

HC

High-End
Applications



Competence in dynamic weighing.

Convincing performance for highest requirements.

HC checkweighers have been designed to meet the highest requirements of the modern, dynamic weighing technology. They offer an ideal platform mechanically as well as for control tasks for the realisation of complex weighing tasks. Solutions fit to meet highest requirements. The HC is a continuation of the product and operation philosophy known from the other checkweighers. At the same time it broadens the application possibilities considerably and completes our versatile product spectrum especially for high-end applications.

The improved especially sturdily constructed stainless steel tube base frame warrants for extremely high precision weighing results at high belt speeds i. e. high product performance. Customised solutions for different product geometrics and formats can be easily realised. Quick-snap latches on conveyors and belts facilitate the exchange without tools. A well engineered and wide spectrum of sorting devices (pushers, air blast pushers, flaps, flippers, etc.) is available to sort out products which are not legal for trade.

The following pages will give you an overview of the options.

Perfect harmony of components. Clever additional use for production automation.

The correct selection of components is an important factor for our reliable checkweighers. Our long lasting experience in the development and production of dynamic weighing technology forms the basis for the necessary interaction to achieve precise weighing results/measurements at high speeds.

Designed in accordance with GMP

Consequent transformation of the known GMP-requirements, e.g. tapered edges, covered cable ducts, easily cleanable surfaces, etc. make the HC ideally suitable for the pharmaceutical and food production.

Solid base frame

The robust base frame made from welded stainless steel tube, guarantees, together with the high integration weight, for a firm stand and absorbs any disturbing vibrations (e.g. fork lift operation, and many more).

Patented transport belts

The light-weight, patented transport belts and the carefully tuned drive concept ensure a smooth operation as well as a reliable and safe transport of the goods. Additionally, the transport system is complemented by a variety of (e.g. singling screws, etc.).

Precision Weigh Cells

The weigh cells were tailored for the special requirements of the dynamic high-performance weighing tasks and have been tuned for these applications. Highest speeds, performance as well as precision are achieved.

