

Industry IoT

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System Integrator

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Plant Automation

We Shoulder Industrial Revolution



# INTRODUCTION

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 including 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.

Since its inception, BAFE has worked closely with the customers and continue the tradition of high customer satisfaction. At BAFE, we recognize the importance of each and every piece of equipment, as it brings impact to the whole process system. Our long-standing experience in each equipment & plant engineering's design, development and implementation is able to fit a variety of industry requirements.

BAFE is about people, know-how, dependability, technical expertise and provide solutions to every customer's unique needs. From a single piece of custom-engineered equipment to a complete integrated plant set-up, BAFE has always offer a combination of experience and expertise for the best in efficient-solution, quality, availability & cost effective.



# OUR SPECIALTY

» Industrial Revolution 4.0 and Industry IoT

» Plant Automation and System Integration

» Bulk Material Handling & Process Engineering

» **FIBC** Machinery and Conveyor System



# IR4.0 & INDUSTRY IoT

If your company is looking to upgrade your process system to IR 4.0 & Industry IoT you have come to the right place –

## We provide Consultancy

For companies (especially factories) looking for Industry IoT Integration System.

## We are a Solution Provider

Offering step-by-step solutions for companies that are ready to implement IR 4.0 in their factories.



Internet of  
Things



Industrial Revolution 4.0



Cloud  
Computing



System  
Integration



Big Data



Autonomous  
Robots





# PLANT ENGINEERING, AUTOMATION & INTEGRATION

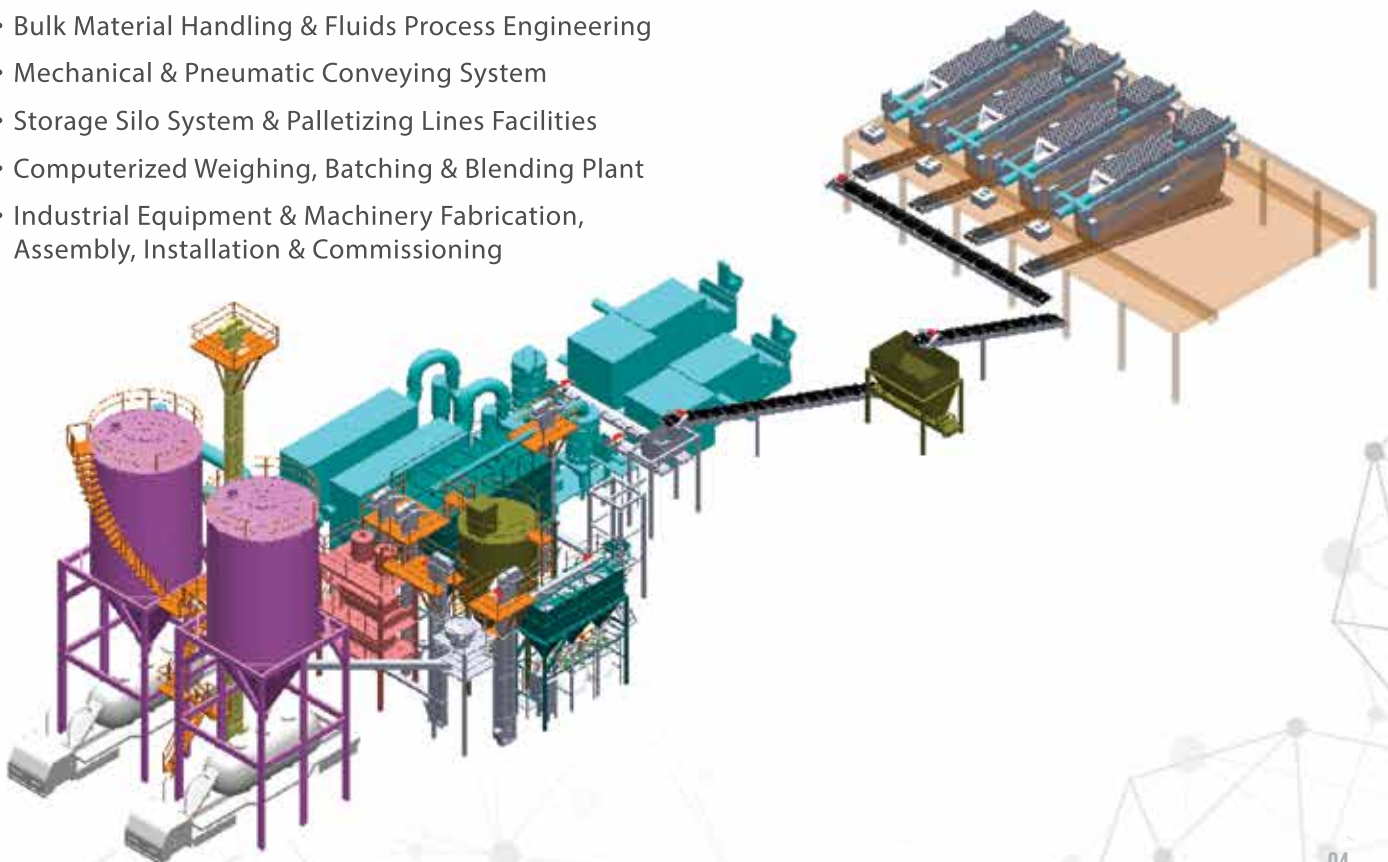
We understand the complexities and challenges from various plant engineering and process automation needs. BAFE's engineering teams are able to cover various ranges of design, solution and specifications to fulfill all aspects of process machinery, plant engineering, operation requirement and process optimization.

