

*R & D Engineers*

Our Innovation for a circular economy

## Edible Container Baking Machine ZA-(C)



Biscuit Cups for tea / coffee  
Edible Container for Milk Shake / Soups



# Edible Cup's for – Hot Coffee or Tea

Manufacturers of all sizes – from start-ups and small enterprises to large companies and multinational corporations – are benefitting from the current trend. However, the production of Eco friendly edible cups differs from conventional wafer production in a number of ways, which has a significant impact on the manufacturing, handling and packaging process: Cups with natural ingredients can spoil more easily; consequently, the packaging needs to offer better protection than for conventionally done. Using natural ingredients like Cocoa, Ginger, Turmeric means product sizes can vary from cup to cup, which poses a particular challenge for product feeding and handling. Allergen-free products are subject to stringent hygienic standards. Combined with their oftentimes sticky consistency, this calls for extensive cleaning and maintenance processes. In addition, retailers and consumers have certain expectations of their own, which cannot be ignored: Customers expect a broad range of Volumetric Cups with different taste, sweetness, flavours and ingredients. These Cups should have as long a shelf life as possible without containing preservatives. The packaging not only needs to be visually appealing, but also suitable for transport and shelf displays. The growing interest in sustainable solutions should be taken into account. Consequently, several aspects need to be considered when selecting the right processing and packaging technologies. Depending on the manufacturer's starting point, company size and existing equipment, a number of automation solutions are worth considering.

**LEVEL A (Basic)** For start-ups and smaller companies, the initial goal is to achieve a consistent quality standard and produce minimum quantities to establish a foothold on the market. A semi-automated entry-level solution is likely the best choice at this point. Automated mixing and forming ensures consistent product quality. Automated primary packaging ensures tightly sealed packs, for high product safety and a long shelf life.

**LEVEL B (Mid Scale)** Small but established manufacturers and medium-sized enterprises, who want to add health and nutrition Cups to their portfolio or produce larger batches, require standardized and fully automated systems. Here, one important aspect is ensuring a maximum degree of flexibility, so that they can respond to new trends and market growth. In addition to Level 1, it makes sense to automate product in-feed, as well as secondary packaging. Heat sealing and Modified Atmosphere Packaging (MAP) can further extend product shelf life. Cartoning and case packing machines should enable fast and easy format changeovers between different products. Easy access to the individual machines and tool-free format changeovers simplify maintenance and retrofitting.

**LEVEL C (Large Scale)** Established medium-sized enterprises and large corporations need fully automated and seamlessly integrated solutions that allow them to quickly retrofit or upgrade their production capacities. At the same time, they require maximum overall equipment effectiveness in order to achieve their growth targets. Gentle product handling, e.g. via linear motors, pneumatic handling of products; reduces debris build-ups in the machine. All process steps are mutually harmonized and fully automated, so that manual interventions are almost entirely unnecessary. A simple, intuitive interface makes the machines easy to operate – a significant advantage in times of skills shortages. Multi leg systems with product buffers and re-feed belts maximize machine efficiency as a whole.

This Catalogue describes level B, mid scale production.



# Product

## Biscuit tea cup.

It can hold hot beverage for 10 to 15 mins.



