

Roller Peeling Machines Working in Steps

Advantages And Disadvantages Of Lengthwise Connected Carborundum Roller Peeling Machines Working In Steps

Years ago we had to take the decision of modifying two or three of our roller peeling machines of the type R-603-102 EE-S 60 and connecting them in steps, in order to create this way a new, possibly revolutionary roller peeling machine.

First, the uppermost machine would have been fed in a discontinuous way. It was our idea to stop the peeling rollers, after a certain peeling time, and make them rotate in the opposite direction, in order to transport the product to be re-peeled - after the pneumatic opening of a valve between the machines - down to the second and lower-positioned roller peeler.

Here, the peeling of the tubers and roots was to be continued. As described above, the fruits were supposed to drop then down into the third roller peeler, positioned on a still lower level, to complete the peeling process here in a third step.

We dismissed this constructional idea after a short time for the following reasons:

1. Without necessity we would have returned to a discontinuous way of peeling, renouncing of the advantages of a continuous operation.
2. A more sophisticated technique brings about disadvantages: more technical attachments, more power consumption, more wear and tear points than necessary!
3. The roller peeling units arranged in steps are separated from each other by long pneumatically working valves. During one peeling process, which is carried out in up to three sections, these valves must be constantly opened and shut! The costs for the generation of compressed air have to be added to the purchase price of the machine; it is a considerable sum of money within e. g. five years' time! (Compressed air is an expensive energy. Moreover, a compressor must be available).
4. Why should we connect three smaller machines in a complicated way, knowing that we can use one of our big machines provided with a plain and well-proved technique? If its capacity should then not yet be sufficient, we would still have the option of putting up two or even three machines one after the other so that one machine would feed continuously into the machine connected behind!
5. Why, we went on deliberating, should we stop the peeling rollers up to 6 times during one peeling process? Why should we have the peeling rollers run in one direction for peeling and in the opposite direction for emptying?

Why create sources of wear and tear?

Why waste enormous quantities of energy by stop-and-go operation (frequently under full load)? - We knew very well that critical customers would have added the unnecessarily high extra expenditure of electrical energy to the purchase price of the machines.

6. When discharging the various peeling steps, it may occur that e. g. carrots get stuck between the peeling rollers so that they are excessively abraded. It became evident that especially in the carrot peeling (longish fruits) there would be clear disadvantages. - Even for other tubers and roots, the opposite rotation of the peeling rollers during the transportation of the fruits down to the next level brings about unnecessary losses by abrasion. The losses may not be high, but they might accumulate to a considerable amount over a period of five-years, for instance.

For these reasons and for some others - we cannot go into detail here for short - we clearly discarded the above described construction type years ago already.

"Playful elements and gadgets" in machines may often promote sales. No doubt that good machine systems, which at the same time contain "playful elements", will sell better, according to the generally accepted opinion that people like playing now and then.

In sober fact, the disadvantages of the above described construction outweigh the advantages - in comparison with our present-day solutions - in such a way that we dispensed with it despite its attractive exterior.

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,
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