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THE PROCESS OF MAKING WHEAT FLOUR DOUGH

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ABSTRACT

Wheat is divided into several types according to its natural characteristics, including important advantages in industry and production, and subtypes according to color, smell, and transparency. Thus, the 1st type of spring red wheat is classified as follows.

KEYWORDS

Natural characteristics, color, smell, transparency.

INTRODUCTION

Further development of the grain storage and processing industry of the food industry, production and storage of new varieties rich in protein and important amino acids are used in more than 60 countries of the world, and the use of modern processing technologies in Karakalpakstan is one of the urgent tasks. If the margins increase, semi-finished products may fill the capacity and flow during baking. quantity (M_{uu}) is determined by: $r = \frac{M_{uu}}{60}$ / Positive Here, r is the mixing rhythm, that is, the time spent processing one portion of semi-finished products, min.;

M_{uu} is the total amount of flour in a portion of dough, kg. If the mixing rate exceeds the maximum value, then during processing, semi-finished products will be opened, because ready-made dough is sent for processing. Maximum values of kneading rhythm for various semi-finished products, equipment occupancy and maximum values of rhythm (minutes) Cost of semi-finished products Frequency of operations Maximum rhythm of kneading of other operations Rye yeast 5-65-6240-27060 Rye dough 6-75-690-12030 from II grade wheat 6-75-690-12030 "Dough from Uzbekistan



and P-grade wheat 7-8 5-8 70-90 35l and high-grade wheat opara5-65-6180-24060l and dough from high-grade wheat7- 8 5-1060-9030 The value of the minimum rhythm from the total duration of kneading a portion of dough and it should not be less than the duration of the auxiliary kneading operations (dosing of raw materials, setting the dough on the plate of the kneading machine, cleaning the dough). according to the rate of loading with flour; - according to the given rhythm of kneading the dough (min.) is calculated: $M = V \cdot q / 100$ where, V is the size of the mixing (bigish) capacity, l; q is the mass of flour corresponding to 100 l geometric volume of the mixing (bigish) capacity (table 6), kg. Then the kneading rhythm is determined according to the formula given above. If the rhythm is greater than the minimum value, the mass of flour used for kneading the dough is reduced. For example, according to the calculation, the amount of flour in the kneading (baking) capacity of I-type wheat flour is 115 kg, and the kneading rhythm is 35 minutes. The value of the rhythm for a semi-finished product should not exceed 30 minutes. At the maximum rate of kneading (30 min.), the amount of flour in a portion of dough is $115 \cdot 30/35 = 99$ kg. Therefore, it is necessary to calculate the recipe for this total amount of flour. The following formula is used to determine the mass of flour contained in semi-finished products (loaf, yeast) used for making dough: $M = M_{ya} \cdot (100 - W) / (100 - W_{fl})$ here, M_{ya} is the amount of flour in a semi-finished product, kg; M_{ya} - semi-finished product mass, kg; W_{fl} - semi-finished product and flour moisture. %. The mass (kg) of the semi-finished product can be determined by the above formula, $M = M_{ya} \cdot (100 - W) / (100 - W_{fl})$ knowing the amount of flour in it. It is made assuming that it consists of dry substances, therefore, these formulas can be considered only semi-finished products (soup, liquid yeast, yeast, decoction). The amount of flour in the

dough, which consists of other raw materials besides flour and water, is determined by a more complicated formula: $121M_{mu} = m \cdot (100 - w) \cdot 100 / [Max. (100 - W)]$ here, M_{mu} is the mass of the dough, kg; W is the moisture content of the dough, %; M_a is the mass of flour and other raw materials (except water), kg; W_a is the average moisture content of the raw materials, %. For example, 143 kg of flour is added to the dough with 50% moisture The moisture content of the flour is 14.5%. It is necessary to determine the mass of the flour in the dough - $M_{fl} = 143 - (143 \cdot 14.5) = 41$ kg The mass of flour to be rolled is $143 - 41 = 102$ kg. Calculation of consumption of other raw materials. Sugar or salt the following formula is used to calculate the mass of the solution: $M_e = M_{sol} \cdot A / 100$ where, M_e - the mass of the salt or sugar solution, kg; A - the concentration of the substances in the solution, kg/ 100 kg. Pressed yeast is added as a suspension to the dough or dough. One part of yeast corresponds to 2-4 parts of water. The suspension axis is determined by the following formula: $M = M_D \cdot (1 + x) / 100$ where, M - mass of yeast suspension, kg; M_D - mass of dry yeast, kg; x - number of parts of water used in the preparation of a suspension from one part of yeast.

here, M_s is the mass of the suspension, kg; D - the amount of yeast according to the unified recipe; x is the number of parts of water used in the preparation of a suspension from one part of yeast. The mass of raw materials (fat, raisins) used for kneading dough without melting is determined by the following formula: $M = M_D / 100 \cdot x$ where, M is the mass of raw materials used without melting, kg; D - the amount of raw materials according to the unified recipe, kg - the calculation of the amount of water used for kneading the dough is done at the end. The mass of the dough consists of the mass of water and raw materials (flour, salt, etc.): $122m = m + m_s \cdot x$ here, M_x - dough mass, kg; M_s - mass of water, kg; M_a - mass of raw materials, kg. So, $M = M - M_x \cdot x$. The dough mass (kg) can be determined using the following formula: $M_x = M \cdot (100 - W) / (100 - W_x)$ average

moisture content, %; W_x is the moisture content of the dough, %. The average moisture content of the raw materials is determined by the following formula: $w_{xa} = \frac{(M_1 \cdot W_1 + M_2 \cdot W_2 + M_3 \cdot W_3 + \dots)}{(M_1 + M_2 + M_3 + \dots)}$ where, M_1, M_2, M_3, \dots - amount of flour, yeast, salt and other raw materials, kg (except water); W_1, W_2, W_3, \dots - the moisture content of flour, yeast, salt and other raw materials, %. When determining the mass of dough in production, the moisture content of raw materials is obtained from quality certificates, the moisture content of dough is in the factory laboratory. It is determined by the method of preparation of the dough.

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