



KERONE



A CRISIL-NSIC RATED COMPANY
ISO 9001: 2008 COMPANY
AFFILIATED TO THE UNIVERSITY OF NOTTINGHAM
MEMBER OF AMICAL

DATE:05/03/2017

PROCESS: De-hydration of potatoes.

PROCEDURE:

1. For this trial, potatoes are peeled and then chopped in dices of about 15-20 mm of thickness.
2. These dices are soaked overnight in water, and then blanched in boiling water for 50-60 seconds.
3. Then drying is done in dehydrator with side draft at temperature of 65°C.
4. During the process, observations are made after every 60 minutes by checking the moisture loss on drying in potatoes, by taking weight and by capturing pictures.

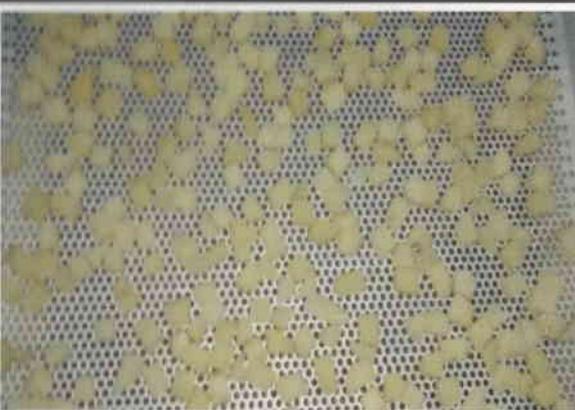
TRIAL READINGS AND PICTURES:



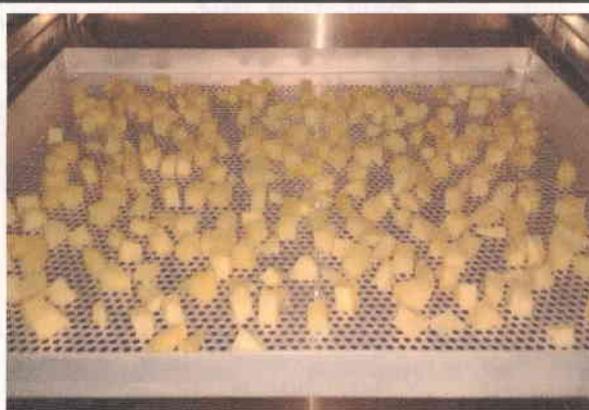
Soaking overnight in water to remove more starch from potatoes than by rinsing



Blanching the potatoes in boiling water for 50-60 seconds. It stops enzyme actions which can cause loss of flavour, colour and texture.



Before De-hydration Process
Initial Weight: 790 grams



After 60 minutes
Weight taken: 426 grams

THIS IS THE PROPRIETARY OF KERONE ENGINEERING SOLUTION AND IS FOR THE SOLE USE OF THE IDENTIFIED PROJECT. ANY UNAUTHORIZED USE, DISCLOSURE, COPYING AND ANY OTHER MEANS OF DUPLICATION IS PROHIBITED. AS PER COPYRIGHT ACT



KERONE



Member of
The University of
Nottingham

NSIC - CRISIL
Rated Company



A CRISIL-NSIC RATED COMPANY
ISO 9001: 2008 COMPANY
AFFILIATED TO THE UNIVERSITY OF NOTTINGHAM
MEMBER OF AMICAL



After 120 minutes

Weight taken: 295 grams



After 180 minutes

Weight taken: 227 grams



After 240 minutes

Weight taken: 192 grams



After 300 minutes

Weight taken: 168 grams



After 360 minutes

Weight taken: 154 grams



After 420 minutes

Weight taken: 139 grams

THIS IS THE PROPRIETARY OF KERONE ENGINEERING SOLUTION AND IS FOR THE SOLE USE OF THE IDENTIFIED PROJECT. ANY UNAUTHORIZED USE, DISCLOSURE, COPYING AND ANY OTHER MEANS OF DUPLICATION IS PROHIBITED. AS PER COPYRIGHT ACT



