

The Combined DORNOW "Step-by-Step" Carborundum - Blade Peeling Systems SBS - KM, Working in Steps - for the Production of Peeled Potatoes for the Catering Industry

(Abridged designation: SBS- KM - plant)

Introduction:

In large-scale production plants a DORNOW roller peeling machine will be used as carborundum pre-peeling machine.

For factories with smaller or medium throughputs the solution described here appears to be appropriate: The combined carborundum and blade peeling in **one** plant, in the DORNOW "step-by-step" carborundum and blade peeling system (K = carborundum peeling, M = blade peeling).

Capacities of the SBS-KM-plant (in kg/hr of final produce, approximate values):

(When using potatoes from medium to big sorting sizes)

SBS-KM-II: 300 - 400, with 1 x peeling unit 20 **K**-AT-OS
and with 1 x peeling unit 20 **M**-AT-OS.

SBS-KM III: 450 - 600, with 1 x 20 **K**-AT-OS,
with 2 x 20 **M**-AT-OS.

View of an SBS - II peeling system: Brochure 108, page 5, picture 16

Special features of the SBS-KM-plants:

- The "step-by-step" carborundum blade peeling system may consist of one peeling unit of the type "20 K-AT-OS" and one or two peeling units "20 M-AT-OS". Throughputs: as cited above in kg/hr of finished produce.
- During the first stage of investment you can start production by means of the combined peeling units "20-K-AT-OS" and "20 M-AT-OS", with the idea of completing the plant later by adding a further peeling unit ("20 M-AT-OS"). Thus, the throughput will be enhanced to 500 - 600 kg/hr of finished produce.

- The machines are, as a rule, put on platforms. For two reasons: 1. The ready-peeled potatoes can, this way, drop directly into a storage bin or on an inspection table. 2. The peel waste, even from three peeling units, can fall directly into the collecting bin of a pump or of a conveying device. The discharge height of the last peeling unit will be adjusted according to the investor's requirements.
- **The peeling** can be carried out either **totally dry** or in atomised water. This way of processing does not necessarily produce waste water. A very small quantity of water results from atomisation and "disappears" in the waste peel.
- There is very little **floor space** required. The erection of the machines can, for instance, be arranged in a way that their sides form a right angle. Normally they will be put up in a line.
- The potatoes leave the machine **as though** they had been **peeled by hand**.
- The inefficient **"flat peeling"** occurring in many other machines **will be avoided**.
- The peeling units are constructed in a way that guarantees a **controlled and continuous** peeling.
- The construction is very **sturdy and permits easy maintenance**. Few spare parts required. Simple technology.
- The blades are made of **strong blade steel**.
- Provided the machinery is properly adjusted, the use of the blade peeling units **need not necessarily lead to a higher waste rate**, with the carborundum peeling unit taking off correspondingly less material.
- The plant includes a precisely working **weighing and dosing device**. This has to be purchased only once, even if further peeling units will be added later.
- To operate the plant, **compressed air**, i. e. a compressor is required.
- By exchanging the peeling elements, the carborundum peeling unit **can easily be transformed into a blade peeling unit** (or vice versa).
- If higher throughputs should be required later, a DORNOW roller peeling machine (working as pre-peeler) can be purchased. In this case, the SBS-KM-plant described here **can be used as a pure blade re-peeling system**.

Résumé:

- plain technique
- robust construction
- low wear and tear
- low maintenance
- **can be extended**
- high capacities
- **no "flat peeling"**
- **controlled peeling**
- **continuous and smooth peeling**
- little waste
- quality like peeled by hand
- no waste water
- does not require much floor space

A list of interesting articles and essays regarding the topics of the preparation and processing of tubers and vegetables and associated specialist areas can be found at our Internet site at www.dornow.de, Treatises.

Review of your current peeling results or before the purchase of a peeling machine or system:

**Realistic test peelings with the most diverse peeling systems,
with the most diverse tubers and root vegetables, some fruit, with your raw
produce are possible in our Peeling Test Center!**

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