

### The Fully Automatic DORNOW "Step- by- Step"

### Blade Peeling Systems SBS - M, Working in Steps

(Abridged designation: SBS- M - plant)

#### Introduction:

In factories with medium or high throughput capacities the blade peeling technology will always be applied together with a carborundum peeling system connected before (e. g. a DORNOW roller peeling machine). - The carborundum peeling does here the rough work (e. g. 85% of the peeling waste), while the blade peeling connected behind provides for the blade-peeled appearance of the potatoes.

## <u>Capacities of the SBS-M-(Messer = blade) system (in kg/hr of finished produce, approximate values):</u>

(When using potatoes neatly pre-peeled by means of carborundum from medium to big sorting sizes)

SBS-M-I: 500 - 600, with 1 x peeling unit 20 M-AT,

SBS-M II: 700 - 800, with 2 x 20 M-AT,

## You can find an illustration of a SBS - II - peeling system in our prospectus 108, page 5, picture 16.

- The "step-by-step" blade peeling system may consist of one peeling unit or of two peeling units of the type "20 M-AT". Throughputs: as cited above in kg/hr of finished produce, when using potatoes relatively well pre-peeled by carborundum.
- During the first stage of investment you can work with one peeling unit "20 M-AT", with the idea of operating the plant later with two peeling units. Thus, the throughput will be enhanced to 700 -800 kg/hr of finished products. The assembly of the second peeling unit, in later years, can be carried out at our workshop.
- The machines are, as a rule, put on platforms. For two reasons: 1. The readypeeled potatoes can, this way, drop directly into a storage bin or on an inspection table. 2. The peel waste, even from two 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 in every case 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. The quantity of water produced by the process of atomising is very small and will "disappear" with the waste peel.
- The "step-by-step" blade peeling plant can easily be connected to a carborundum roller peeling system, i. e. to a pre-peeling system.

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- 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 inefficient "flat peeling", known from many other machines, does not occur, provided the machine is properly filled.
- The potatoes leave the machine as though they had been peeled by hand.
- The peeling units are constructed in a way that guarantees a **smooth and continuous** peeling. That is why there will not be much waste. The blade peeling units will normally account for 10 to 15 per cent of the total peeling capacity, while the pre-connected and separately working carborundum pre-peeler accounts for some 85 to 90 per cent.
- The construction is very sturdy and permits easy maintenance. Few spare parts required. Simple technology. The peeling elements can, if necessary, be exchanged in a short time.
- The blades are made of strong blade steel.
- Provided the machinery is properly adjusted, the use of the blade peeling line, in connection with a carborundum peeling unit put before, does not necessarily lead to a higher waste rate, taking off less material, correspondingly, in the pre-peeling cycle.
- 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.

#### Résumé:

- plain technique
- robust construction
- low wear and tear
- low maintenance
- extendable
- high capacities
- no "flat peeling"

- controlled peeling
- continuous and smooth peeling
- low waste rate
- quality as if peeled by hand
- o no waste water
- does not require much floor space

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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 <a href="https://www.dornow.de">www.dornow.de</a>, 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!

This paper contains non-committal notes. We do not lay claim to completeness. Alterations reserved. Our order confirmation, accepted by our customers, is in effect upon delivery. - The presentation of a new edition of this treatise will substitute for any previous versions.

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