

HH Harro Höfliger

[ALL YOU NEED]



You have special
REQUIREMENTS...

...we have
the IDEAS...

Progress in capsule filling And checking systems

- ▶ **Overview of current machine program**
- ▶ **“High Lights” from capsule filling machines for solids & liquids**
- ▶ **Checking systems for capsule for IPC and 100% checks**

Capsule & Tablet Technology - Product Overview

CAPSULE &
TABLET
TECHNOLOGY

Technology
overview

Modu-C

Accura-C

- **CAPSULE FILLING MACHINE**

- **CAPSULE / TABLET WEIGHING MACHINES**



MODU-C



OMNicontrol



ACCURA-C



KPG 2000

Capsule & Tablet Technology Product Family – Modu-C

CAPSULE &
TABLET
TECHNOLOGY

Technology
overview

Modu-C

- ▶ product family
- low speed
- functions
- mid speed
- functions
- dosing systems
- technical data

Accura-C



Low Speed

25.000 C/h



Mid Speed

100.000 C/h

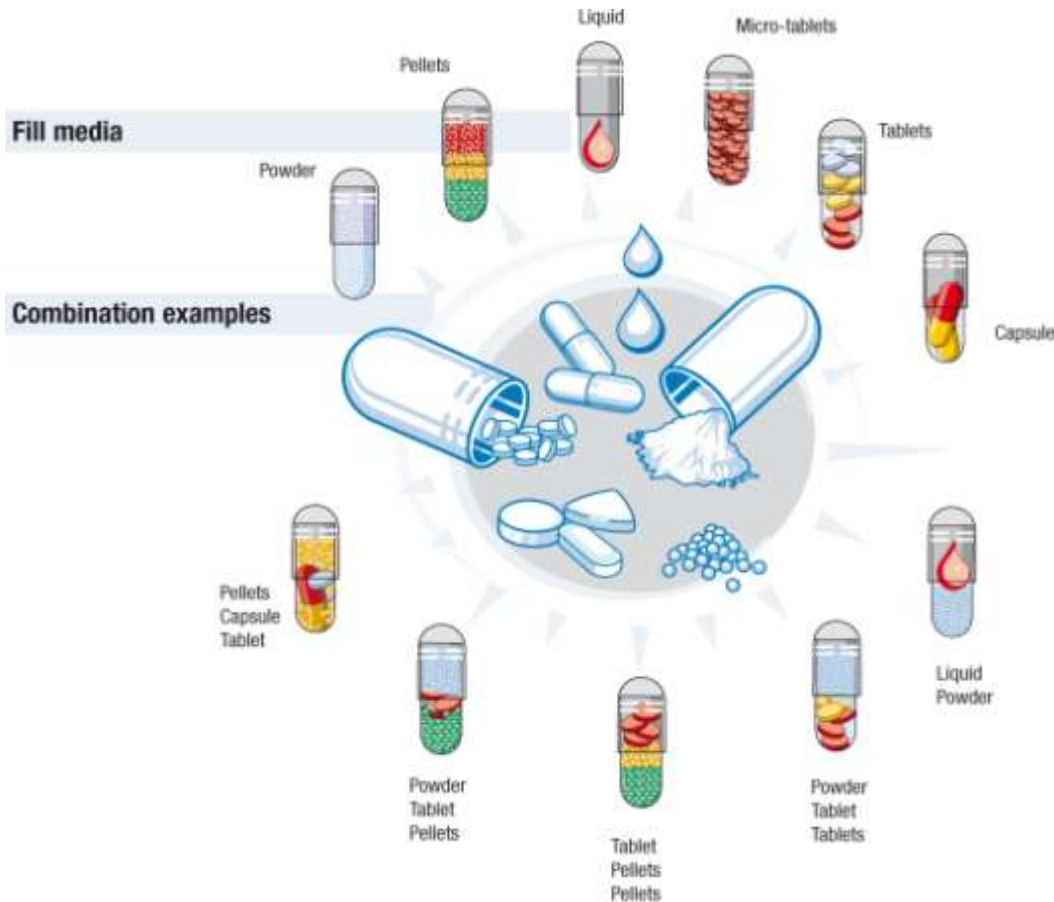


High Speed

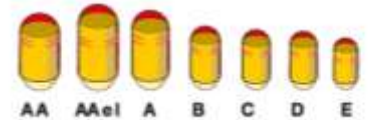
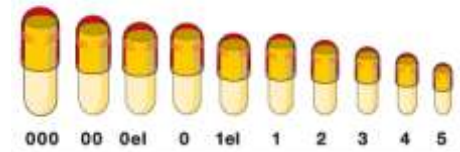
200.000 C/h