15g / 60ml  
₹7.5 each



25g / 110ml  
₹10 each

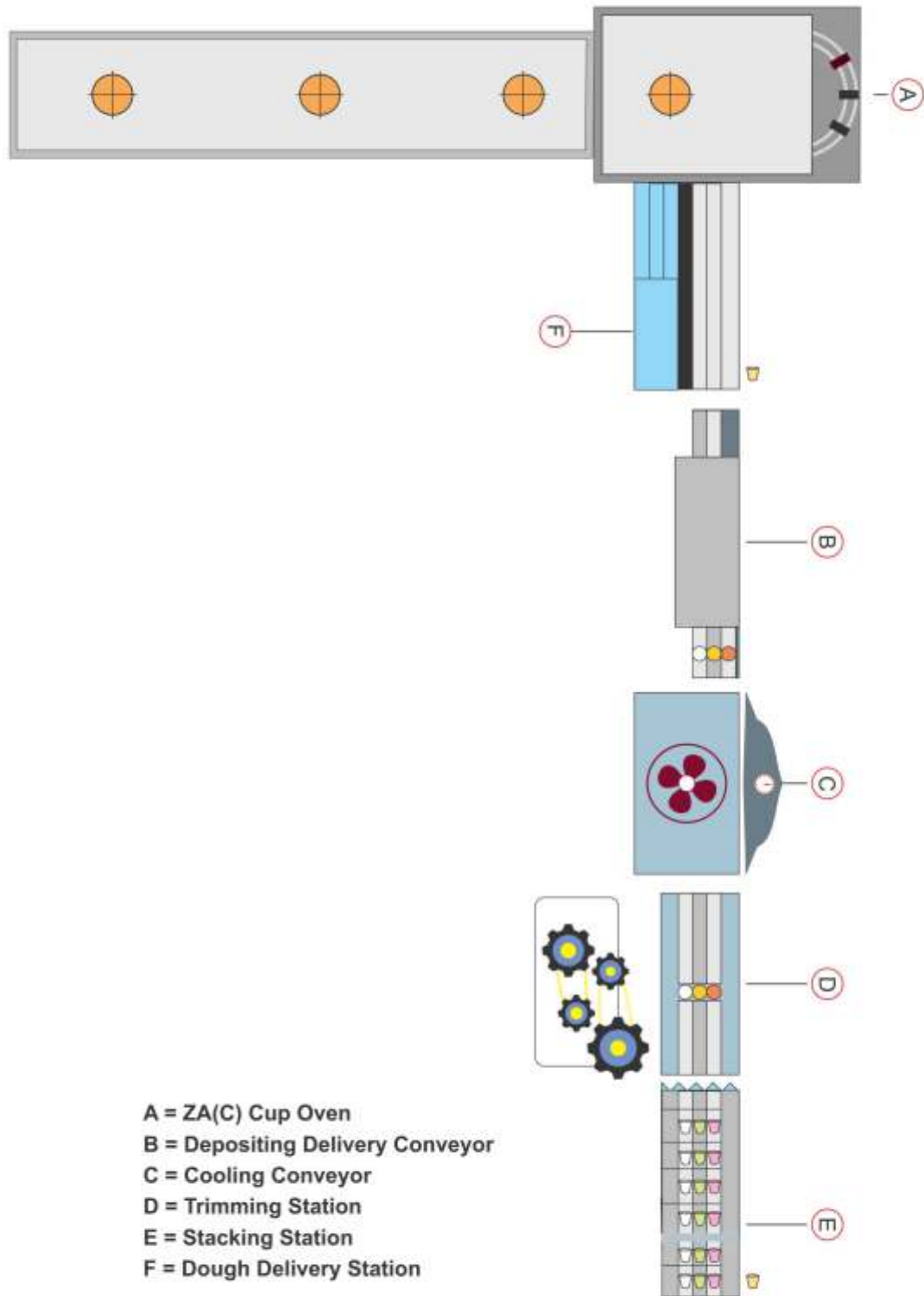
Ingredients : Wheat flour, salt, sugar, fat, Baking additives



Process

# Za (C) for Solid dough

## Principle of Operation



# Let us Contribute to green products

With our circular economy using edible cups!

## CIRCULAR ECONOMY



What are the biggest road block to a circular economy in packaging today?  
How must the packaging sector you represent respond to these in the coming years;  
it we are to achieve circularity?



**ISO: 9001 - CERTIFIED**

**R & D Engineers**

A-41, IDA Kukatpally, Phase II, Road No. 4, Via I.E. Gandhi Nagar, Hyderabad - 500037. INDIA

Phone : +91-40-2340 2682

Mobile : +91 9959000380 E-mail : [info@rndwafers.com](mailto:info@rndwafers.com)

All rights reserved. No part of this brochure may be reproduced or transmitted in any form or by any means, electrical or mechanical including photocopying, recording or by any other form of information storage or retrieval system without permission in writing from the publisher. R&D Engineers adopts a policy of continues improvement and whilst every effort has been made to provide accurate and up to date information, the information contained in this brochure should be used for guidance purpose only and does not form part of any contract. The technical data and illustrations are subject to change without notice

Web : [www.rndwafers.com](http://www.rndwafers.com)