From client's plan on converting, upgrading the production plant or construction of a new plant; BAFE will work with the client from the initial concept all the way to actual plant operation & production.

Our portfolio ranges from the conceptual technical design to actual plant operation, including full project management.

We have successfully delivered numerous significant plants integrated engineering projects as to various industrial and application.

- Turnkey Project for Plant Engineering, Automation & Integration
- Industry IoT, Smart SCADA & Instrumentation
- Bulk Material Handling & Fluids Process Engineering
- Mechanical & Pneumatic Conveying System
- Storage Silo System & Palletizing Lines Facilities
- Computerized Weighing, Batching & Blending Plant
- Industrial Equipment & Machinery Fabrication, Assembly, Installation & Commissioning





# OUR PRODUCTS

**SPECIALISE IN  
BULK MATERIAL HANDLING  
AND PROCESS ENGINEERING**

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Belt Conveyor



Volumetric &  
Gravimetric Feeder



Vibro Sieve Separator



Vacuum Conveying Systems



Storage Silo and Hopper



Bucket Elevator



Screw Conveyor



Ribbon Mixer &  
Blender Machinery

# OUR PRODUCTS



Magnetic Filter for Liquids Line



Magnetic Separator



Gravity Diverter Valve



Diverter Valve For Pneumatic Conveyor



Rotary Valve



Lump Breaker



Dome Valve



Gate Valve / Butterfly Valve / Knife Gate Valve



Double Flap Gate



# FIBC

**FIBC** is defined as **Flexible Intermediate Bulk Container**, also called Bulk Bag or Super Sack having a body made of flexible fabric, which provides an effective method of packaging, shipping and storing dry bulk products. It offers hundreds of dry bulk products an advantage edge by its design which suits to various industries needs.

BAFE specializes in design, fabrication, installation and commissioning on various types of FIBC filling & discharging system to suit clients' requirements and specification for different dry bulk products characteristics and process handling needs.



## FIBC Filling Machine

**BAFE's FIBC Filling Machinery & System** are designed to provide maximum ingredient densification and precise weighing, with operation principle of bag hanging, bag stretching, weighing & vibration as they fill. Such system gives good compaction of product, good accuracy and result in stable filled FIBC which are safe & economical to store & transport. The machine & system can be tailor-made to handle a various of material characteristics, bag construction, filling capacity and client's individual requirements.

