



*Know-how in food processing!*



# Derinding Machines

**Sturdy, reliable, proven**

## Perfect derinding results

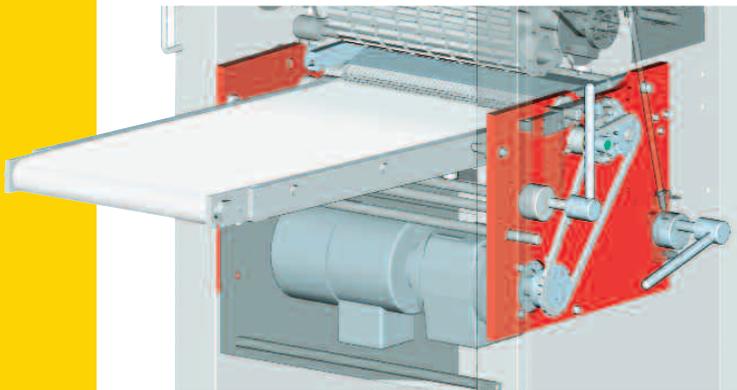
The NOCK derinding machines persuade through their perfect derinding results. They operate with an ingenious geometry of the transport roller, blade holder, pressure device and infeed conveyor. The blade holder mounting is spring suspended so that the blade holder adjusts optimally to the thickness of the rind (skin). The pressure roller is spring suspended in all models and in most models it is also infinitely variable in height. This way all pieces such as belly of pork, backs of pork, top pieces of bacon, flat cuts, loins, hams and so on can be flawlessly derinded. Even freshly slaughtered meat can be easily processed. Bacon slabs can also be sliced.

The **NOCK ACTIVE SKIN GRIPPER® (ASG)** optionally available for all industrial models offers further important advantages:

- **Flawless first cut and perfect derinding also with very thin skinning**, hence less trimming
- **Noticeable increase of yield** and best rind quality
- **Longer durability of pressure wheels**, as less force is applied to the product (softer pressure springs)
- **Relief of the blade** due to less contact with the rind
- Thus amortization of the extra cost within a short space of time

## Solid. Sturdy. Durable: The NOCK POWER PLATES®

The mechanically highly strained machine components such as drive, transport roller, blade holder and pressure device are mounted in **solid, 15 mm thick base plates**, the **NOCK POWER PLATES®**, which are located in the machine casing. Thousands of NOCK machines have since 1990 proven this construction. In comparison to the mounting of these parts in the casing like known from other brands the NOCK construction has deciding advantages:



### ■ Long lasting precision

The NOCK POWER PLATES® guarantee an excellent bearing alignment and precise positioning of the machine parts. And thereby a constant better function of the machine.

NOCK POWER PLATE®

### ■ No material fatigue

When the highly strained parts of a derinding machine are positioned on the casing, sooner or later it can come to deformation or crevices. With a 15 mm thickness, the NOCK POWER PLATES® are resistant to material fatigue. This has been proven by thousands of NOCK machines since 1990 in the hardest industrial operation, even in several shift operation. They make the NOCK derinders especially sturdy and durable.

### ■ Service friendliness

All components are very easily accessible once the side covers are opened.

### ■ Hygienic and easy to clean machine surfaces

Due to the positioning of the machine components on the NOCK POWER PLATES®, the steel casing can be designed with large smooth surfaces. This makes the NOCK machines particularly hygienic and easy to clean.

→ 15 mm ←

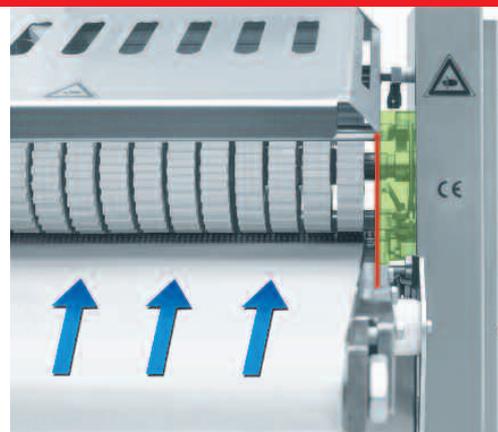
## The NOCK EASY-FLOW® safety cover

The covers of the NOCK conveyORIZED machines are constructed **similar to a tunnel:**

All machine parts which could obstruct the flow of the product, for example the mountings and handles of the blade holder, the mountings of the pressure device and of the conveyors, are located outside the tunnel-like safety cover.

