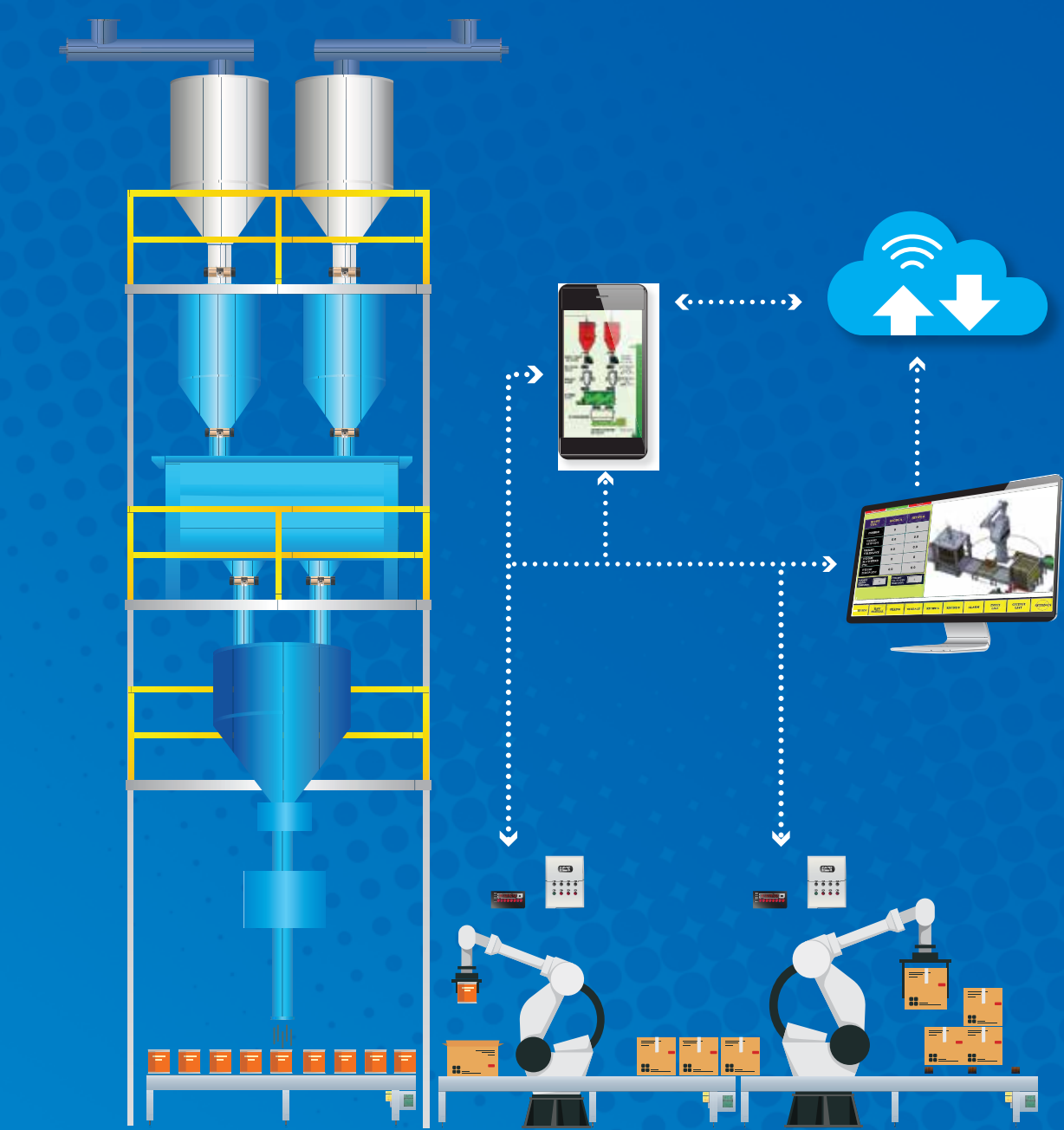


# Industrial Revolution 4.0 & Industry IoT

## Batching & Blending Plant cw Bagging Line & Robotic Palletizer System



- Real-time tracking and also regulating system for any kind of batching & blending plant. Parameters are monitored from upstream process such as product transferring, feeding, weighing, blending, storage and extended to bagging as well as robotic palletizing system.
- Able to achieve plant operation transparency such as machinery real time running performance, machine downtime, batching recipe selection, weighing recording, production quality and production throughput calculation. The list goes on.
- Ensure the confidentiality and integrity of real-time monitored data transit from next-gen sensing devices to cloud, edging analytics on the data, facilitate stored data flow securely between edge devices and cloud and securing access to information.
- Reduce the risk of low-quality production by AI complements, the IoT offers predictive maintenance. The alert system alerts about possible harms. Hence, plant operators could fix the issues before major shutdowns happen. New insights can be identified to better understand past events and to mitigate future risks.
- Assist business decision-making by moving data out of traditional silos. IoT enhances situational awareness and empowers new contextual insights, resulting in faster and better-informed decision-making and thus creates higher dividends.

# Provide the Right Solution to Plant Automation & Integration System with Various Industry IoT Needs



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**Robotic  
Palletizing System  
Solutions**

- Industry IoT
- System Integrator
- Plant Automation

**Quality Robots for  
Maximum Efficiency**



## About BAFE

Bulk And Fluids Engineering Sdn. Bhd. (BAFE) was established in 2004. It is a fast growing Malaysia-based company to provide Plant Engineering, System Integration and Industry IoT solutions for various process industrial plants. The solutions provided include bulk material handling, fluids process engineering and plant automation for virtually every industrial environment.

Today, BAFE's business growth is stronger than ever. The company has progressed and dedicates to serve the clients with tailor-made equipment & complete system to suit the process plant & manufacturing application requirement. We provide design, fabrication, installation and commission recognized innovative technological approaches to fulfill various industrial application needs.



## Robotic Palletizing System

Robotic Palletizing System is an essential component in the manufacturing and distribution sections of a production plant in this modern world. Production business, from fields as diverse as chemicals, food and health care, are acknowledging the advantages this innovation brings.

Choosing the appropriate robotic system has to take into considerations many factors. At BAFE, we supply personalized solutions that integrate seamlessly right into each production setting to attain, as well as optimize the desired results of the clients.

We aim to provide top quality and also reliable solutions and services to our clients regardless of what industries they might be in. Our systems are quick, stable, and with short cycle times and increased throughput combined with low space requirements and high cost effectiveness.