- ▶ **Modu-C – Modular capsule filling machine:**
 - Most flexible machine in handling different products.



Capsule sizes



Capsule & Tablet Technology

Modu-C Low Speed – Special Features

▶ **Modu-C – Modular capsule filling machine:**

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product family

▶ low speed

functions

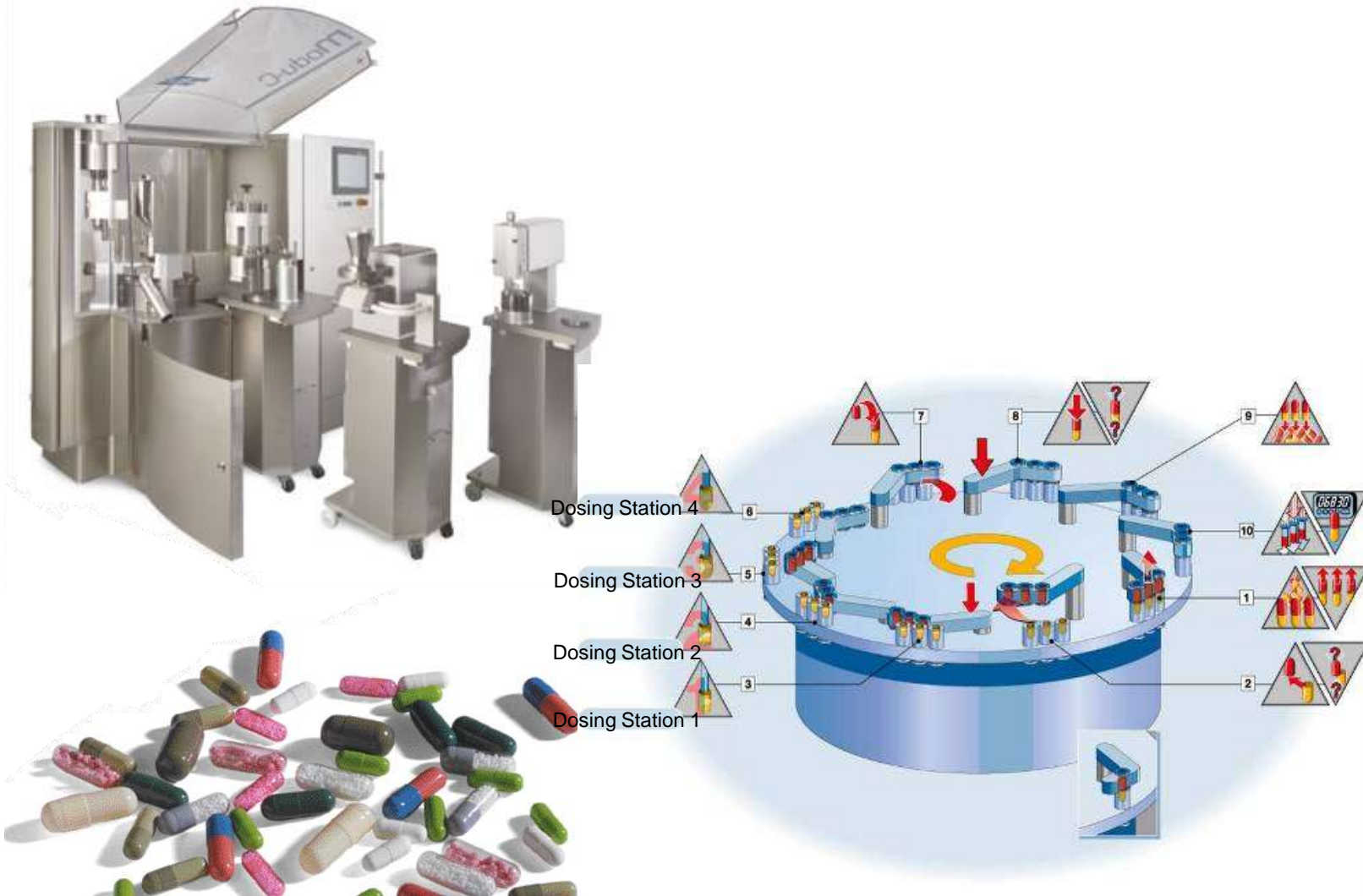
mid speed

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Accura-C



Capsule & Tablet Technology

Modu-C Low Speed – Powder dosing systems

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Drum Filler with vacuum



Tamping Pin with compaction



Dosator with vacuum/compaction

Technical Data

