

Circular Peeling machines

# The "Slot" Batch Automatic Carborundum Peeling Machines "30 K-OA-Automatic" and "60 K-OA-Automatic": The Circular Peeling Machines without Waste Water.

### **General description**

The "slot" batch automatic carborundum peeling machines "30 K-OA-Automatic" and "60 K-OA-Automatic" have the appearance of conventional automatic batch peelers.

The peeling segment and peeling discs of the automatic machines were, however, designed by our firm in a way that the machines can work without waste water.

The peeling tools are provided with "elongated holes (slots)" through which the peel waste can get out. The produced peel pulp can, for instance, drop into a container or be pumped, by means of a pump, to any place you like.

The machines are equipped with a switch cabinet over which you can control the following functions: 1. running time of the conveyor belt for the feed-in of raw material, 2. opening and shutting of a weighing and dosage bin above the automatic peeling machine(s), 3. Cycle time for the peeling process, 4. Cycle time for the discharging (can be used as repeated break time).

The necessary movements on the machines are carried out pneumatically. A compressor must be available.

The machines serve, above all, for peeling potatoes. On the bigger model "60 K-OA-Automatic" you can, however, peel celeriac, too. Less suitable they are for the peeling of longish fruit, as for example carrots, for the peeling of which you should use the DORNOW roller peeling machines working without water.

The machines can work without water/waste water in most cases. - As there are still abraded particles sticking to the peeled fruit, after the peeling process, the peeled material normally drops, after leaving the peeling machine(s), into a storage bin filled with water.

By immersion of the fruit into the water the abraded particles are washed away. Such storage bins are normally to be found in any peeling line. They serve at the same time as dosing devices for the connected inspection table etc.

If required, it is possible to produce atomized water in the machines by means of an atomizer nozzle. Water supply and atomizer nozzle(s) are among the standard equipment of all machines. By the addition of small quantities of water via atomizer nozzle(s) waste water is not necessarily produced. However, it makes the peel mash (708031)



produced as "waste" less viscous which is advantageous if, for instance, this peel mash is to be removed through chutes in the floor. - Besides there are considerably less abraded particles sticking on the fruit after peeling.

As special equipment a magnetic valve can be fit in the water supply. This valve opens the water supply for some seconds, by means of one or two additional water nozzle(s) (with large opening), at the end of every peeling cycle (adjustable via timer in the switch cabinet). Thus, the peeled potatoes are thoroughly rinsed at the end of every peeling cycle. Even by this addition of water waste water is not necessarily produced. The rinsing water can normally be removed with the peel mash (suitable for the production of animal fodder).

Read also our paper Q63 = "What is the meaning of 'peeling without water and waste water' (on mechanical peeling machines) for in-plant practice?"

## Capacities (raw material/h, approx.):

DORNOW-30 K-OA-Automatic = 700-1000, in the chips (GB: crisps) producing industry twice or thrice more than that,

DORNOW-60 K-OA-Automatic = 900-1500, in the chips (GB: crisps) producing industry twice or thrice more than that.

#### Range of application:

Industrial section	30 K-OA-Automatic	60 K-OA-Automatic
Chips industry Potato salad producers Industrial potato	yes yes	yes yes
peeling factory Tinning (US: canning) industry Large canteens	for limited service no for limited service	no for limited service no

It appears to be advisable to consult an expert before taking a definite decision as to which type of peeling machine is to be used for which application.

Pictures/photos of the machines can be found in the brochure "The new circular peeling machines without waste water" (P105 E1). Descriptions and photos of these machines and other peeling machines can be found on our website www.dornow.de.

Q73 E4 2/2 (708031)



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.

Copyright by DORNOW food technology GmbH, D-40549 Düsseldorf

For more information: www.dornow.de

3/3 (708031) **Q73 E4**