Touch screen

Remote operation

Printer/smartfile

Stainless steel housing

Weighing conveyor

Infeed/outfeed conveyor

Rejection device

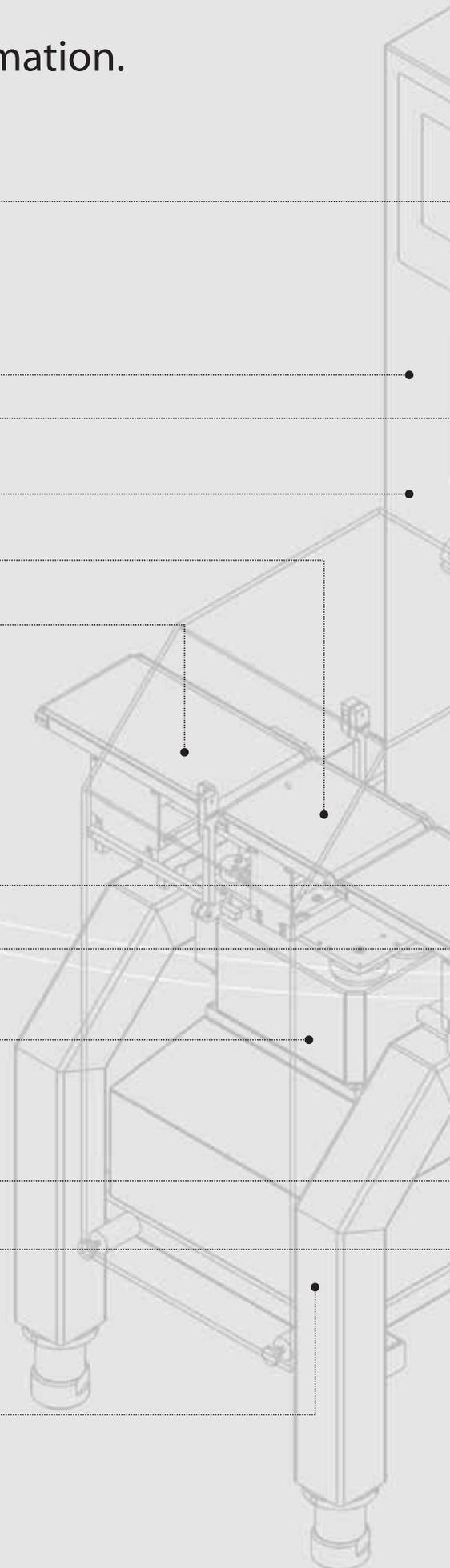
Product flow control

Precision Weigh Cell

Infeed/outfeed conveyor

Low maintenance servomotor/
sequential drive

Massive base frame





Colour-TFT

The HC is equipped with a large, high-resolution TFT touch screen. The brilliant and rich in contrast display is optionally available in colour.

Remote-operation

HC checkweighers can be operated fully remote via an Ethernet connection from a second operating terminal (optional).

Product Flow Control (PFC)

The option product flow control monitors the product chain and sounds an alarm upon:

- wrongful entry of an additional product into the production chain
- registered products were removed from the product chain
- a product not legal for trade was not rejected (rejection counter control in pass-through channels)

Servo drive

The HC motor management offers as a standard the stepless control of the individual motors. Modifications of transport speeds of adjoining machines are synchronised in consideration of the metrological accuracies as well as the automatic adaption of the sorting instant.

Open flap control

The optional feature flap control checks for the correct closure of packages. Faulty packages are detected and rejected by means of a sorting device. Packages which are not closed correctly are shown separately in the production statistics.

The closure control can be easily adjusted to fit individual package sizes by position indicators.

Sensor control

Continuous monitoring of all connected sensors by the checkweigher (optional feature). In case of a failure of a sensor (e. g. caused by a broken cable) an alarm is triggered automatically. The alarm is displayed on screen with the indication of the respective sensor.

Floating Mean Value Control (FMVC)

The optional feature FMVC enables you to automatically adjust sorting limits in case of long-wave weight deviations of packages. The sorting limits and the tolerance zones are adjusted according to the calculated floating mean value which has been defined by the user in the current production. The FMVC allows you to choose tight sorting limits under the simultaneous consideration of weight deviations of packages within the production process.

Perfectly tailored to your requirements. The intelligent and modular

PRODUCTION

Standard equipment

- ➔ Reliable checkweigher for max. speed and precision:
 - 100 % production monitoring according to national legal for trade requirements e.g. E-merk
 - rejection of products with weight shortages at high selectivity
- Production documentation in various log books
- Total and/or intermediate statistics selectable by piece, hours or minutes
- Sturdy, massive stainless steel tube frame and complete unit encased in stainless steel housing with infeed-weighing- and outfeed conveyors as well as sorting device
- Certified for several countries
- Legal for trade
- Very high performance
- Spot check function with single output
- Various weighing ranges
- Various weight ranges for classing
- Memory for 100 product parameters
- Simple, menu-driven operation incl. icons via touch screen
- Large weight display available
- Menu language selectable¹⁾
- Comprehensive, menu-driven service and diagnostics functions
- Online help function
- 4 password-protected user levels
- Various working height ranges
- Simple exchange of belts i. e. conveyors without using tools
- Maintenance-free servo drives
- Flexible integration into production lines
- Line synchronisation with isolated I/O-signals
 - automatic (input)
 - bringer release (output)
 - error 1 (output)
- Variable belt widths and belt lengths in grid dimensions

Optional features for pharmaceutical industry

- ➔ Air pressure control
- Rejection counter control
- Product flow control (PFC)
- Manual re-check
- User access administration in compliance with 21CFR Part 11
- Extended event log (audit trail, electronic records) in compliance with 21CFR Part 11
- Data backup/restore
- Comprehensive qualification documentation (IQ, OQ)
- Sensor control
- Batch program package

Optional features for control engineering

- ➔ Mean value control for one or more filling heads
- Filling head monitoring with trend meter and individual statistics
- Floating MVC, ASMIN

