

Cereal quality case study

Ukrainian Milling Company is manufacturing wheat grain for flour. They produce wheat flour for bread, pasta and pastries production. Before processing, crops are stored during 10-15 days.

Today four batches of wheat are supplied to the facility with next quality indexes.

	Class of wheat	Moisture, %	Protein content, %	Presence of pests	Gluten
1	Hard red spring	15,8	15,2	none	strong
2	Soft red winter	14,5	10,5	yes	medium
3	Soft white	14,0	9,7	none	weak
4	Durum	13,8	14,3	none	medium

The manufacturing team from storage facility is asking for your opinion about safe storage of wheat.

1. What batch of wheat shouldn't be allowed to be stored without obligatory pre-treatment?

The manufacturing team from the milling facility would like your help to determine an expediency to use particular wheat class for specific type of flour.

2. What class of wheat is proper to produce bread flour?
3. What class of wheat is appropriate to produce flour for pasta products?
4. What class of wheat is the best to produce flour for pastries?

Choose desirable conditions to store grain in the safe mode

5. Which level of grain moisture and temperature is appropriate for prolonged grain storage?
 - a. 20 °C and 18%
 - b. 15 °C and 20%
 - c. 22 °C and 12%