KERONE



Member of
The University of
Nottingham

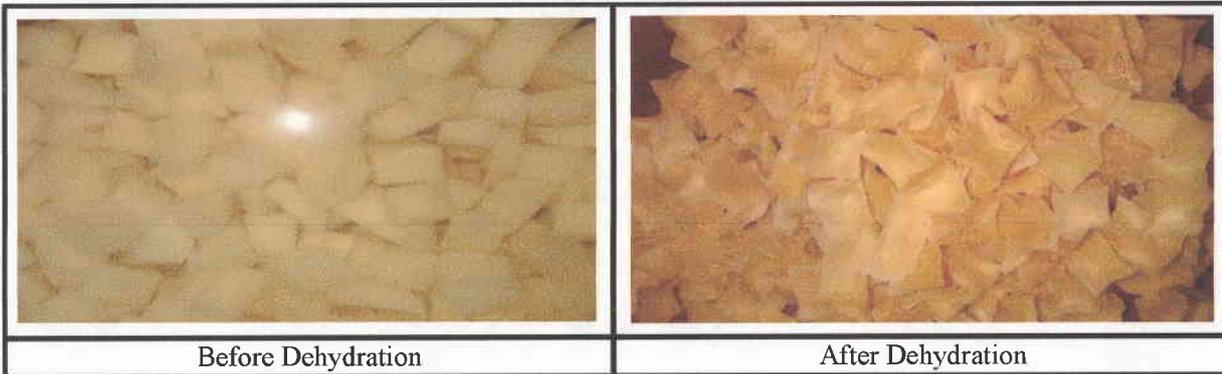
NSIC - CRISIL
Rated Company



A CRISIL-NSIC RATED COMPANY
ISO 9001: 2008 COMPANY
AFFILIATED TO THE UNIVERSITY OF NOTTINGHAM
MEMBER OF AMICAL

OBSERVATIONS:

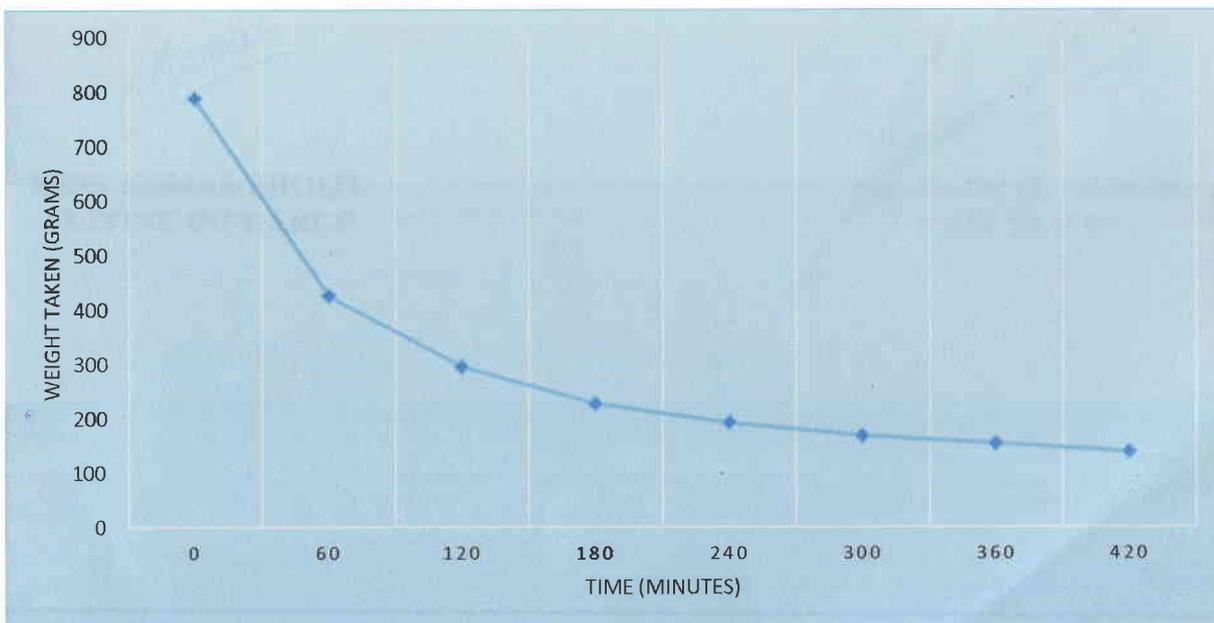
1. After 420 minutes, the potatoes became hard as rock and process of de-hydration completed.
2. The total weight loss in potatoes is 651 grams, i.e., out off 790 grams only 139 grams remain.
3. It shows approximately 82% weight loss of potatoes in 420 minutes, i.e., in 7 hours at 65°C.
4. Following are the before and after pictures of dehydration process.