dosing volume	1 mm ³ – 100 mm ³	50 mm ³ – 1000 mm ³	20 mm ³ – 1000 mm ³
particle size	from 1 µm	from 80 - 150 µm	from 80 - 150 µm
characteristics	cohesive powders/API	free-flowing / abrasive	Carr's index 15 - 25
cycles / min.	100	up to 140	up to 75



Capsule & Tablet Technology

Modu-C Low Speed – Micro Vipe

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Accura-C

- ▶ Functional principle:
Vibrating capillary dosing to target weight.
Controlled by either:

- weight cell
- mass sensor (Visio AMV)



Capsule & Tablet Technology

Modu-C Low Speed – Micro Tablet Station

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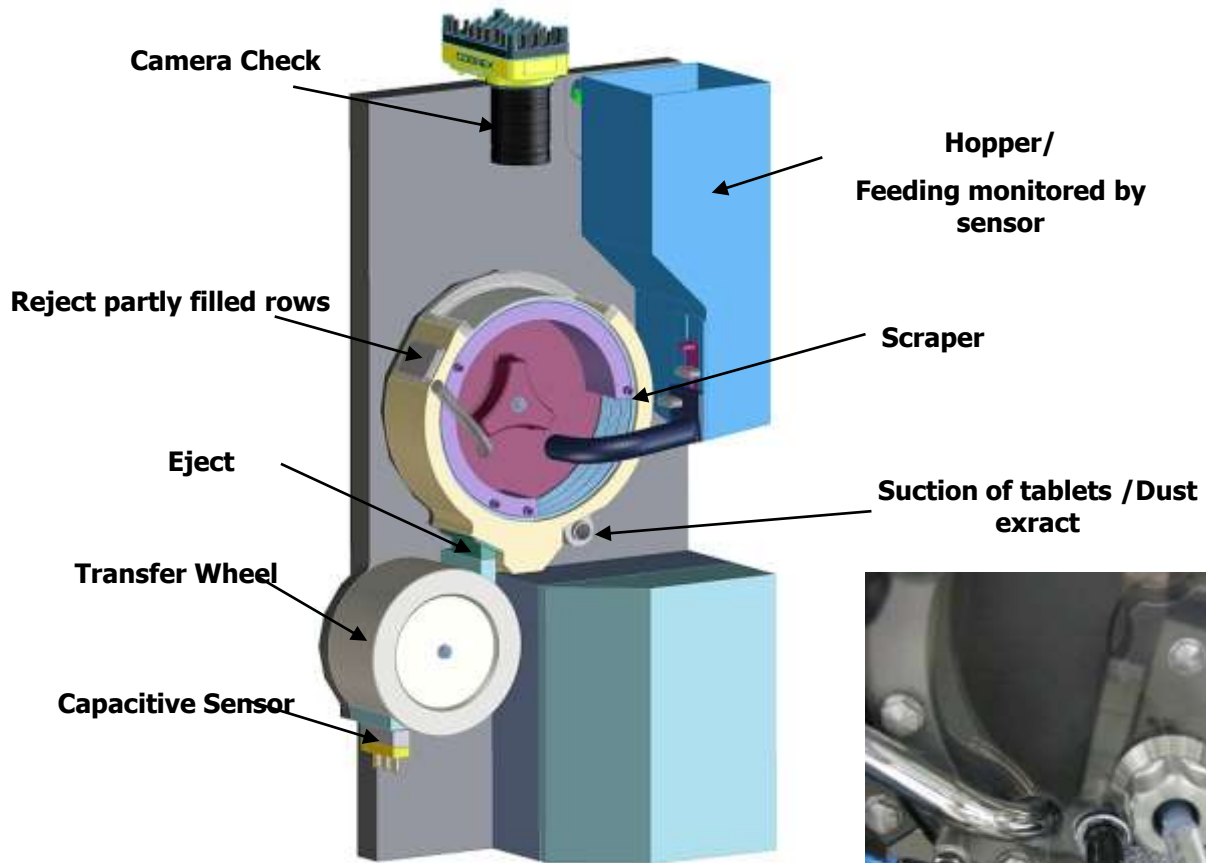
mid speed