Optional features weighing technology/ applications

- ➔ Dead load adjusted interference compensation
- Active vibration compensation
- Full weighing belt cover (available with and without lid)
- Tare-gross weighing systems



¹⁾ subject to availability, special languages on demand



Electrical options

- ➔ Colour TFT display
- Memory expansion product parameter memory
- Switching of articles via data interface or digital contacts
- Free standing operation terminal
- Alpha-Numerical remote display
- Control of additional transport drives; control of various motors (IMOT or DC/AC drives)
- Classifying-/sorting signal lamp (threefold)
- Signal lamp (basic)
- Acoustic signal (external)
- Remote maintenance by modem or remote control
- Emergency stop function
- Extension module for digital I/O-signals
- Product jam sensors
- Sequential drive

Mechanical options

- ➔ Various application-related transport systems (e. g. NT17, NT46, VA30WA, SL60/SL80)
- Base frame in Special heights available
- Travelling design (with transport rollers that can be hydraulically lowered)
- Belt for metal detector
- Combination base frame for e. g. metal detector
- Separately installed conveyor belts
- Knife-blade flange (with rollers)
- Transfer sheets
- Multi-sorting
- Rejection bin (lockable) with filling height monitor
- Centralised operation for multi-lane systems

Product handling options

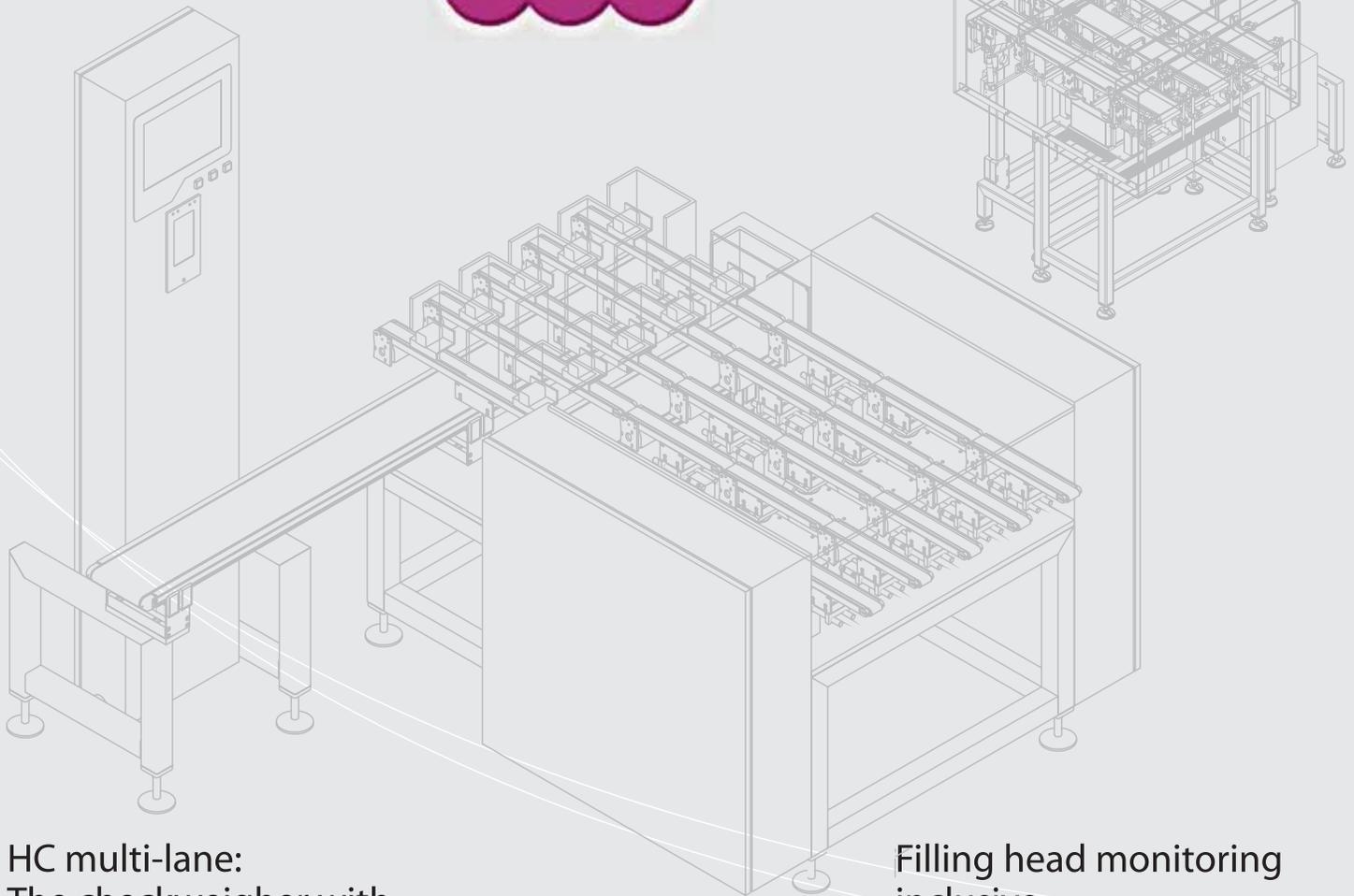
- ➔ Infeed screw for the singling and allocation of products
- Additional product monitoring, e. g.:
 - sloaping position control
 - package open flap control
 - metal control
 - optical check by camera
 - lid control
- High-speed rejection systems
- Lateral guide rails, lateral guide acceleration belts (overhead conveyors), vertical and horizontal clearance variable
- Various rejection devices (air blast nozzle, pneumatic pusher, flap, sorting gate, etc.)