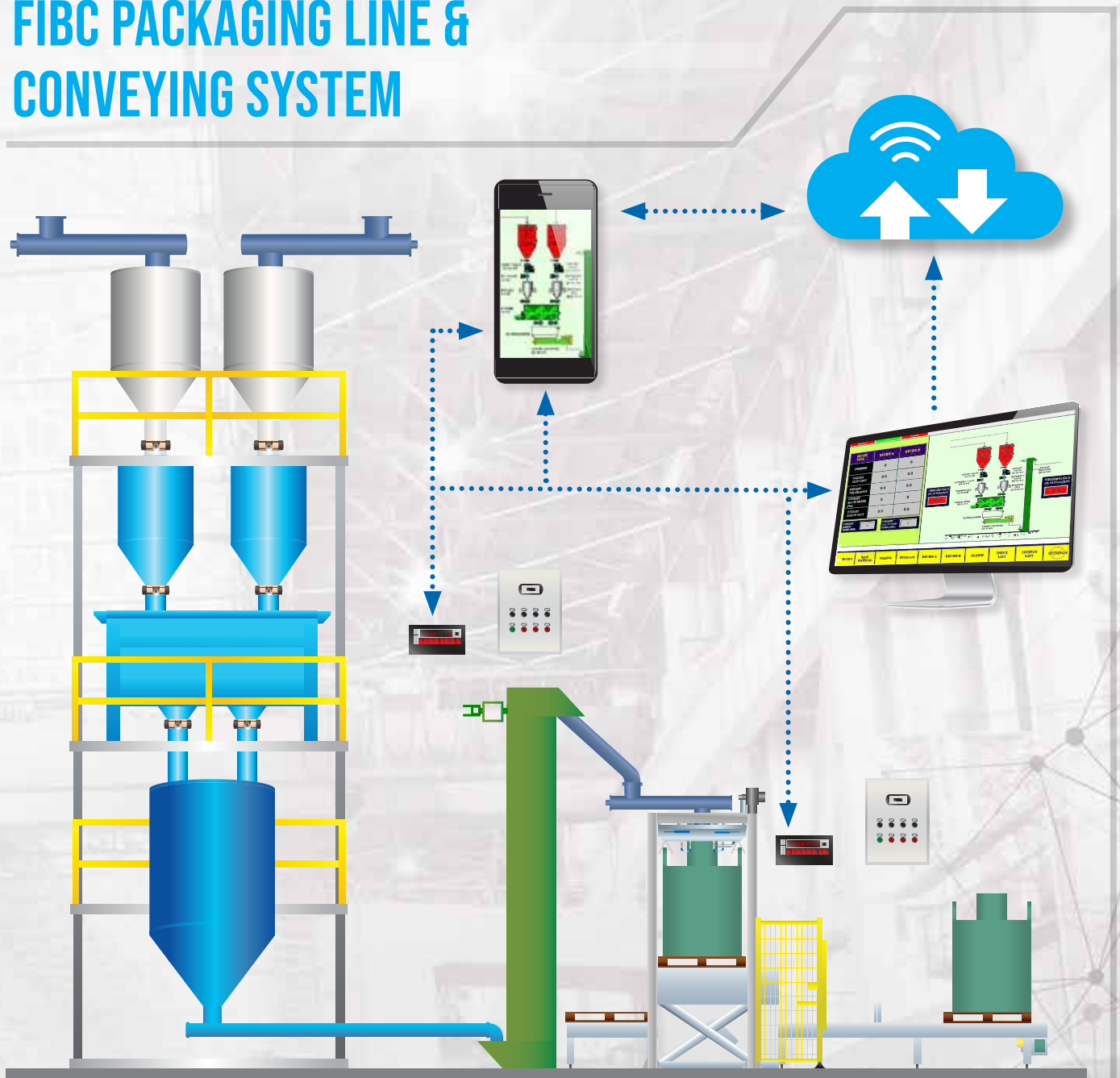
## FIBC Discharging Machine

**BAFE** offers the **FIBC Discharging Machinery & System** to cope with variable material characteristics, bag sizes & site environments. The machine range provides a safe, efficient & dust free handling methods to protect the environment and machine operator. The optional modules can be added to meet FIBC bag design to eliminate dust emission & product contamination. **BAFE** is able to extend from simple basic system to loss-in-weight discharging system with a sophisticated electronic weighing controller.



