

DVORAK – engineering

## Round Wafer



*Delicate round wafers with vanilla flavour or chocolate cream are typical products for confectionery shops, cafes in big cities, or attractive tourist places to visit.*

*Round wafers can also be very often a souvenir gift from such tourist destinations, as they are e.g. Vienna Sacher Cake, Karlsbad Wafer, Tokyo banana ...*



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# Round Wafer

The wafer dough is prepared in a Turbomixer. Then the wafer corpuses are baked by Baking carousel.

The cream is prepared by Planetary mixer and spread automatically on wafers by Creaming machine.

The wafers creamed by cream are cooled in a Cooling tunnel.

## Preparing of a dough

### Dough preparation recipe:

water 40 l  
flour 24.000 g  
sunflower oil 1.200 g  
dry egg yolk 300 g  
wheat starch 300 g  
dry milk 210 g  
salt 60 g  
baking soda 60 g  
Total: 66 kg



## Turbomixer

Technical data:	
Power input	3 kW
Voltage	3x230/400 V/50 Hz
Maximum volume of hopper	70 litres
Standard volume of hopper	40 litres
Diameter of hopper	400 mm
Machine height	1050 mm
Weight	75 kg

# Round Wafer

## Baking of wafer corpuses



The baking carousel is designed for production of wafer corpuses with a diameter 180-200 mm. This machine has 21 baking plates. The supply of dough on the baking corpuses is realized by pisto pump, the volume of dough is adjustable. An automatic temperature regulation of upper and lower baking plate is possible.

The baking corpuses can have different design (logo of the city, logo of a major tourist attraction in the city) or just a relief. In case of wafer tarts production, the baked wafer corpuses are automatically transferred to the Creaming machine.

## Baking caroussell

Technical Data	
Machine length	2500 mm
Machine diameter	2120 mm
Machine height	1250 mm
Weight	1450 kg
Baking plates amount	21 pcs
Power	21,5 kWt
Capacity	1160 pcs/hour
Electric motor	1,5 kWt/380V
Air pressure	0,5-0,6 MPa
Air amount	240 l/min.



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## Preparing of a cream

Premix 14.000 g  
icing sugar 10.500 g  
milk powder 4.500 g  
45% chocolate 3.000 g  
milled wafers 2.000 g  
soy powder 750 g  
cocoa 1.500 g  
vanilla flavouring 45 g  
cocoa flavouring 45 g  
Total: 31.8 kg

## Planetary mixer

<b>Technical data:</b>	
<b>Bowl volume:</b>	50 litres
<b>Motor:</b>	1500W
<b>Electro:</b>	400V/50Hz/3 phases
<b>Amount of Speeds:</b>	3
<b>Speeds</b>	- 99 rotations/min - 176 rotations/min - 320 rotations/min
<b>Sizes (w x l x h):</b>	73 x 64 x 130cm
<b>Weight:</b>	270 kg
<b>Amount of bowls:</b>	2
<b>Accessories:</b>	Flat beater Spiral hook Wire whip



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Wafers creaming

Creaming machine



Technical Data	
Maximum number of wafers lying on each other	6 pcs
Cream thickness	1-2 mm
Input	1 kW
Length	2530 mm
Width	900 mm
Height	1444 mm
Weight	approx. 350 kg
Compressed air	0,5-0,6 MPa, 300 l/min
Maximum height of wafer's block	25 mm



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## Cooling of wafers

### Cooling tunnel



Technical data:	
Conveyor	Straight, belt conveyor
Conveyor length	6050 mm
Conveyor height	800-900 mm
Belt width	570 mm
Cooling length	4500 mm
Width of the tunnel	1200 mm
Height of the tunnel	1900-2000mm
Belt	Ammeraal Beltech
Electricity	3 N PE, 50 Hz, 400/230 V, TN-S
Input	5,5 kVA
Protection	IP 42
Shortest cooling time	40 seconds
Longest cooling time	11 minutes



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**Product diameter :** between  
180-200mm

**Product thickness:**  
Approx. 3-5 mm

**Cream flavours :**

Vanilla, white or dark chocolate, cocoa,  
egg liqueur, nougat, all fat based creams