LINE GRAPH AND BAR DIAGRAM SHOWING MOISTURE LOSS ON DRYING:

Following presentation of line graph and bar diagram illustrates the moisture loss on drying in potatoes by showing weight taken against different intervals of time. The line graph shows the weight of potatoes decreases over the period of time interval and in bar diagram, the numbers on bar indicates the weight of potatoes taken at that time interval.

1. Line Graph:



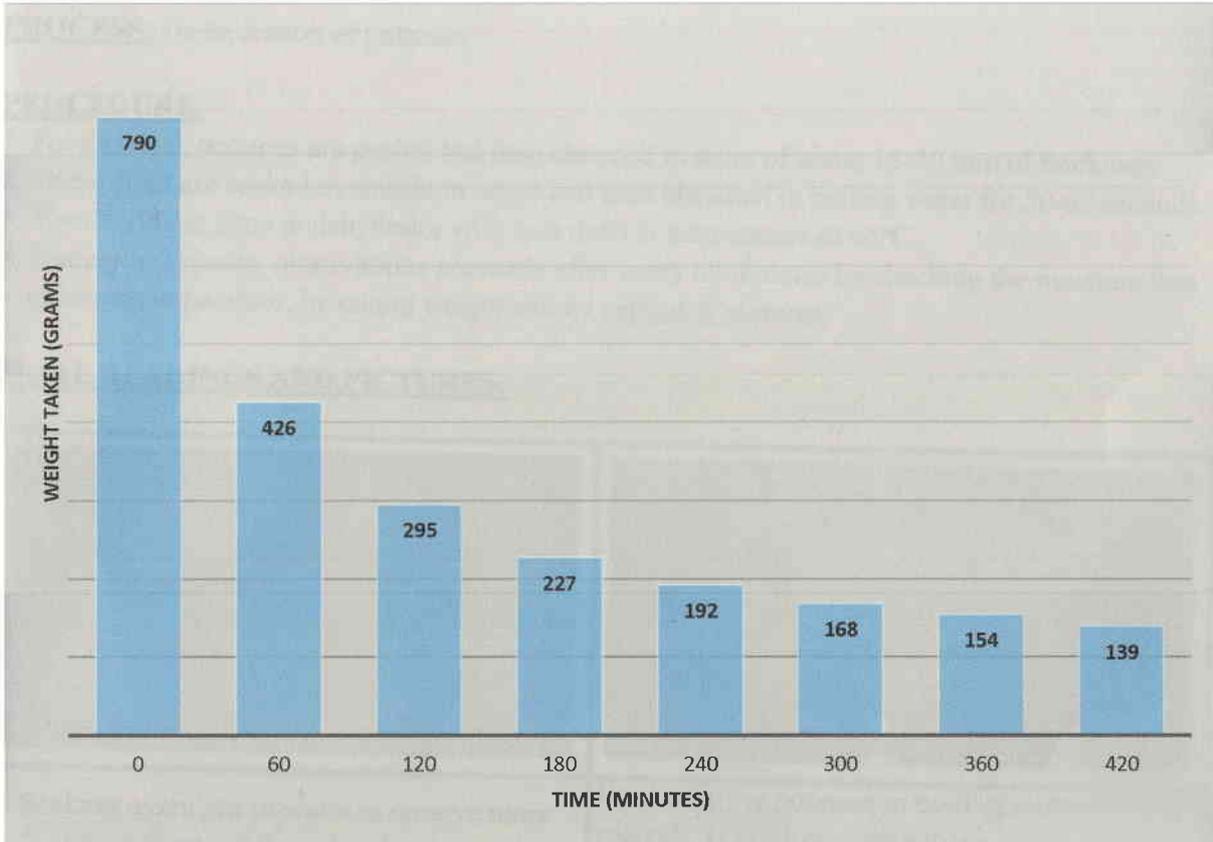


KERONE



A CRISIL-NSIC RATED COMPANY
ISO 9001: 2008 COMPANY
AFFILIATED TO THE UNIVERSITY OF NOTTINGHAM
MEMBER OF AMICAL

2. Bar Diagram:



K Komal

MISS. KOMAL BHOITE
TESTING INCHARGE

MR. GAURAV MESTRY
CHECKED BY