## Why BAFE?

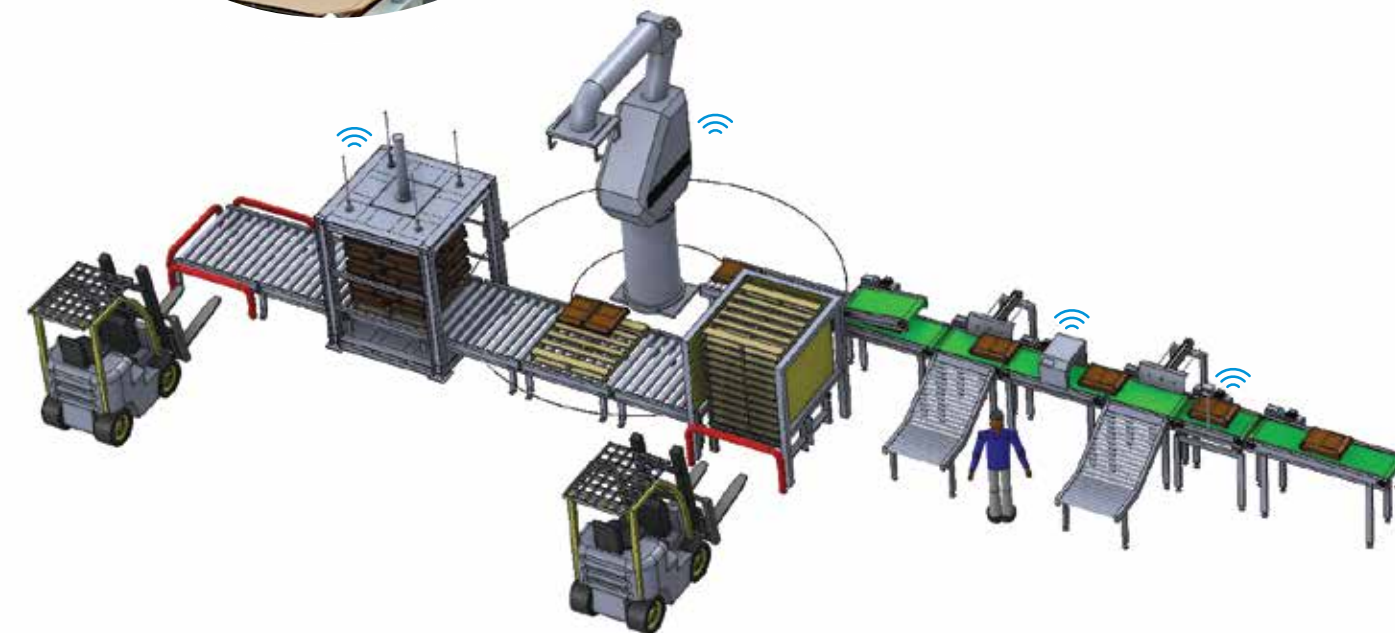
BAFE has been a leader in the product handling and also robotic packaging sector for more than 15 years. Our industry-leading series of palletizers will accommodate a wide variety of product formats of our clients. We help you to choose the best palletizing solution for your production line.

When you automate with BAFE's Robotic Palletizing Solutions, you can expect:

- Increased line efficiency
- Improved quality of finished products
- Optimum performance with high processing speed
- Able to manage multiple items at one time
- Highly accurate
- Able to lift heavy loads
- Adjustable to brand-new product extension
- High palletizing performance means higher profitability
- Greater line flexibility
- Reduction in staffing requirements

## Applications

- Stacking Boxes, Bags, Cases & Cartons Bagging Lines
- Food & Beverage Industry
- Plastic & Rubber Manufacturing Industry
- Cement & Building Material Industry
- Chemical & Fertilizer Plant
- Feed Mills, Rice Mills & Agricultural Industry



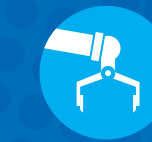
## Robot Grippers

Robot Gripper is often the key to a successful palletizing application. Application of the optimum gripper is crucial when it comes to increasing performance as well as maintaining product quality. While the task it performs may appear easy, designing a gripper that will repeatedly handle thousands of products, day after day, with little to no maintenance can only be achieved through years of industry experience.



### Combination Grippers

Combination grippers combine the functions of other grippers. It is significant to perform several tasks at once or if limited space is available. Combination grippers can also be used to palletize a particular product while also handling pallets, slip-sheets, layer boards, totes and etc.



### Fork Grippers

Retractable fork grippers handle open vessels or large containers. The design of this gripper makes it possible to accept products from the roller-conveyor.



### Vacuum Grippers

Vacuum grippers are mainly used for cartons and ideal for handling large variations in product sizes. They are most commonly seen handling objects that are smooth, flat and solid.



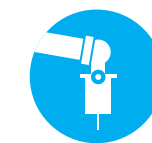
### Magnetic Grippers

Magnetic grippers are suitable for picking up flat, ferromagnetic objects such as pressed or perforated steel parts and sheets, punched steel materials or metal mesh parts.



### Mechanical Grippers

Mechanical grippers are suitable tools for products that cannot be sucked. They constantly have their product safe in control, even under strong acceleration.



### Needle Grippers

Needle grippers provide the option of reliable gripping of workpieces which are difficult to grip. These special grippers are particularly suitable for textiles, fiber composite materials or fleeces.