Data management options

- ➔ APS statistics package in accordance with national legal for trade requirements-conformity, optionally with:
 - integrated thermal printer
 - integrated smartfile-system
 - external Centronics-printer, provided by customer
- Prepared for network integration:
 - Single nominal weight transfer via interface: RS 232c, RS 422, RS 485, TTY (current loop)
 - Ethernet (TCP/IP)
 - Profibus DP
 - XML Data interface
 - Integration in data networks of other scale manufacturers
 - ComScale NT

Multi-lane systems weighing technology in the narrowest spaces. Application oriented and custom fit.

Multi-lane



HC multi-lane: The checkweigher with 1001 weighing profits

You think multi-lane. Your filling and/or packaging machine is a multi-line system. We do not see a reason why your checkweigher should be an exception.

The HC enables you to operate your system in two, three, five or x-number of lanes.

The vast selection of our electro-dynamic force restoration weigh cells offer you the necessary weighing technology.

Our highly trained engineers and application specialists combine both components to build your customised system.

The advantages are obvious: You will receive a compact, space-saving weighing system without additional sorting or allocation devices. The operation of the complete system or individual weighing lane is operated by a central control. Production data and statistics are centrally recorded, processed and evaluated.

Filling head monitoring inclusive

The comprehensive evaluation and control functionality of the HC enables you to monitor the complete or individual viewing of the filling heads. Irregularities in product consistency, caused by changes in temperature, fluctuations in humidity or variations in the operation of the filling heads are recognized and individually adjusted.

The tendency characteristics can be individually displayed for each filling head. You will be able to monitor each individual control step. In addition, the trend meter offers a compact overview on the filling heads with all essential key performance indicators.

Combination of various control and coding systems. Versatility for practice oriented solutions.

HC

In addition to the weight and/or completeness check as well as the package control itself the HC can be expanded to a **Total Quality Check and Coding Center (TQCC)**.

For the coding of each package the HC can be equipped with a laser coding system. During the coding process, each package is marked with (an individual) quality seal and is assigned to a certain production batch.

For the optical verification of the coding system marking, an OCR camera system can be integrated into the TQCC.

Incorrectly coded packages are detected by the camera and will be safely rejected by the checkweigher.