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Accura-C



Capsule & Tablet Technology

Modu-C Low Speed – Format Free Tablet Station

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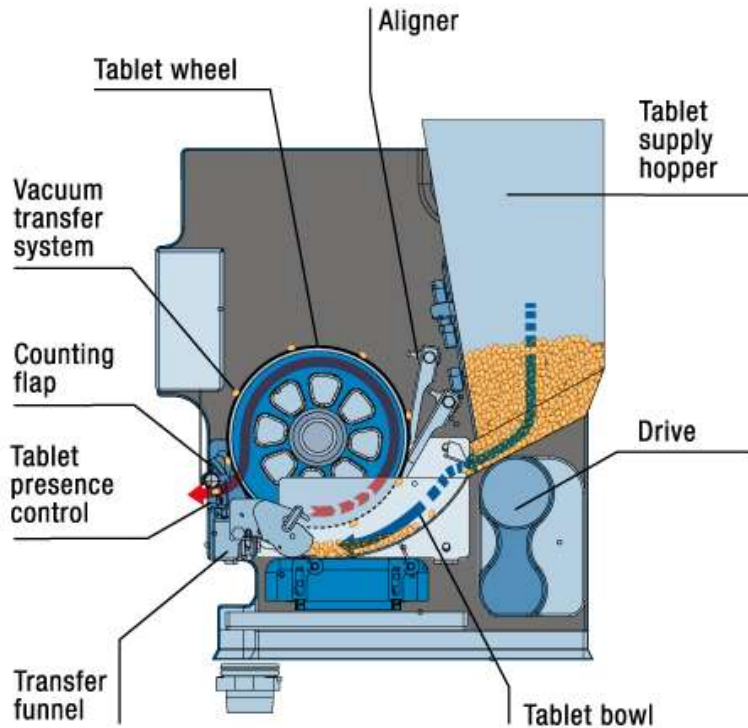
mid speed

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technical data

Accura-C



Technical Data

size	3 mm – 10 mm
characteristics	all kind off tablets
cycles / min.	up to 65 maximal 80

Capsule & Tablet Technology

Modu-C Low Speed – Checking System

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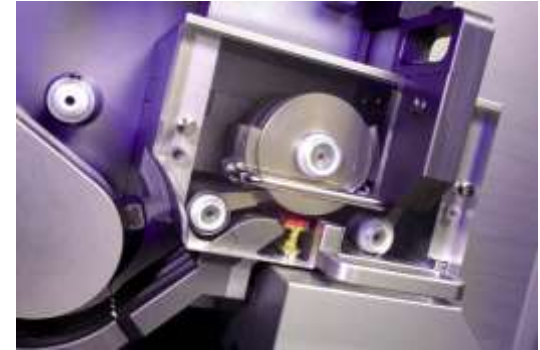
functions

