

# **EGG TRAY PRODUCTION LINE BASED ON FIBER MOULDING METHOD**

## **2500pcs/h**

### **1. General Information.**

#### **1.1. Purpose.**

Egg tray, egg cartons, fruit trays, other types of packaging made from cellulose, waste paper, other fibre materials.

#### **1.2. Brief description of production process and its composition.**

The production line was developed using advanced technologies and practical experience.

This line is characterized by a high level of automation, productivity, efficiency, low labor costs and energy consumption. The following production characteristics should also be noted: stable quality indicators, environmentally friendly, easy to operate and maintain, small production area.

The capacity 2500 egg trays / hour.

The production is located in a separate building.

The method of pulp moulding is based on the use milling of waste paper with adding chemical additives and vacuum moulding and drying.

Operating mode - continuous.

### **2. Main production stages.**

#### **2.1. Raw materials and Energy consumption.**

Capacity per hour, pcs	2500
Capacity per day (22 working hours), pcs	55000
Capacity per month (25 working hours), pcs	1375000
Weight, g	65
Waste paper consumption per hour	3600
Waste paper consumption per day (22 hours)	4290
Waste paper consumption per month (25 days)	79500
Electricity per hour, kW	60
Electricity per day (22 working hours) kW	1320
Electricity per day (25 working days) kW	33000
Gas consumption, hour, m3	55

Gas consumption, per day, m3	1210
Gas consumption, month, m3	30250
Number of workers	
Pulp making	1
Moulding machine	1
Ready products collection	2
Pelletising and storage house	1

**Chemical additives recipe will be included in the technological documents.**

## **2.2. Technological process stages .**

Installation plan will be designed on the base of layouts of warehouse provided by the customer.

### **Main equipment of Egg Tray Production Line No 1 (3000 шт/ч)**

<i>No</i>	Description of equipment	Model	Specification	Power, kW	Q-ty, unit of measure
1	Hydraulic pulper	HP-3-55	3m3	55	1 set
2	Pulp screen machine	PMM-1. 8	1.8m2	4	1 set
3	Conveyor		4m/м	5	1 set
4	Scales	PW1010-1			1 set
5	Deflaker	D-15	16/24t/d	15	1 set

6	Pulp pump	PP-4-125	60m3/h	7,5 x5	5 sets
7	Water pump	PW-4-125	50m3/h	7.5	2set
8	Pulp impeller	PI	1200mm	4x4	4 sets
9	Water feeding tank	TANK1	2m3	-----	1 set
10	Control panel	C1	-----	-----	1 set
11	Rotary type molding machine with 1 set of moulds	SD-2500	-----	4,5	1 set
12	Vacuum pump	2BE253-45	40.8m3/min	45	1 set
13	Air compressor	AT30A	3m3/min	20	1 set
14	Vacuum tank	1,5.0m3	1,5m3	-----	1 set
15	Air storage tank	1,5m3	1,5m3	-----	1 set
16	6 layer drying tunnel			-----	1 set
17	Burning chamber				1 set
18	Gas burner	RS 100 Riello	RS 100	4	1 set
19	Hot air blower	1250r/min об/мин	1450r/min	30	1 set
20	Fan	Y5-48-3		3§x2	2 sets
21	Control panel	C2	-----	-----	1 set
22	Pulp concentration gauge unit	LDC-010	1%	_____	1 set