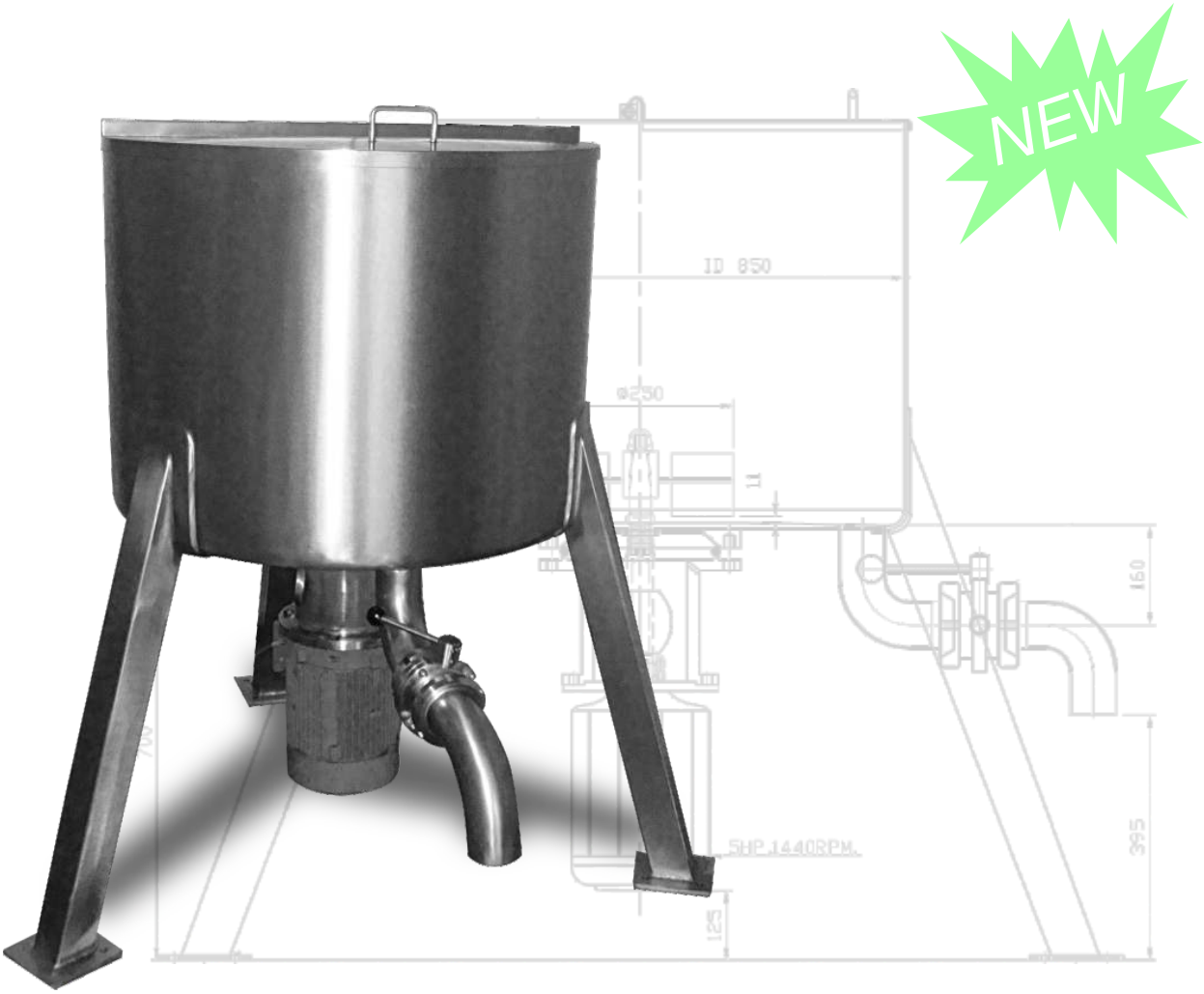
Wafer World
For PRIVATE Circulation only
The regular insider information from R&D Engineers 2010 01



TM5 - Batter Mixer

Basic needs of Good Quality Wafer Batter

The objective in mixing wafer batter is to obtain a uniform distribution of the solid ingredients, especially the flour, through out the aqueous phase without permitting the formation of strands of gluten from the flour protein.

To this end mixing should be carried out in a high speed mixer, the mixing element being submerged in the batter at all times.

The water used should be cold (15-20^{0}C) and the flour should be added slowly to the water with the mixer running. With suitable equipment mixing can be completed in 2.5 - 6 minutes.

A good product essentially begins with good quality batter.

Continued on page 4...