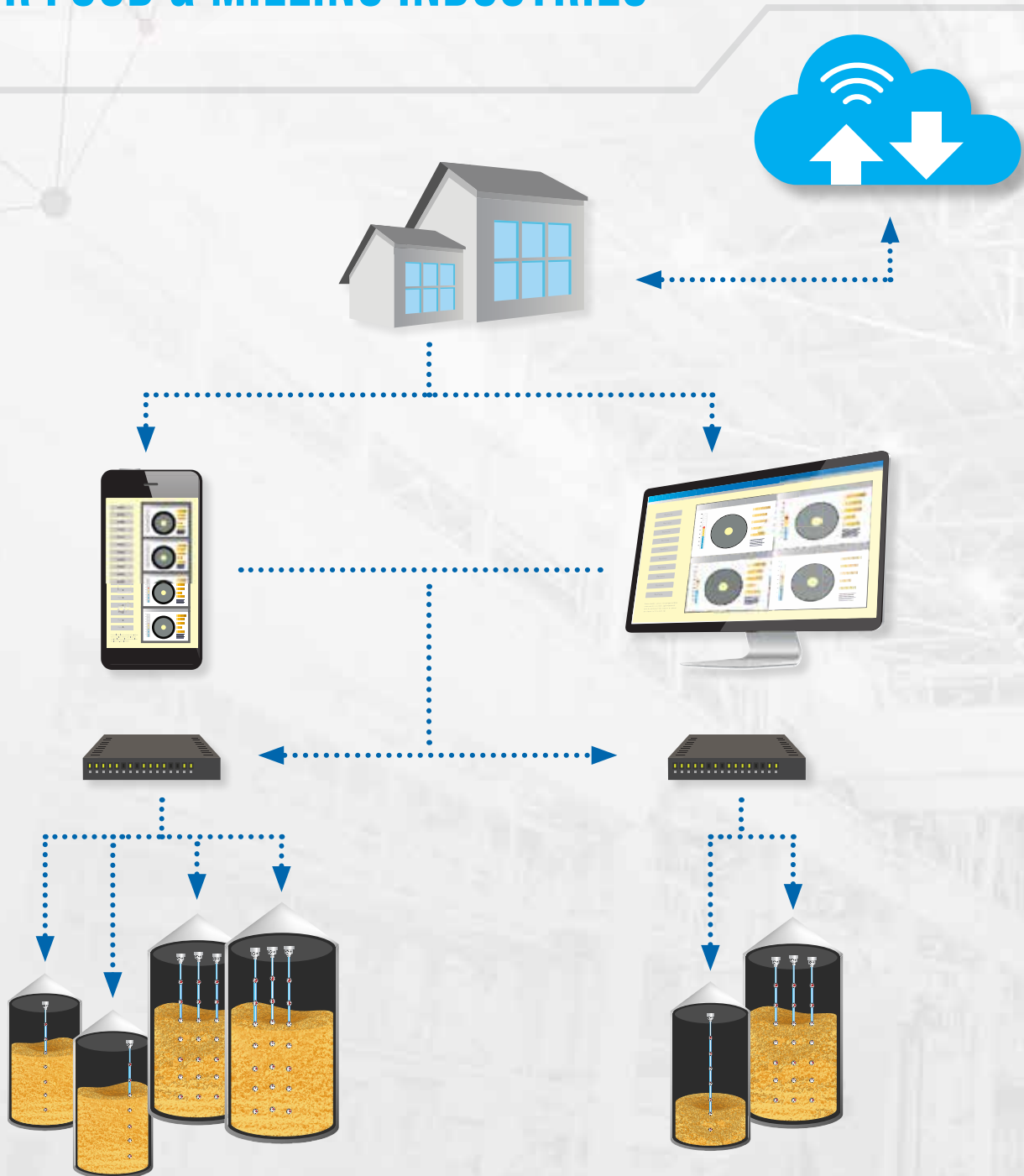


# INDUSTRY REVOLUTION 4.0 & INDUSTRY IoT BATCHING & BLENDING SYSTEM FOR FIBC PACKAGING LINE & CONVEYING SYSTEM



- Real-time monitoring and controlling system for any batching and blending plant, on products transferring, feeding, weighing, blending, storage and extend to bagging and palletizing system.
- Capable to detect the plants machinery operation mode, running status, efficiency range, downtime as well as the selection of batching recipe, weighing accuracy and production throughput.
- The real-time monitored data and information can be captured and transmit via internal networking or external cloud system.
- All captured and stored data are sent to a network and plot into the client's ERP system for production planning, preventive maintenance, inventory & delivery management, and good customer communication.

# INDUSTRY REVOLUTION 4.0 & INDUSTRY IoT STORAGE, TRANSFERRING, PROCESS SYSTEM FOR FOOD & MILLING INDUSTRIES



- Smart technology to monitor and control the temperature and moisture of grain in the storage tank.
- Real-time moisture and temperature measuring and automated process control solutions in a feed mill plant or raw material handling and storage environment.
- Real-time monitoring on storage level of grain and finished products in the plant's storage tank.
- All parameters and data are digitalized and send to the cloud system.
- Extracted data & information from multiple process locations can be used to recalculate conditioning parameters in order to improve the plant operation, cost of production, stock management practices and total product profitability.



# BUSINESS PARTNERS & PROCUREMENT SERVICES

To strengthen our business grown; we are supported by few well-known experienced principals & manufacturers who have been in the industries for decades. We are able to provide sales solution, application, engineering, integration system, wide range of engineering components and after sales service to various industries.



