

### **Peeled Potatoes – Sorting and Dividing**

## **The Sorting of Peeled Potatoes and the Dividing of them into Plate-Ready Pieces in Industrial Peeling Factories**

### **The Sorting and Dividing Station**

After peeling and inspection the potatoes are cut into plate-ready pieces if required by the market.

This is often still done by hand. However, to divide manually 1.000 kg/hr of peeled potatoes, from medium to large sorting sizes, you need 5 to 7 labour per hour. The high costs for these personnel can hardly be justified anymore in countries with high salary levels.

Already many years ago DORNOW designed the first potato quartering machines the world over with the type designation KT1 E which can also halve potatoes. Moreover, DORNOW marketed a pure halving machine (KT 2) with high hourly outputs.

In case of hourly outputs of up to approximately 500kgs to a max. 800 kg, DORNOW offers a relatively simple solution which permits the integration of a potato dividing machine into a peeling line for peeled potatoes with minimum investment expenditures. Already on the roller inspection table the peeled tubers are put - by hand and sorted according to their sizes - in channels separated from each other. These channels lead into the four lanes of the dividing machine KT1 E.

The cutting stations can be provided with cutting blocks for halving or quartering. Please read also our paper Q 04 "DORNOW dividing machines for peeled potatoes". Here, dividing machines of different dimensions are shown, too.

If there are larger quantities of peeled potatoes to be cut into plate-ready pieces, the potatoes should be sorted out, e. g. by means of a sorting drum, into various sorting sizes. Here you can, for instance, separate:

- a. Undersizes and small parts
- b. Sorting size 20-35 mm,
- c. Sorting size 36-45 mm,
- d. Sorting size 46-55 mm and
- e. Oversizes.

Should it prove necessary and in order to achieve a good continuous cutting quality the sorting sieves can be replaced with sieves of different measures. Make sure to have at your disposal several sorting segments with slightly differing dimensions for every sorting station of the sorting drum.

Sorting size "a" is either "waste" or can, for instance, be added to a Swiss "Rösti" or German potato pan cake production.

Sorting "b" is not divided, but might be separately packed and marketed.

Sorting "c" is halved,

Sorting "d" is quartered.

The sorting sizes "c" and "d" are packed together.

The oversizes "e" can, for example, be marketed as diced goods.

If a sorting drum is applied for higher throughputs, it will often be necessary to use the halving machine KT 2 for halving in order that the capacity of the cutting machine KT1 E can be fully utilized for quartering.

While the above mentioned dividing machine KT1 E is operated in cycles and has a maximum capacity of 8 potatoes per cycle, the halving machine KT 2 works continuously, thus giving a high-capacity service.

Beneath the sorting drum and near the dividing machine(s) one can mount underwater storage bins, dosing devices and conveyor belts. The whole area can be arranged according to the requirements and ideas of the investor.

As further possible supplements to the described sorting and dividing station we supply inspection conveyor belts for the final check of the divided potatoes and preserving and sack-filling devices as well as - if required - devices for vacuum-packing.

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](http://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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