



GRINDING SYSTEMS FOR **SPICES AND HERBS**

Customized plant solutions for gentle grinding of various spices, herbs and flavorings.



SPICES AND HERBS GRINDING

JEHMLICH explosion-protected, easy-clean spice grinding plants are built on REKORD wide chamber mills and REKORD universal impact mills in 4 size classes as well as JEHMLICH cutting mills and hammer mills.

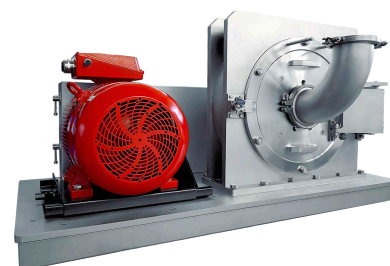
The wide chamber pin mills are suited especially well for grinding heat-sensitive spices and herbs with high oil contents. Cutting mills allow defined comminution of fibrous spices, such as ginger and vanilla beans. Hammer mills are suitable for breaking down very hard flavor carriers such as cola nut and bitter orange.

Stable continuous production is feasible with the REKORD mills, even with spices with high volatile oil contents that require gentle processing and tend to become sticky when impact is applied. The rotor speed and sieve insert types and hole sizes are variable, allowing precise parameter setting for the ideal result. The essential oils are best preserved during milling by cryogenic grinding or milling air cooling/drying.

The specific properties of the product are critical for the individual design of the JEHMLICH spice grinding systems. Configuration with turbo rotor, fluted disc rotor, impact pin rotor and beater rotors are possible. The optimum process parameters are defined in the JEHMLICH application centre by testing.

JEHMLICH grinding plants are delivered turn-key and include customized solutions for the material feeding, dosing and weighing, grinding, dedusting, separation, fractionizing and product handover to existing systems such as bagging, mixing and robotic filling

Type	Fine impact and wide chamber mill REKORD	Cutting mill CM 342	Hammer mill HM 142/342/672
Driving power	5 – 110 kW	5 – 37 kW	7.5 - 45 kW
Grinding element	Rotor selection according to requirements; Effective diameter between 224 - 630 mm	Three cutting blades each on rotor and stator	between 12 - 48 hammers; narrow or wide version



REKORD 450 universal impact mill with turbo rotor



PRACTICE EXAMPLES

Get an overview of possible applications and performance data for grinding selected spices and flavors on JEHMLICH spice grinding systems.

Grinding with JEHMLICH REKORD universal impact mill

Spice/Flavour	Feed d90 [mm]	End fineness d90 [μ m]	Throughput REKORD 630 [kg/h]
Basil	60	100	700
Butterbur	10	500	500
Caraway	5	350	700
Cardamom	20	350	500
Cinnamon	5	200	400
Citrus fibre	1	110	600
Clove	15	800	400
Dill	30	100	900
Fenugreek	4	600	2,200
Garlic	20	90	200
Gentian root	8	200	300
Ginger	10	300	300
Horseradish	30	120	1,300
Kola nut	15	280	700
Mace	15	1,000	300
Mugwort	40	200	300
Mustard, brown	2	900	1,900
Mustard, yellow	2	175	700
Nutmeg	25	340	1,000
Onion	25	295	700
Parsley	45	100	500
Passionflower	3	300	400
Pepper, black	4	300	600
Pimento	7	400	1,000
Rose hip	5	190	500
Rosmary	18	100	300
St. John's wort	2	400	900
Vanilla	20	750	600



Grinding with JEHMLICH hammer or cutting mill

Spice/Aroma	Feed d90 [mm]	Final fineness d90 [mm]	Throughput rate [kg/h] Hammer mill	Throughput rate [kg/h] Cutting mill
Kola nut	40	3.5	3,000	-
Pomeranz	20	6	3,000	-
Vanilla	200	4	-	300



f.l.t.r. Mugwort, Cardamom, Mustard, Clove

OPTIONS

Request your specific spice grinding solution. We prepare your customized and energy-efficient plant layout with high availability and flexibility, also for future market requirements. From us you may receive single mills as a component for integration into your existing installation, and complete turn-key systems for processing your products consistently and in accordance with current hygiene, ergonomic and safety standards.

We are designing our systems on the basis of many years of product experience and with confirmational tests in our modern JEHMLICH application centre.

FULL SERVICE

Optimize the operational performance of your grinding plant with our dedicated maintenance services. We warrant short term availability of original spare parts throughout the lifetime of your unit.