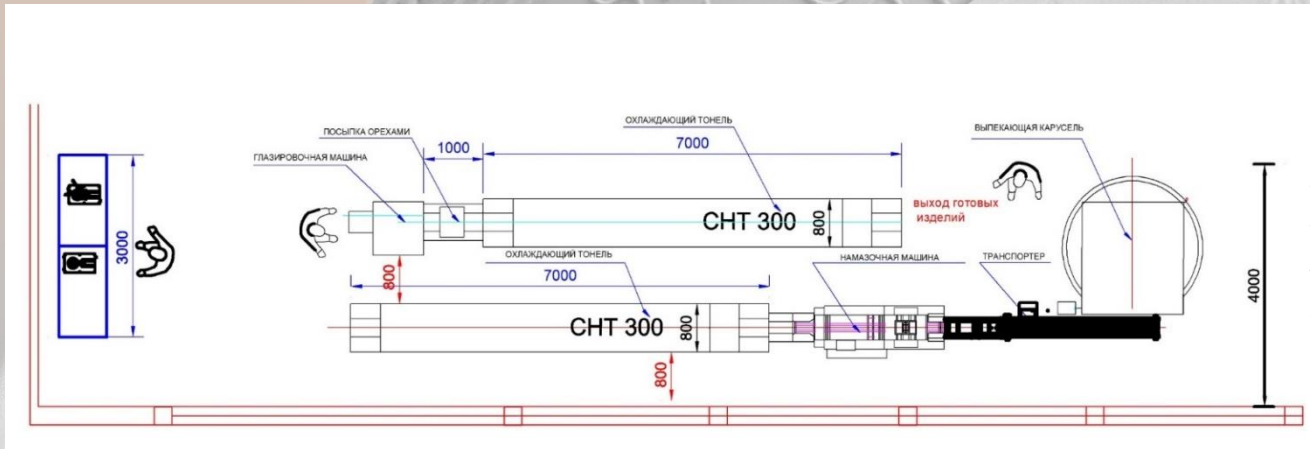


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## Production plant layout

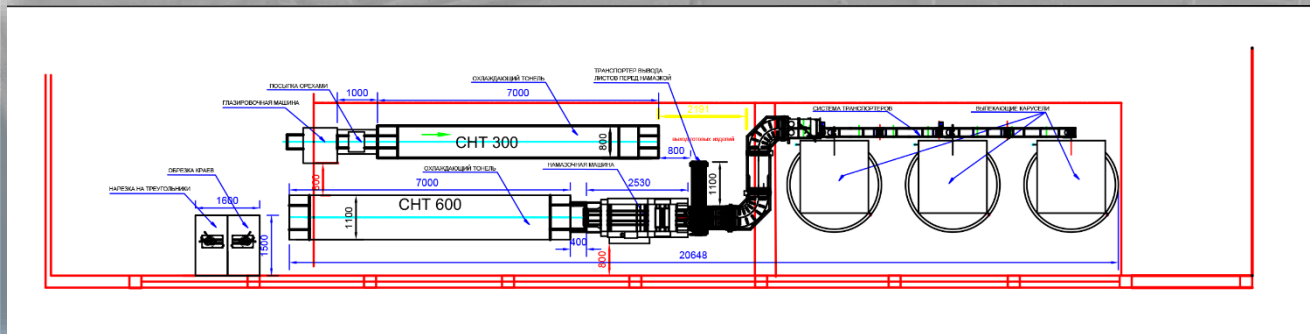
### Round wafers plant- one carousel



### Layout Description

- 1 baking carousel(s)
- 2 outfeed conveyor
- 3 greasing machine
- 4 cooling tunnel
- 5 glazing machine
- 6 with strewing unit
- 7 cooling tunnel

### Round wafers plant- three carousels





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# Round Wafer

Advantages:

- different fillings can be used
- product shelf live 6 months
- custom-tailored set of molds according to customer's requirement
- easy to operate the line
- easy to clean the line
- quick return investment

*We will be pleased to advise you on the basis of our experience, propose the optimum layout of the machines, elaborate a graphic design to your liking and present a budget quotation.*

*We are happy to help you to launch this product on the market.*

*If you want more information, do not hesitate to contact Dvorak-engineering Co., Ltd.*

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