Drawing shows sample version

# SERIALISATION FOR BOTTLES AND VIALS

**TQS** LI-Bottle

The **TQS-LI-Bottle** from WIPOTEC-OCS serialises medicine bottles at high transport speeds. Serialisation is carried out simply by applying labels to the bottles. The compact, space-saving footprint of the TQS-LI-Bottle combined with a very short design in the direction of product flow makes it easily integrated into existing lines. Labelling is carried out in a star wheel with format-specific pockets or a driven lateral side grip conveyor. If necessary, the system can respond to product-specific requirements with the aid of format parts. A thermal printing system ensures high-resolution printing of the labels with plain text and product codes.

Digital control of the print head allows updating of the information to be printed without having to stop the system. The labels with or without booklet are applied centrally with the utmost precision. Readability of the printed information is optically verified full-surface before the labels

are applied so that only 100% correct labels are used.

Any faulty labels are removed before the application process. Any unlabelled products can be returned to the process. Optionally, the TQS-LI-Bottle can

be equipped with a precision weighing system and is suitable for a large range of different bottle shapes and sizes. All components are operated on a central 15" touchscreen.



## MAIN FEATURES

- ✔ Safe product transfer due to modular construction, different versions possible
- ✔ Thermal transfer printing system for high-resolution printing of plain text and product codes
- ✔ 100% correct labels due to full-surface optical print verification
- ✔ Ejection of faulty labels
- ✔ Return of unlabelled products to the process
- ✔ Large 15" with touchscreen display and intuitive control menu (19" optional)
- ✔ Can be optionally equipped with precision weighing system

## YOUR BENEFITS

- ✔ All-in-one operating concept for very quick and easy handling
- ✔ Space-saving design for easy integration into existing lines
- ✔ High throughput
- ✔ Large product range due to modular configuration

## TECHNICAL DATA

<b>Material of machine</b>	Stainless steel V2A/AISI 304
<b>Production type</b>	IP54 <sup>1)</sup>
<b>Output</b>	120 pcs/min
<b>Product diameter (cylindric)</b>	30-110 mm
<b>Rated voltage; Rated frequency</b>	L1/N/PE 100-240 V; 50/60 Hz
<b>Connect load</b>	Approx. 1.4 kVA
<b>Working height</b>	700-850 / 800-950 / 900-1050 mm <sup>2)</sup>
<b>Compressed air</b>	Approx. 6 bar 16 NI/min, quality class 1/4/1 to DIN ISO 8573-1

1) Water spray from above

2) Other working heights on request

These specifications are reference values of the standard machine excluding application- or weighing-specific add-on parts. Extended performance data available on request.



Other machine specifications  
 → Technical Data Sheet



Application and serialisation of the labels



# AUXILIARY CODE PRINTING AND ULTRAFAST ALL ROUND INSPECTION OF BOTTLES AND VIALS

**TQS SP-Bottle**

**TQS-SP-Bottle** prints auxiliary codes and verifies bottles and vials. Printing is completed by the CIJ printer either on the underside or the top of the container (visible only under UV light, if required). Subsequently, the machine verifies the previously serialised bottle or vial labels.

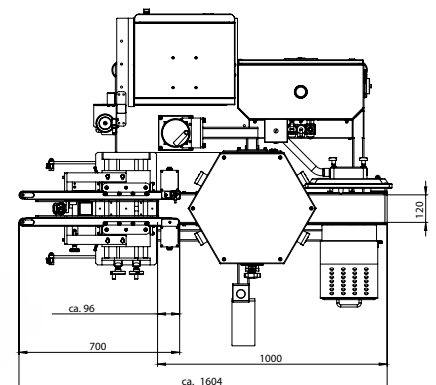
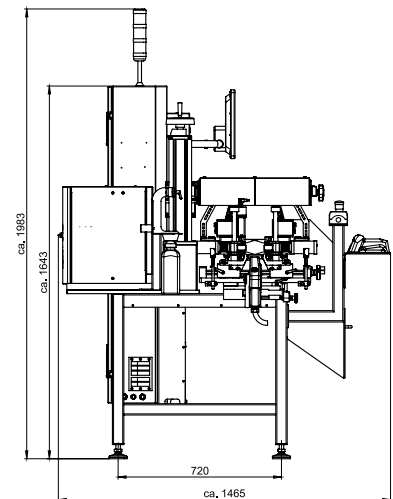
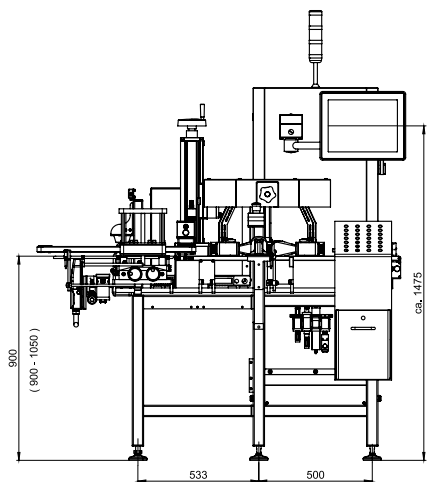
The auxiliary aggregation code is for the higher-level aggregation in bundles or cartons. Additionally the integrated 360° camera unit manages the all round inspection of cylindrical objects, for example, the optical control of the coding, layout, and plain text on vials or bottles. Multiple ultrafast cameras are used for the omnidirectional detection of the objects.

