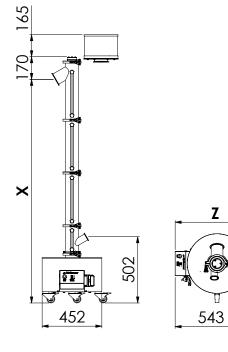
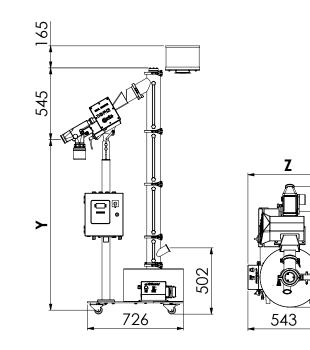
KCP Series





KCP10		800	1200	1600	2000
Weight	kg	55	60	65	70
Outlet height X	mm	1295	1695	2095	2495
Overall widthZ	mm	545	605	665	725
Ø Capsule inlet/outlet	TC	2.0" / 3.5"			
Suction port	TC		2.0"		
KCP15		800	1200	1600	2000
Weight*	kg	105	120	135	150
Outlet height Y*	mm	920	1320	1720	2120
Overall width Z	mm	545	605	665	725
Ø Capsule inlet/outlet	TC/mm	2.0"/66*			
Suction port	TC		2∩"		

Conveying Capacity (all conveying ranges)					
Capsule no. 4	capsules / hr.	300'000			
Capsule no. 3	capsules / hr.	300'000			
Capsule no. 2	capsules / hr.	300'000			
Capsule no. 1	capsules / hr.	300'000			
Capsule no. 0	capsules / hr.	250'000			
Capsule no. 00	capsules / hr.	250'000			

Power supply	110 V, 50 / 60 Hz – 230 V, 50 / 60 Hz
Maximum current	4 - 2 A
Compressed air (p = 0.5 - 1 bar)	50 - 100 l/mir
Air extraction (pu = 10 - 20 mbar)	100 - 150 m³/h
Noise emission at 1 m distance	< 68 dB(A)
Protection rating, drive unit and con	troller IP54
Explosion protection ATEX 94/9/EG	II 2D/- Db 140 °C
OEL Level, with filter	ОЕВ4 (1 µg/m³ bis < 10 µg/m³)
Filter cartridge	HEPA Klasse H14
Material rotary brush	FDA zugelassenes Polyamid (Nylon)

KCP15 Metal detector type	CEIA E (100x40)	Lock PH IQ4 (95x38)	Safeline Tablex 2L (95x38)
Ferrous (Fe):	0.30 mm	0.30 mm	0.30 mm
Non-Ferrous (70Cu30Zn):	0.35 mm	0.35 mm	0.40 mm
Stainless Steel (AISI316):	0.50 mm	0.50 mm	0.50 mm





# KRÄMER, THE SWISS ORIGINAL SINCE 1975

Krämer AG specializes in dedusting, conveying, capsule polishing and handling equipment for the pharmaceutical, nutraceutical and vitamin industries. Since Krämer's invention of the first vertical vibratory tablet deduster more than 45 years ago, the company has developed innovative equipment for customer-specific applications, and produced many industry firsts which have now become standards for every Krämer machine. In cooperation with tablet press, capsule filling and packaging line manufacturers, we have developed machines to address increasingly potent drug products which require dust tight (DT), containment (C), and high containment (HC) for certifiable operator protection. Our KD70DT and WIP Series is SMEPAC certified and meets the required ATEX guidelines. For standard applications we offer our KD60 Series, which also has our patented drive unit and can be equipped with a metal detector from various manufacturers.

More than 10'000 Krämer dedusters and capsule polishers ensure a smooth daily operation in pharmaceutical plants. Multinational to regional manufacturers of tablets and capsules appreciate the quality and reliability of our products.

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Truly Swiss Made



**KCP** Series





# **EVERYTHING AT A GLANCE**

#### **METAL DETECTION**



#### EASY ASSEMBLY AND DISASSEMBLY



- No tools are needed to assemble or disassemble the machine for cleaning
- All product contact surfaces are AISI 316L stainless steel and FDA approved materials
- Minimal number of parts to be cleaned. Each individual part weight, and size is minimal for ease of handling, which assures quick and effortless cleaning



- The KCP Series capsule polishers have been independently tested and certified to meet OEB 3 and OEB 4 containment levels in accordance with ISPE – SMEPAC requirements as well as the EC Machinery Directive 2006/42/EC and Directive 94/9/EC (ATEX-95)
- Optional HEPA filters H14 are available to meet both certifications



- EEE\*
- Compact combination unit of capsule polisher and metal detector from Ceia, Loma/ Lock or Safeline
- All metal detectors offer best in class calibrated detection levels for the detection of ferrous (FE), non-ferrous (NFE) and stainless steel (SS) particles in capsules
- Total electrical integration with the capsule polisher for transmitting metal detector signals to the capsule filler

CONNECTION PORTS

#### DRIVE SYSTEM



- The drive features a state of the art geared motor with a special designed shaft seal that prevents dust from entering the drive unit
- The special cGMP design allows for easy cleaning and maintenance
- With a compact design and minimal footprint, the KCP Series provides economical upward conveying in four heights



- With the use of a hose, or optional inlet adapters, the capsule polisher is easily connected to numerous capsule filler configurations
   The inlet can be rotated 360°
- The inlet can be rotated 360° independent of the outlet
   Targeted vacuum dust
- extraction on each module utilizes a manifold for balanced dust collection.

° Krämer

#### **BRUSH DESIGN**



- The rotational spiral brush designed specifically for capsule applications polishes gently and removes excess dust
- Unique stepless design between brush modules, minimizes product jams and guarantees continuous product conveying
- Every brush module can be marked in order to keep brushes product dedicated if needed

#### **OPERATOR INTERFACE**



- The KCP10 Series utilizes a simple frequency controller with two conveying speeds
   The quick connect plug
- allows for use of preassembled cables with power supply as well as signal wire options for communication to upstream equipment such as capsule fillers

#### • Available in conveying heights from 800 to 2000 mm in 400 mm increments

- Upward conveying of capsules sizes
  4 to 00 with two conveying speeds
  Designed according to cGMP
- specifications
- Lowest noise level < 68 dB
- Compact combination of capsule polisher and metal detector for minimal footprint
- Flexible application thanks to 360° rotation freedom of capsule inlet and outlet (right or left of capsule filler)

MAIN FEATURES

- Improved dedusting and polishing capabilities thanks to targeted vacuum dust extraction on each module
  Vibration-free housing thanks to precise drive unit for trouble-free combination with metal detector
  Unique stepless design between
- brush modules and rotational spiral

brush designed specifically for capsule applications polishes gently and removes excess dust • Classification: Atex Zone II 2D/-Db 140 °C

- · Certification: OEB4
- (1  $\mu$ g/m<sup>3</sup> to < 10  $\mu$ g/m<sup>3</sup>) acc. SMEPAC with optional HEPA filter H14
- Easy assembly and disassembly,
- no tools are needed
- Easy cleaning

## AVAILABLE VERSIONS OF THE KCP SERIES



**CAPSULE POLISHER** 



KCP15

CAPSULE POLISHER METAL DETECTOR

### **AVAILABLE OPTIONS**



#### **KV2010 DIVERTER**

nanual 2-way dust tight diverte used for continuous filling of containers with capsules



#### KCS10 SORTER

in-line empty capsule sorter for removal of empty and broken capsules



#### **KT2010 MD TESTER**

insertion device for metal detector test tablets without breaking containment (C)