The advantages:

- **Reliable product flow ("easy flow")**  
= higher processing safety
- **Hardly any accumulation of surpluses on the mountings during processing** = better processing hygiene and faster cleaning of the machine



*Interference-free product flow due to tunnel-like protection against machine parts*

A safety switch stops the machine, once the cover is opened.

A safety bolt hinders reliably that the opened safety cover does accidentally fall closed.

The NOCK EASY-FLOW® safety cover complies to the European safety standard EN 12355 und bears to the high occupational safety of the NOCK derinders.

# for the NOCK derinding machines



## Quick cleaning and optimal hygiene

- The NOCK machines have not only a modern, but also a **hygienic design**, which of course can comply with the latest hygienic standards.
- Casing, conveyor frames, transport roller, blade holder and so on are made of **high quality stainless steel**. The conveyor belts and pressure wheels are made of approved food safe plastics.
- Due to the standard installed **NOCK POWER PLATES®**, it is possible that the machines can be designed with large smooth surfaces, which are particularly hygienic and easy to clean.
- The **NOCK EASY-FLOW®-safety cover** prevents the build-up of product surpluses on the mountings of the blade holder and the pressure unit during processing.
- All of the NOCK derinders except the table model Cortex C 420 are equipped with lockable castor rollers. This eases the transporting process to a cleaning area.



Conveyors, pressure roller, blade holder, changeable tables and output sheets can be removed and replaced for cleaning purposes from the machine within seconds without any tools. Therefore soiled parts are easily accessible. The scraper comb can be tilted downwards, the transport roller can be turned by hand. The conveyor frames can be folded back so that the inside of the belt can be cleaned. The belts can also be easily removed from the frames for thorough cleaning. The machines can be optionally equipped with plastic modular belts.



**Quick and easy to clean:**  
NOCK derinder after removing conveyor, pressure roller and blade holder. Scraper comb tilted back.

## Top quality - Made in Germany

NOCK is an owner run German family business, which since 1990 constructs and sells successfully modern machines for the meat processing industry worldwide. In close contact to meat processing plants and distributors, the machines are constantly further developed. Of course the latest hygiene and safety standards are respected.



*F. Nock*  
Ferdinand Nock,  
company founder

NOCK stands for uncompromising quality "Made in Germany". This begins with the quality-orientated concept and construction of the NOCK derinding machines, comprising of the manufacturing of all central components at the company-own ultra-modern machine park, exclusively using premium base materials and acquired parts, the collaboration with established suppliers, diligent assembling and final inspection of the NOCK machines. An experienced team of highly qualified and motivated employees also contributes significantly to this high quality standard. This results in modern, particularly reliable and durable machines of continuous quality.



NOCK can offer German high class workmanship to interesting prices due to modular construction, modern production methods and strict cost management. This is an important aspect considering the often tightly calculated investment budgets of meat processing plants.



## Derinding machines for automatic and open top operation

The conveyORIZED NOCK derinding machines for the small trade can be operated, in addition to automatic conveyORIZED operation, as an open top (manual) machine, to derind for example round pieces of ham. (Flat pieces must only be processed in conveyORIZED operation according to EN 12355.)

Besides this the machines are equipped with an in the height adjustable foot switch bar and an infeed table. In comparison to the industrial types, the slower speed setting simplifies the processing on the open top machine.

**The adjustment of the machine can take place in seconds without any tools:**

Open the NOCK EASY-FLOW® safety cover – remove pressure roller and place it in the provided notch in the safety cover – remove infeed conveyor – mount infeed table – done.



### Space saving construction

The conveyORIZED derinders for the small trade are constructed particularly compact and with shorter conveyors, so that not much storage place is required.

The optional available integrated NOCK product return system® allows that the machine can be placed up against a wall as the derinded product is automatically conveyed back to the operator.



### Industrial-suited robustness

The NOCK conveyORIZED derinders for the small trade are in their sturdiness in comparison to the NOCK industrial type absolutely equal. They avail also of the 15 mm thick NOCK POWER PLATES®, which give them a particular stability and durability.