Coded containers with faulty labels or an incorrect auxiliary code are separately ejected from the product flow and stored in lockable containers.

ConfigureFast will quickly and easily configure all sub-components, like the printer and camera, from a single interface.



Other machine specifications  
→ Technical Data Sheet



All entries in mm | Drawing shows sample version



# RELIABLE 360° INSPECTION FOR SEMI-AUTOMATIC AGGREGATION

TQS CP-Bottle

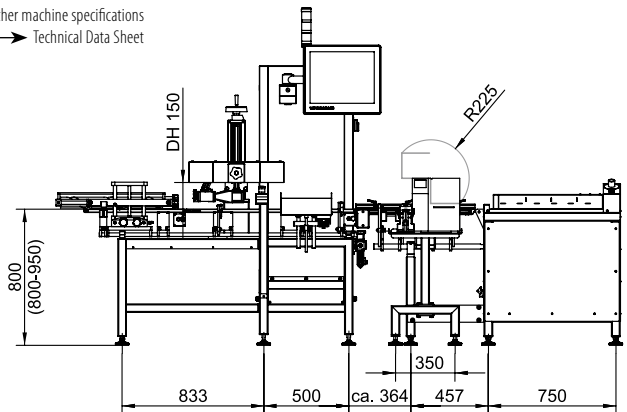
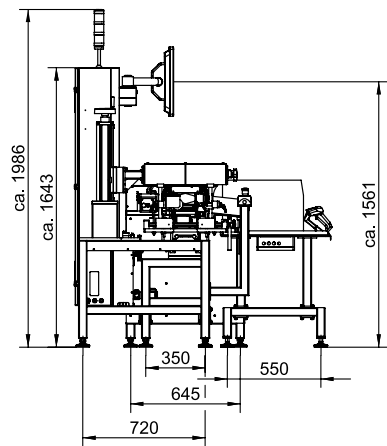
**TQS-CP-Bottle** is designed for the perfect integration in bottle or vial production lines. The system can be set up directly at the outlet of any conventional labeling machine to verify the previously serialised labels on individual cylindrical containers via an omnidirectional, 360° inspection. This is done by a 360° camera, which features a central adjustment unit to facilitate the tool free adjustment of all cameras to the respective diameter of the bottles.

Bottle-shaped products are transported to the machine via a conveyor screw. The codes of previously serialised products are identified in a 360 degree process. A non-readable or invalid serial number leads to its discharge. A fully automated grouping table facilitates placing the products into rows in preparation for packing or even aggregation to the next

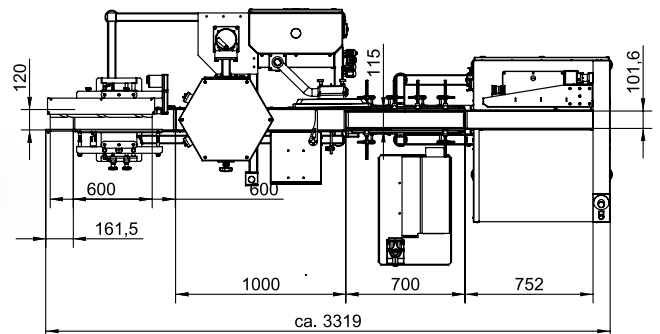
higher packaging level (for example, shipment carton). The grouping table does not require any separate setup. It is controlled from the TQS machine. Once the carton is full, the operator applies the automatically printed label to the shipment carton and verifies it with the handheld scanner.



