

## **CONTRAPLEX PIN MILL**

Enhanced for optimum grinding results.





Discover the benefits of the latest generation of Contraplex pin mills.

- >>> INTERNATIONAL STANDARDS IN THE FIELD OF FOOD SAFETY
- >>> ENERGY-EFFICIENT PRODUCTION
- >>> EUROPEAN SAFETY GUIDELINES
- >> 100 % MADE IN GERMANY

# A NEW DIMENSION IN GRINDING QUALITY

Experience the latest generation of Contraplex pin mills CW II.

Hosokawa Alpine CW-series CONTRAPLEX® pin mills have always guaranteed finest grinding results. Now we have further refined this classic in collaboration with our customers. The result: an optimised machine concept full of technical highlights and innovative features. The current versions CW 250 II and CW 400 II always put you one step ahead of competitors. Find out more.

#### **TECHNICAL HIGHLIGHTS**

#### **CLEVERLY DESIGNED CAST HOUSING**

- optimum grinding chamber accessibility
- > polished infeed with larger minimal cross-section
- > low-porosity cast housing design
- pressure shock-resistant (0.5 bar overpressure)
- > no dead spaces in the purge air system
- aerodynamically optimised shape

#### INNOVATIVE MILL DRIVE

- cold-protected bearing for longer service lives
- > new, gearless drive
- > relative speed of the outermost pin rows up to 240 m/sec.
- > same motorisation and speed ranges on door and housing side
- > easy gap adjustment via door-side bearing

#### **FLEXIBLE OPTIONS**

- > suitable for belt or direct drive
- > can be operated with a deflector cone or with free-standing pin discs
- > components in contact with the product can be polished to Ra = 0.8







## **PERFECTED TO SUIT YOUR WISHES**



#### > NEW DRIVES

The new, gearless drives avoid any possible contamination in the production area.



#### > INCREASED ENERGY EFFICIENCY

The revised drive concept improves energy efficiency (kWh/kg product) by at least 10%.



#### > FINER GRINDING

Higher speeds allow better deagglomeration and hence finest results.



#### > EASIER CLEANING & MAINTENANCE

New door design for easy access to the grinding area for all maintenance and cleaning work.



#### > LONGER SERVICE LIVES

The optimised product infeed protects the bearings during cold grinding.



#### > PERSONNEL & PLANT PROTECTION

The cast housing is of explosion-proof and pressure shock-resistant design. Personnel and plant are safe and protected against dust explosions.

### **TECHNICAL DATA**

	CW 250 II	CW 400 II
Power factor <sup>1</sup> (F)	1.3	2.5
Drive - housing (kW)	15	30
Speed – housing max. (rpm)	9850	6650
Drive - door (kW)	15	30
Speed – door max. (rpm)	9850	6650
Relative speed (m/sec)	240	240
Purge air <sup>2</sup> (m³/h)	300 / (0)	480 / (0)
Total air-flow rate <sup>2</sup> (m <sup>3</sup> /h)	900 / (600)	1800 / (1320)

The power factors are with reference to the original CW.
The CW 250 II therefore has a higher factor and hence increased throughput.

<sup>&</sup>lt;sup>2</sup> The figures in brackets apply to an operating mode with free-standing pin discs.

REFERENCE PRODUCTS		
Product	Fineness	Throughput
PA 6 (cold grinding)	97% < 170 μm	96 kg/h
TPU (cold grinding)	95% < 200 μm	30 kg/h
	50% < 130 μm	
Coriander	95% < 500 μm	200 kg/h
Hemp seed press cake	95% < 250 μm	130 kg/h
Arabica coffee (cold grinding)	93% < 40 μm	70 kg/h
Limestone	97% < 23 μm	210 kg/h
Pigment (zinc oxide)	99.9% < 32 μm	300 kg/h

 $50\% < 1.5 \,\mu m$ 

220 kg/h

## **CUSTOMISED SOLUTIONS FOR YOUR REQUIREMENTS**



We test your specifications beforehand in the research unit and develop a plant concept tailored to your needs. Interested? Consult us!

Pigment (organic)



#### **FOOD** > PERFECT PROTEIN SHIFTING

Even sharper and cleaner breakdown of the defined protein and starch fractions through increased impact speed.



#### **FOOD >** OILY & FATTY PRODUCTS

The two pin discs driven in contrary motion in combination with the special drop shape of the housing minimise deposit formation and enable longer production times with difficult products.



## CHEMICALS > OPTIMUM GRINDING OF POLYMERS

The trend is towards increasingly fine powders, e.g. for use in 3D printing.

The CW II provides the optimum solution in this case. The free-standing pin discs allow perfect results with cryogenic grindings and for products with a low melting point. Purging the gap around the pin discs is eliminated – thereby reducing investment and operating costs.



#### HOSOKAWA ALPINE AKTIENGESELLSCHAFT

Peter-Dörfler-Straße 13–25 86199 Augsburg, Germany

Phone: +49 821 5906-0 Fax: +49 821 5906-101

Email: mail@alpine.hosokawa.com

www.hosokawa-alpine.com

#### ANY QUESTIONS? WE WILL BE PLEASED TO ANSWER YOU!

Food/feed applications Chemical applications:

Phone: +49 821 5906-406 Phone: +49 821 5906-402 Fax: +49 821 5906-655 Fax: +49 821 5906-438

Email: food@alpine.hosokawa.com Email: chemical@alpine.hosokawa.com

All rights reserved for amendments.

All information in this brochure is purely informative and non-binding. Our offers shall be decisive for ordering.

© Hosokawa Alpine 2018. Printed in Germany 0165-DE-2018-02