#### Options:

- Output conveyor
- Skin removal conveyor
- Integrated NOCK product return system®
- Inflated pressure balloon



#### Cortex CB 435

- Cutting width: 430 mm
- Cutting speed: 24 m/min
- Particularly compact and good value derinding machine with middle length infeed conveyor
- Preferred operation in small to medium sized trades



#### Cortex CB 496

- Cutting width: 430 mm
- Cutting speed: 24 m/min
- Derinding machine with middle length infeed conveyor
- Pressure roller spring suspended and infinitely adjustable in height
- Universal operation in trades and industry plants

## Automatic conveyORIZED derinding machines

The conveyORIZED NOCK derinding machines for industrial use are equipped with long conveyors and operate with high cutting speeds. They may not be operated in open top (manual) operation.



**Cortex CB 503**

- **Cutting width:** 500 mm
- **Cutting speed:** 29 m/min
- Good value, compact industrial machine with middle length conveyors
- Pressure roller is spring suspended and infinitely adjustable in height

### Options:

- Skin removal conveyor
- Plastic modular belts
- Inflated pressure balloon
- NOCK ACTIVE SKIN GRIPPER® (ASG)



Cortex CB 604 with ASG

**Cortex CB 504 • CB 604 • CB 704**

- **Cutting width:** 500 / 600 / 700 mm
- **Cutting speed:** 29 m/min
- Derinding machines with different cutting widths for the meat industry
- Long conveyors
- High cutting speed
- Pressure roller spring suspended and infinitely adjustable in height, for particularly gently processing of high products. Perfect results also with thin products and flat cuts.

### Options:

- Suspended version for plant specific adaption
- Skin removal conveyor
- Skin removal conveyor from the side with separate drive
- Plastic modular belts
- Inflated pressure balloon
- Transfer plate for passage without processing
- NOCK ACTIVE SKIN GRIPPER® (ASG)

## How does the NOCK ACTIVE SKIN GRIPPER® function?

The blade holder is opened slightly wider before it comes into contact with the product. Consequently the incoming rind (skin) can be easily grasped by the blade (active grip). Then immediately after the front edge of the rind passes the blade's edge, the blade holder closes pneumatically at lightning speed to the adjusted derinding thickness. When derinding thicker pieces (when more fat is to be removed) then the ASG remains switched off.



## Automatic conveyORIZED derinding machines



### Cortex CB 501 SERRANO

- **Cutting width:** 500 mm
- **Cutting speed:** 29 m/min
- Derinding machine with 125 mm high throughput (for higher products upon request). Particularly suitable for derinding high products like air dried or smoked hams, loins etc. Perfect derinding results also with flat products.
- Determined de-fatting with optional quick-adjustment blade holder (pneumatic)

#### Options:

- Skin removal conveyor
- Plastic modular belts
- Pneumatic quick-adjustment blade holder for determined de-fatting
- Inflated pressure balloon
- NOCK ACTIVE SKIN GRIPPER® (ASG)



Smoked ham, derinded



Inflated pressure balloon for NOCK conveyORIZED derinding machines (optional)

## Open top derinding machines



### Cortex C 420

- **Cutting width:** 430 mm
- **Cutting speed:** 19 m/min
- Open top derinding machine (table model) to derind round pieces, eg. round hams

**Option:** Underframe



### Cortex C 460 • C 560

- **Cutting width:** 430 / 500 mm
- **Cutting speed:** 19 m/min
- Open top derinding machines (stand models) to derind large, round pieces, eg. round hams



### Cortex C 660 • C 860

- **Cutting width:** 600 / 800 mm
- **Cutting speed:** 19 m/min
- **Open top derinding machines with changeable tables** to derind ham, shoulders and loins with bones