dosing systems

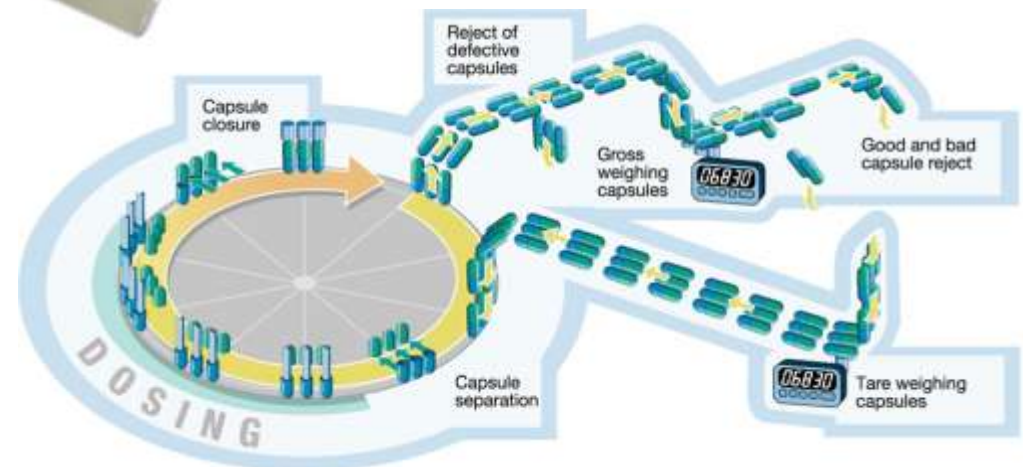
technical data

Accura-C

- ▶ **Modu-C – 100 % verification module:**



- **100% gross weight**
- **100% tare/gross weight**



Capsule & Tablet Technology

Modu-C Low Speed – Checking System

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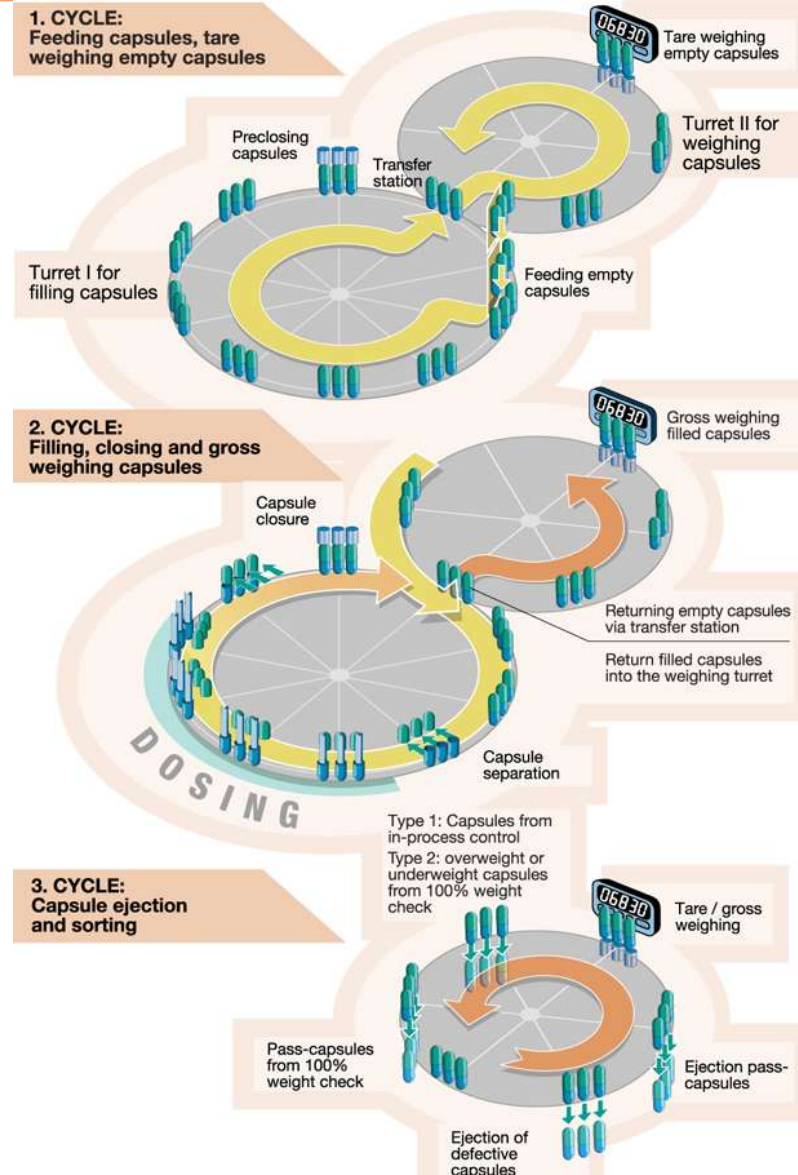
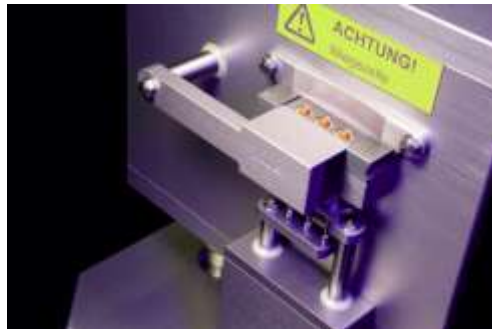
technical data