During the course of the 100 per cent check the packages can be sorted, depending on the results, into different containers.

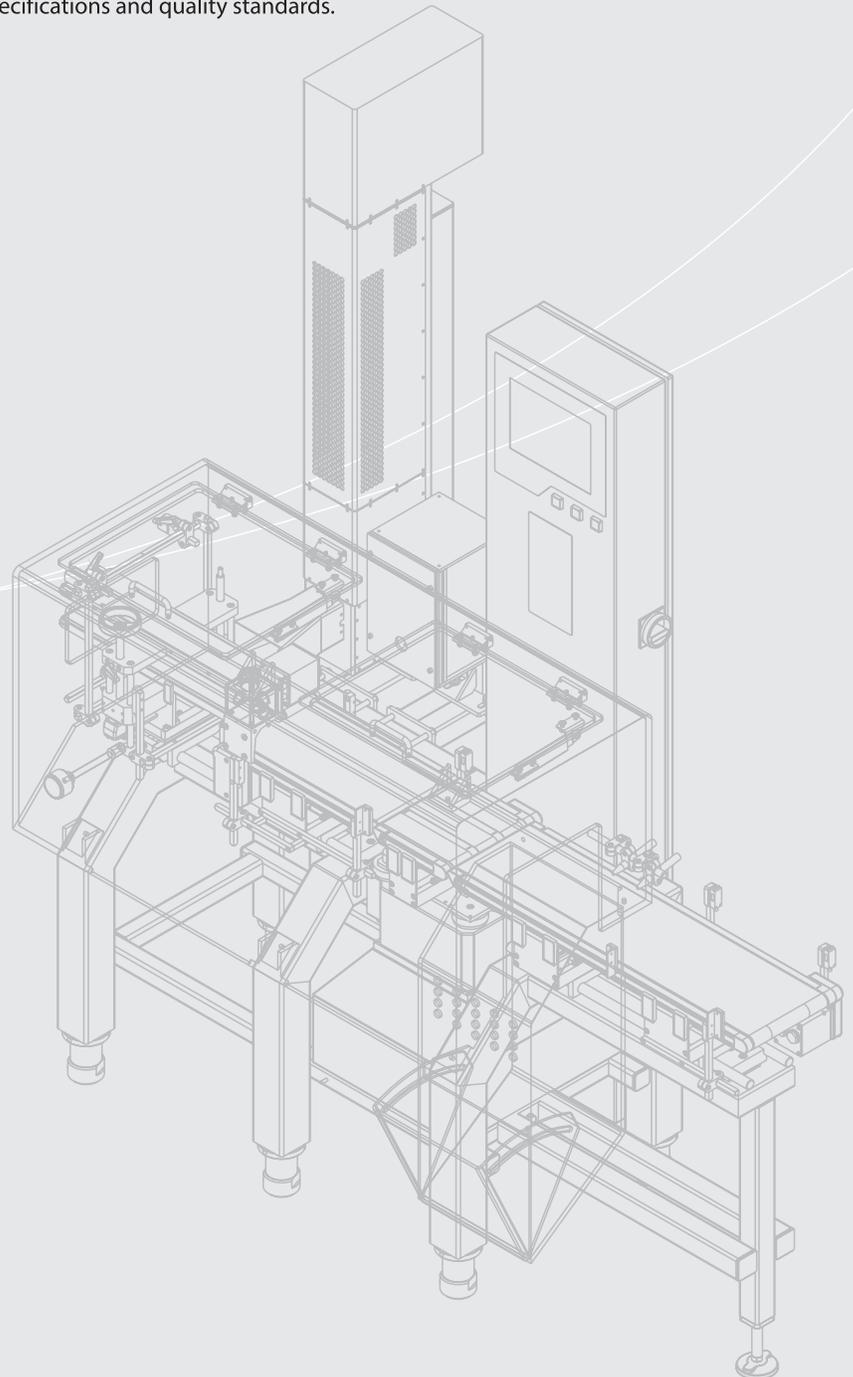
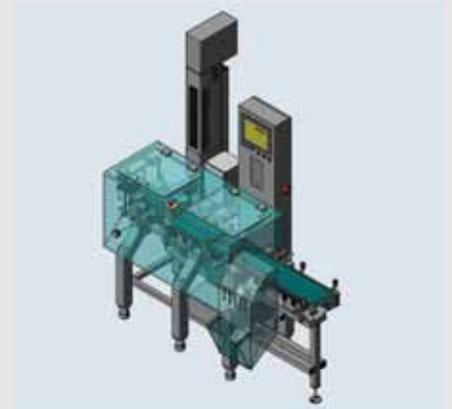
Packages which comply with the set quality standards are automatically forwarded to the adjoining machine (e. g. centralised packaging machine or cartoner).