Contents

TECHNICAL

Mould Care

Moulds are exposed to a tremendous level of stress during the manufacturing process therefore good mould maintenance is required for smooth workflow and high production rate.
The mould is subjected to sheer torture due to constant heating & cooling round the clock.
Proper care tremendously increases its useful life.
Whatever is done with or to the mould must be done with the greatest of care from aligning in the tong assembly, removal, washing (decarbonizing) and storage.
Washing is a very important part of the process for better heat transmission & hygienic reasons. Therefore moulds must be washed regularly.
Incorrect washing can destroy the material structure. As a result the surface becomes rough and looses its lustre.
It is essential to ensure that the manufacturer of your mould confirms correct procedure and provides exact cleaning information.

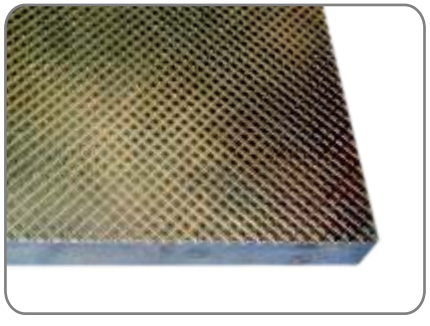
Various stage of Wafer mould condition (illustrated below)

(A)

(B)

(C)

Used Moulds



Semi Cleaned Moulds

Cleaned Moulds

(A) - Condition on prolonged use with higher carbon deposit on the plates.

(B) - Cleaning done, on the machine which may show some position still not fully cleaned.

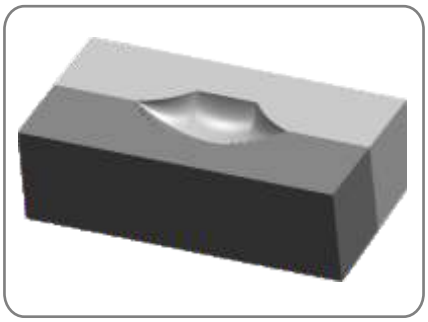
(C) - Moulds taken off the machine, washed & cleaned carefully.

PRODUCT IDEAS

NEW PRODUCT

Clients Concept

Mould Development



Actual Product

The above is an imitation of a crab shell design. We have been producing complex design wafer products.

Street Food - Wafer based

- PRAGUE, CZECH REPUBLIC

FORTHCOMING EXHIBITIONS

ProSweets Cologne

Date: Jan 31 - 03 Feb, 2010
Venue: Cologne International Expocentre, Germany.

Gulf Food - Dubai

Date: 21-24 Febuary, 2010
Stall No.:S1-B58, Hall 1 Sheikh Saeed
Venue: Dubai International Convention and Exhibition Centre. Dubai

FHA - Singapore

Date: 20-24 April, 2010
Stall No.:4B1-04,
Venue: Singapore Expo, Singapore

1.3. MIXING, STORAGE AND DEPOSITING OF WAFER BATTER

Continued from page 1...

Gluten strands are more likely to form when batters are mixed at higher temperatures, are prepared on slow speed mixers, or when the mixing time is excessively prolonged. If gluten strands are formed in the batter they frequently cause blockages in pipe work and metering pumps used to distribute the batter to the wafer ovens.

Where yeast is added to the formulation as an aerating agent the batter is held for a period of about one hour before use. Non-fermented bailers may be held for 10-20 min before use to allow air bubbles entrained during mixing to rise to the surface and disperse. However such systems can be a source of problems if the temperature of the circulating batter is allowed to rise. Under such conditions gluten strands may form. Another potential problem associated with elevated batter temperatures in a circulating ring main is bacterial fermentation. This may lead to a fall in pH and cause undesirable changes in product properties. Ideally, batter should be distributed from the point of preparation to the point of use by means of a unidirectional now system.

Batter is deposited onto the wafer-baking plates (for a description of the later see Section 1.4) by means of an intermittent now volumetric dispenser. The pattern of the deposit consists of a number of strips of batter laid parallel to one edge of the plate. It is found that of the three deposit patterns investigated (2, 5 and 8 strips), the pattern consisting of 5 strips of batter produced wafers having the most uniform weight distribution within the sheets. Since the batter is metered onto the plates volumetrically it is essential that the solids content and specific gravity of the batter should be as constant as possible. Measurements made on yeast-aerated batters were reported to have an average specific gravity of 1.13; on non-yeasted batters average values of 1-14-1-15

(To be Continued)

R&D
An ISO 9001:2008 Company
Web : www.rndwafers.com
R & D Engineers
A-41, IDA Kukatpally, Phase II,
Road No.4,Via I.E.Gandhi Nagar,
Hyderabad - 500037. INDIA.
Phone : 0091-40-2307 9121 / 7985,
Fax : 0091-40-2307 8668.
E-Mail : info@rndwafers.com

Designed by Srinivas Panuganti Printed @ Pragati Offset Printers, Hyderabad.