



CASE STUDY

## INCREASING OUTPUT

### Without Sacrificing Quality

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**Multitech Foods  
Manufacturing Co.,Ltd.**

"Matcon's IBC system has enabled us to save over one hour of production time per batch—a significant saving when producing ten batches per shift."

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Pasawat Woraphechaiwat, CEO

THE POWDER HANDLING EXPERTS

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Discover how Multitech Foods Manufacturing saved over  
one hour of production time per batch.



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## About Multitech Foods Manufacturing

**Multitech Foods Manufacturing must always adhere to multiple regulations and controls to ensure quality and safety**



Multitech Foods Manufacturing Co., Ltd. is the parent company of Inthaco, OJ Squeeze and OJ Natural brands.

Founded in 1976, Inthaco Co., Ltd. is a leader in the production of food ingredients and additives, specialising in the use of natural raw materials.

Inthaco are also a contract manufacturer for a range of customers—highlighting the need for adherence to multiple regulations and controls that ensure quality and safety. To enable them to manufacture a wider range of products, Multitech use a range of natural ingredients in powder form to create their recipes, some of which contain allergens. All their manufacturing processes are performed using closed systems to avoid waste and batch cross-contamination.

OJ Squeeze Instant Powder Fruit Juice products are developed using Thai fruit juices including pineapple juice, guava juice and lemon juice. They also incorporate Thai Herbal Drinks. The products are sold to both local and domestic retailers and exported overseas to international markets. These products are manufactured in Multitech's Thailand factory, using a spray drying method which efficiently enables the transformation of a wet blend to transform into powder. The powder—when subsequently mixed with liquids—has almost the same aroma and taste of the raw material. In many instances it has an identical profile to the native raw material.

## The Need

All activity within the campaign manufacturing process must meet the required hygiene standards of the customer and be performed in-line with international regulations.

As consumers demand more product variety and diverse batch sizes, Multitech Food Manufacturing have been looking at new ways to run an efficient manufacturing system to handle this growing and changing market.

To accomplish this, recipe changeovers need to be performed as quickly as possible to reduce any downtime and to ensure that output throughout the shift remains high. Ideally resources should be focused on production rather than the disassembly and cleaning of equipment.



## Before Matcon

Before contacting Matcon, Multitech Foods Manufacturing were using a stand-alone V Blender and a Ribbon Blender with separate packing systems. The typical manufacturing process for each product involved milling the ingredients before loading the V blender or Ribbon blender, sieving the product on discharge and then transporting to the packing line.

Previously, all of these process steps would take place one after the other, which meant that some equipment was often not in use throughout an entire shift. In addition, both of the blenders used had limited capacity. Therefore Multitech were only able to produce batch sizes between 200–1,000kg.

Once the batch size for one product had been fulfilled, all equipment had to be stripped down, cleaned and then reassembled. As both the V Blender and the Ribbon blender had multiple moving parts in contact with the powders, cleaning time was significant. In addition, product residue was often found in hard to reach parts of the blender leading to further waste and contamination issues.

## Why did Multitech call Matcon?

Using their legacy production process, batch changeovers were an onerous, resource-heavy task. Labour costs for disassembly and cleaning were too expensive and the numbers of batches produced per hour were shrinking. The existing equipment was also too difficult to clean thoroughly causing additional downtime which greatly reduced productivity.

## The Matcon equipment installed as a solution

- IBC Filling System
- IBC High Shear Blending System
- IBC Discharge System to 500g aluminium bag
- IBC Discharge System to 10–12Kg bag
- 6 x 1500 Litre Stainless Steel 304 IBCs



Once the new Matcon Technology was installed, Multitech Foods Manufacturing saved one hour per recipe changeover—a significant improvement that has led to increased production volumes for each shift.

## The Rewards

### Dust free contained processing

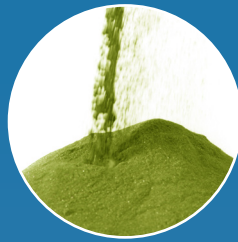
Matcon IBC Technology decoupled the manufacturing steps to create a flexible, agile production process. Each step can now be active in parallel, increasing productivity and eliminating idle equipment and production steps. The contained nature of IBCs and tumble blending also means that the system is contained, even during discharge. Only the IBCs and contact parts need to be cleaned eliminating inefficiencies and blending related bottlenecks.

### Fast, efficient changeovers

As IBCs are now cleaned offline, manufacturing downtime is significantly reduced. Each IBC is designed and manufactured to meet the highest hygiene standards with no entrapment areas. The IBCs move through the process steps and are the only equipment that needs to be cleaned in between batches.

Multitech's processing equipment now safely manages a range of ingredients—even those with allergens—with the contained Matcon IBC System. Since the new equipment has been in operation, Multitech have had several potential customers visit them who have in turn been suitably impressed with their new processing system.





"Matcon's IBC System has enabled us to save over one hour of production time per batch—a significant saving when producing ten batches per shift."

"The contained system was an important factor that ensures high speed recipe changeovers which have led to an increase in production rates and even opened us up to venture into other industries, such as dairy. The set-up and commissioning of the system has been a huge success. The technical knowledge and level of customer service from pre-order to commissioning has been excellent."

**Pasawat Woraphechaiwat**  
**CEO**



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## WHY CHOOSE MATCON

We understand the challenges faced by manufacturers of beverages and mixed products.

## YOUR CHALLENGES

Increasingly large and varied product portfolios require constant changeovers which significantly impact production time.

Segregation of the mix is a risk—particularly with products like 3in1 coffee—due to the different particle characteristics.

A dust-filled production environment creates risk of cross-contamination in the end product.

## HOW WE CAN HELP

Matcon's unique Cone Valve in each IBC protects the blend during transfer, leading to better quality product every time—and satisfied customers.

Matcon's powder handling system remains contained at all times. Confinement of dust creates a cleaner environment, better operator safety and no risk of cross-contamination.