The product chain within the TQCC is monitored contiguous by the product flow control (PFC).

The guide lines and stipulations in compliance with 21CFR Part 11 are observed and automatically registered.

The HC checkweigher family is prepared to enable a comprehensive and easy qualification and validation.

The TQCC at the end of a packaging line warrants for a 100 per cent control of all packages produced and ensures that all legal for trade packages comply with the set specifications and quality standards.



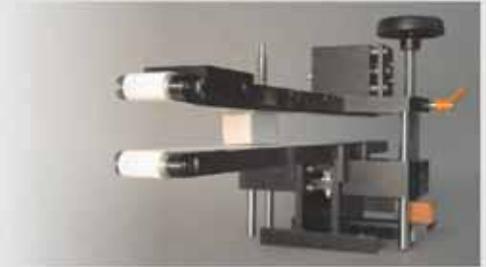
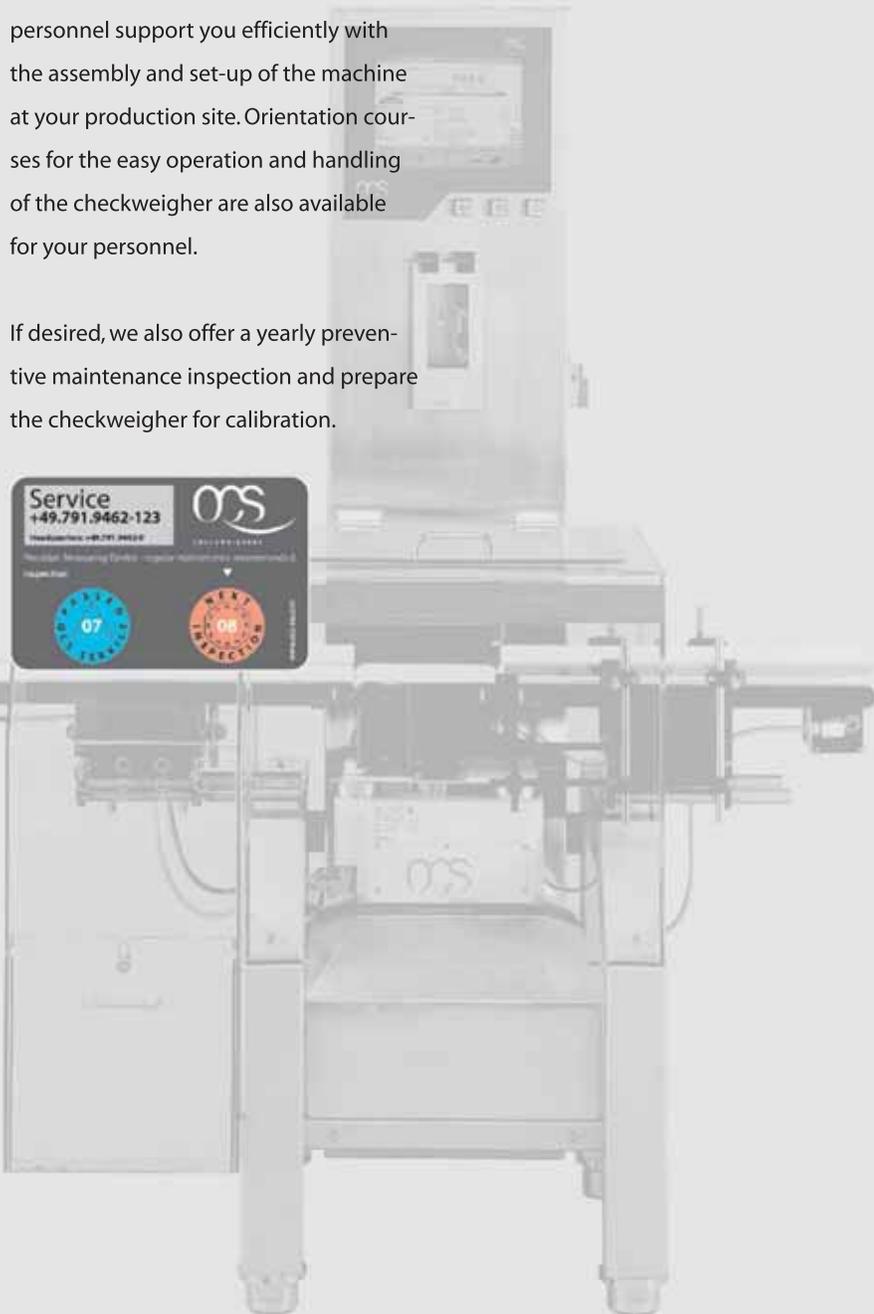
Flexible answers to meet your requirements