## KREISEL

An international plant manufacturer & solution provider, with technical employees that are experts in the field of handling bulk material.



## BELVEN

40 years experience in the production of valves and accessories, which are used in heating, air conditioning, industrial pipelines and water treatment.



## PAGLIERANI

Well established since 1926; designing and producing of weighing, packaging, bagging, palletizing, wrapping and full bagging line machinery. A wide range of solutions and system with unique services designed to provide safety and high production performance.



## ISSES

Industrial IR Oven System Solution Provider; To Save Energy Cost through an innovation with Gas Catalytic Hybrid Infrared Oven System.



## SESOTEC

More than 40 years of experience in contaminant detection and product inspection for metallic contaminants on production or final products. Protection against damage to machinery, production downtime, customer complaints and recalls.



## Galaxy Sivtek

High performance of Sieving & Filtering Solution for Screening, Sizing & Grading Requirement.



## WEG

Wide range of Electric Motors, Drives, Inverter, Soft Starter, Gearboxes & Industrial Gears.



## OSMAK

To provide the conveyor solution; from belt & rollers conveyor; extended to all accessory's equipment. Design and product with series, standard, economical and most importantly quality as highly protected against physical and chemical corrosion.



## Eliance

Digital technologies with Industry IoT, Big data, Cloud Computing & Artificial Intelligence for realization of Smart Manufacturing & Digital Farming.



To Provide Right Solution  
to Plant Automation &  
Integration System with  
Various Industry IoT Needs.

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