Other machine specifications  
→ Technical Data Sheet



Transport direction →



All entries in mm | Drawing shows sample version

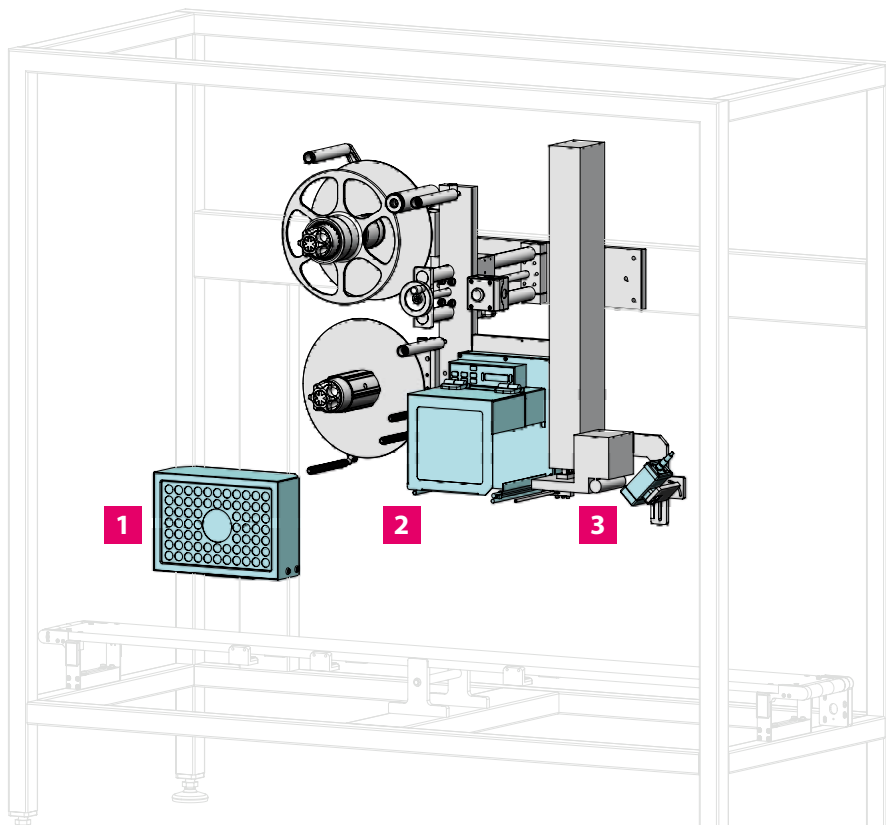
# OEM COMPONENTS: TQS FOR DIRECT INTEGRATION

## OEM KITS FOR MAXIMUM FLEXIBILITY

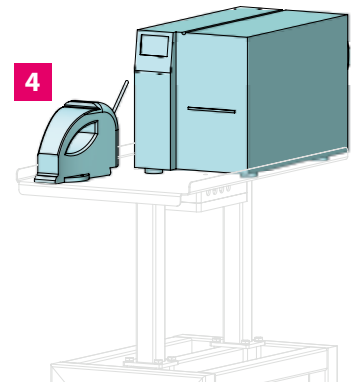
In addition to the independent machine components of the TQS series, we also supply components for the direct integration in packaging machines. These options modules are given the "OEM" designation. TQS-OEM Kits and their functional ranges correspond to those of the separate machines. Consequently, the TQS-SP-OEM for serialisation is integrated in the cartoner. Similarly, TQS-CP-OEM for fully automated aggregation of shipment cartons is placed directly in the end-packaging machine.

## SPACE SAVING INTEGRATION

The TQS integration variants are especially practical if the existing installation conditions do not offer adequate space. Both variants may also be used in mixed operations. That creates space for your other individual requirements. The integration of these components generally requires the cooperation of the equipment manufacturer because it always involves plant-specific installations.



Drawings and data sheets for the respective integration kits provided on request.



TQS-VIO3 camera for layer-by-layer reading of full surface data at case-packing level



Thermal transfer printer (TTO) for shipping carton labels



TQS-VIO S verifies shipment carton labels



Wireless handheld scanner incl. integrated control panel with industrial scale thermal transfer printer for labels

## RELIABLE EXPERT SERVICE, CUSTOMISED TO YOUR NEEDS

When you choose WIPOTEC-OCS as your system supplier, you have the benefit of top quality service modules that incorporate the vast experience of our weighing and inspection system experts. Whether a pure consulting service or specific line and product support throughout the product life cycle, we are your reliable partner.

Turn to us with your requirements. We would be pleased to discuss the scope and effort of individual services in more detail with you. Trust in our experience and reliability.

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- ☑ **REMOTE MAINTENANCE FIRST HAND (WITH APPROPRIATE HARDWARE) FOR URGENT JOBS**

\* On conclusion of a corresponding service agreement





# INNOVATIVE, HIGH-END INSPECTION SYSTEMS FOR BETTER IMPROVED EFFICIENCY AND PRODUCTIVITY



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