The basic model of the HC covers an extraordinary wide and versatile spectrum of applications. This versatility is supplemented by the selectable options.

Our sales department will be glad to offer you a checkweigher according to your requirements and specifications. We will also assist you in obtaining the ideal configuration of your checkweigher.

Our trained qualified staff and service personnel support you efficiently with the assembly and set-up of the machine at your production site. Orientation courses for the easy operation and handling of the checkweigher are also available for your personnel.

If desired, we also offer a yearly preventive maintenance inspection and prepare the checkweigher for calibration.



Overhead conveyor



Dosing and/or delay screws



Sorting gate



Closable catch container
Optional level check

HC-IS

HC-IS-D

This version was especially designed for cylindrical products with a minimal standing surface (e.g. aerosol cans) and and easy exchange of the indexwheel.



As HC-IS-Ex in an explosion-proof and ATEX compliant version is available.

HC-MDi

Space-saving machine combination consisting of metal detector and checkweigher with fully integrated operation of both units into the HC.



HC-Ex



ATEX compliant checkweigher for the complete integration of weighing module and operating terminal in explosive zones 1 and 2.



Separated from the operating terminal, the weighing module can be installed as stand alone unit in the hazardous area.

HC-PD

This version of the HC was designed for the dynamic milligram weight control at highest resolutions. Transport system with push-down technology.



For complex control tasks the HC checkweigher can be utilised for standard EC-M applications as well.

OCS checkweighers cover all areas of weighing technology and provide solutions for every task in the industrial sector

HC-Series

High-performance checkweighers for high-end applications



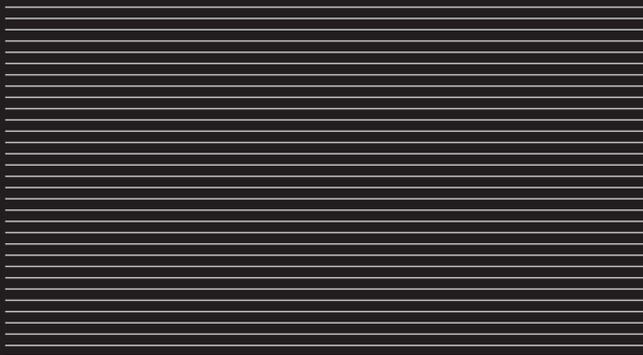
EC-M-Series

Standard checkweighers for mid-range applications



EC-S-MB

Entry level checkweighers for standard applications



Close to you with our worldwide service and sales network

A Wipotec Brand



CHECKWEIGHERS

Subject to technical modifications.