Accura-C

Flexible checking device:



- random sampling check:
 - gross weight
 - tare/gross weight
- 100% weight and tare/gross weight check



▶ **Modu-C – Modular capsule filling machine:**

- Output: 100.000C/h
- Operator protection included
- Dosing systems based on trolleys
- 3 Different powder dosing systems
- Liquid filling with sealing possibility
- Micro dosing of powder
- 2x powder filling



▶ **Modu-C – Modular capsule filling machine:**

- For all kind of powder
- For pellets
- For tablets
- For liquids
- for there combinations



▶ **Modu-C – Modular capsule filling machine:**

- For filling inhaler capsules
- Net Mass determination of powder
- Operator Protection for toxic or high potent drugs.



▶ Technical Specifications:

- 3 different Types available
- Standard
- Dust reduced
- Dust free (operator protection)



Accura-C – Capsule Weighing Machine

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▶ Accura-C – Capsule Checking System:

- Output up to 180.000 Capsules/h
- Weighing accuracy +/-1 mg
- Available in 12 or 6 lane execution
- Reject of defect and capsule different sizes
- Feedback loop to ModuC
- Empty capsules check
- Guided transfer of faulty capsule into waste bin



▶ Accura-C – Operating Chart



- 1 Capsule supply hopper
- 2 Gate for blocking the supply hopper
- 3 Movable capsule hopper
- 4 Sluicing out defective capsules
- 5 Container for defective capsules
- 6 Calibration rail
- 7 Purging nozzle for defective capsules
- 8 Min. accumulation sensor
- 9 Capsule feed channel
- 10 Single-track blocking
- 11 Capsule transfer into capsule transfer wheel
- 12 Capsule transfer wheel
- 13 Weighing assembly with weighing cells
- 14 Transfer wheel for single capsule ejection of pass or fail capsules
- 15 Chute for pass capsules
- 16 Pass capsule container
- 17 Fail capsule container

Omnicontrol – Format Free Capsule Weighing Machine

CAPSULE &
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Modu-C

Accura-C

▶ functions
technical data

▶ **Omnicontrol – Format free Capsule and tablet Checking System:**

- None size parts for capsule or tables
- Output up to 32.500 or 65.000 Capsules/h
- Weighing accuracy +/-1 mg
- Available in 12 or 6 lane execution
- Gliding Window of measurement
- Feedback loop to ModuC
- Empty capsules check
- Guided transfer of faulty capsule into bin



Omnicontrol – Capsule Weighing Machine

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rotating vacuum wheel

rotating pocket
wheel

Product hopper

Transfer chute

weighing cell
star wheel

Deflector plate

Container for bad
products

Container for
good products



▶ **Omnicontrol light IPC – Universal Capsule Checking System:**

- To be used only for IPC checks
- Output up to 0,5% up to 2% of ModuC LS
- Fits to any capsule filling machines and tablet presses
- Weighing accuracy +/- 2 mg
- Format free for capsule and all kind of tablets
- Feedback loop to ModuC
- Starts and runs even in a loose connection