*Cortex C 860 with changeable table for ham with bones*



*Cortex C 860 with changeable table for loins*

## Features + equipment / Derinding machines

model	pressure roller		open top (manual) operation possible	output conveyor	discharge conveyor for removed skin	NOCK ACTIVE SKIN GRIPPER® (ASG) <sup>2</sup>	plastic modular belts	spring- suspended blade holder mounting	tooth roller with scraper comb	NOCK POWER PLATES®	NOCK EASY-FLOW® safety cover	lockable castors	stainless steel <sup>3</sup>	particularly suitable for	
	spring- suspended	adjustable in height												small trade	industry
Cortex CB 435	●		●	○			○	●	●	●	●	●	●	●	●
Cortex CB 496	●	●	●	○	○		○	●	●	●	●	●	●	●	●
Cortex CB 503	●	●		●	○	○	○	●	●	●	●	●	●		●
Cortex CB 504	●	●		●	○	○	○	●	●	●	●	●	●	●	●
Cortex CB 604	●	●		●	○	○	○	●	●	●	●	●	●		●
Cortex CB 704	●	●		●	○	○	○	●	●	●	●	●	●		●
Cortex CB 501 SERRANO	●	●		●	○	○	○	●	●	●	●	●	●		●
Cortex C 420			●						●				●	●	
Cortex C 460 C 560			●					●	●	●		●	●	●	●
Cortex C 660 C 860			●					●	●	●		●	●		●

### Further options:

- Inflated pressure balloon (soft balloon)
- NOCK integrated Product Return System®
- Pneumatic quick-adjustment of blade holder (CB 501)
- Transfer plate for passing without derinding

- standard**
- optional**

- <sup>1</sup> alternative: without underframe for integration in cutting lines
- <sup>2</sup> requires compressed air
- <sup>3</sup> inclusive of all rolling bearings

## Technical data / Derinding machines

model	cutting width mm	cutting speed m/min	maximum throughput height mm	blade gap mm	apply length on infeed conveyor mm	overall dimension W x H x D mm	infeed conveyor mm	output conveyor mm	weight kg	motor performance kW	electrical connection
<b>Cortex CB 435</b>	430	24	90	0 - 5	400	800 x 1190 x 1660 / 1210 <sup>1</sup>	850 x 425	650 x 425	225 / 210 <sup>1</sup>	0.75	3 AC - 400 V - 50 Hz <sup>2</sup>
<b>Cortex CB 496</b>	430	24	90	0 - 5	400	800 x 1190 x 1860 / 1210 <sup>1</sup>	850 x 425	850 x 425	240 / 220 <sup>1</sup>	0.75	
<b>Cortex CB 503</b>	500	29	120	0 - 5	300	865 x 1190 x 1860	850 x 490	850 x 490	265	1.1	
<b>Cortex CB 504</b>	500	29	120	0 - 5	520	865 x 1220 x 2280	1070 x 490	1070 x 490	280	1.1	
<b>Cortex CB 604</b>	600	29	120	0 - 5	520	965 x 1220 x 2280	1070 x 590	1070 x 590	300	1.1	
<b>Cortex CB 704</b>	700	29	120	0 - 5	520	1065 x 1220 x 2280	1070 x 690	1070 x 690	320	1.1	
<b>Cortex CB 501 SERRANO</b>	500	29	125 <sup>3</sup>	0 - 5 <sup>4</sup>	520	865 x 1350 x 2280	1070 x 490	1070 x 490	285	1.1	
<b>Cortex C 420</b>	430	19	-	0 - 4,5	-	700 x 420 x 500	-	-	70	0.75	
<b>Cortex C 460 C 560</b>	430/500	19	-	0 - 4,5	-	750 / 815 x 960 x 750	-	-	150/180	0.75	
<b>Cortex C 660 C 860</b>	600/800	19	-	0 - 4,5	-	915 / 1115 x 980 x 750	-	-	170/200	0.75	

<sup>1</sup> with / without optional output conveyor

<sup>2</sup> other voltages/frequencies upon request

<sup>3</sup> higher throughput upon request

<sup>4</sup> optional pneumatic quick adjustment (3 steps, e.g. 0 - 5 / 6 - 11 / 12 - 17 mm)

**NOCK Maschinenbau GmbH**  
 Industriestrasse 14  
 77948 Friesenheim  
 GERMANY

Tel: +49 (0) 7821-92 38 98-0  
 Fax: +49 (0) 7821-92 38 98-48  
 E-mail: info@nock-gmbh.com  
 www.nock-gmbh.com