MANUFACTURER OF WORLD-CLASS FOOD AND FEED PROCESSING PLANTS AND EQUIPMENT

ENGINEERING INTELLIGENCE

LIFELONG PARTNERSHIPS

LOCAL SKILLS, GLOBAL FOOTPRINT

RAW MATERIALS → PRE-PROCESSING → EXTRUSION → POST-PROCESSING → FINAL PRODUCTS

- Bulk materials handling
- Milling
- Mixing
- Weighing

- Cooling & drying
- Coating
- Milling & sieving
- Mixing & flavouring
- Packaging

- Twin screw extruders
- Single screw extruders
- Forming extruders

CLIENT SUPPORT
- PRODUCT DEVELOPMENT
- PLANT DESIGN
- FINANCIAL ANALYSIS
- TRAINING ACADEMY
- 24-HOUR MAINTENANCE SUPPORT

info@CFAMinternational.com | www.CFAMinternational.com | +27 (0) 18 285 1031
2020 Expanded R&D Centre

Technical information

- Fully intermeshing, co-rotating twin-screw extruder
- Nominal barrel bore diameters from 32 mm to 120 mm
- Production capacities varying from 50 kg/h to 4500 kg/h
- Fully automated PLC control system
- Power requirement ranging between 18 kW and 400 kW

Features

- Advanced PLC control system
- User-friendly intuitive operating system
- Low maintenance cost
- Recipe manager that ensures repeatable high-quality production
- High-quality products with reliable consistency
- Easy access to analyses of production statistics
- Built-in protection devices to safeguard extruder
- 24-hours local maintenance support
- Power dip recovery function
- IOT enabled

Applications

- Processing of maize, soya, wheat, legumes and other products
- Produces products for food, feed, aqua feed and pet food
- Ready-to-eat or precooked products
- Various shapes, sizes and diameters of extruded products
Applications

- Development of new extrusion applications and products in laboratories
- Processing of maize, soya, wheat, legumes and other products
- Produces products for food, feed, aqua feed, and pet food
- Ready-to-eat or precooked products
- Variable shapes, sizes and diameters of extruded products
- Developing new applications for agricultural products, by-products and waste streams

Technical information

- Co-rotating, full intermeshing screws
- Nominal barrel bore diameters of 32 mm
- Production capacities varying from 25 kg/h up to 200 kg/h
- Fully automated PLC control system
- Power requirement of 30 kW

Features

- User-friendly intuitive operating system
- Low maintenance cost
- Products can be scaled up to be produced on production extruders
- High quality products with reliable consistency
- Built-in protection devices to safeguard extruder
- 24-hours local maintenance support
- IOT enabled
Applications

− Extrusion cooking of full fat soy for animal feed applications.

Technical information

− Single screw extruder
− Production capacity between 750 kg/h and 1000 kg/h of full fat soy
− Power requirement of 75 kW - 90kW

Features

− User-friendly operating system
− Low maintenance cost
− Good quality products with reliable consistency
− Built-in protection devices to safeguard extruder
− 24-hours local maintenance support
− IOT enabled

Applications

− Extrusion cooking of full fat soy for animal feed applications.
BUCKET ELEVATORS

Technical information
- Product throughput to client specification
- Options between stainless steel or mild steel
- Food grade buckets and belts available

Applications
- Ideally suited for food and feed applications
- Conveying a wide range of granular products

Features
- Access hatches for ease of cleaning and maintenance
- Optional extras include a range of sensors for automation purposes
- Modular design enables flexibility and ease of installation
- 24-hour local maintenance support
- IOT enabled
BULK BAG FEEDER

**Features**

- Designed with adjustable height, to fit a range of bulk bag sizes
- Dust-free dispensing of bulk bags
- Spring loaded suspension and pneumatic actuators to increase flow of product
- Integrated hopper with product flow aids

**Applications**

- Easily dispense product form bulk bags into other equipment, e.g. mixer, hammer mills etc
- Stand-alone feeder or integrated into a process plant
- Ensures good product flow and eliminates bridging problems
V-SERIES INTELLIGENT CLOUD COLOUR SORTER

Technical information
- Non-invasive, multi-level sorting
- Intelligent cloud brain
- Enhanced digital security
- Intelligent self-cleaning system
- Accurate valve control
- Adaptive input flow control system
- Air cooling system
- USB port
- LED light source configuration

Features
- Simple operation, easy to learn and use
- Flexible sorting modes, adaptable to a wide range of products
- Auto programming & remote function mode with video option
- Serviceable and upgradable
- 24-hours maintenance support
- IOT enabled

Applications
- Colour sorter for rice, beans, tea, cereals, seeds, nuts & kernels, dehydrated vegetables, industrial goods, and marketable crops
- Accurately identifies small defects and spots on products
- Sorting based on size, shape and colour
COUNTERFLOW COOLER

Technical information

- Adjustable product bed height
- Energy efficient cooling
- Pneumatically operated louvers

Functionality

Product is cooled, and excess moisture is removed using continuous airflow to allow post processing e.g. milling, coating or packaging.

Features

- Can be integrated with the processing plant control system
- Fast, effective cooling
- Fully automated system
- 24-hour local maintenance support
- IOT enabled
Applications

- Drying of extruded products such as pet foods, aqua feeds, texturised extruded proteins, etc.
- Sources of heat: steam, hot water, electricity, thermal oil or hot air
- Fast effective continuous drying of extruded products

Features

- Smooth discharging from drying bed to bottom holding hopper
- Discharge louvre system is triggered by high level sensor and driven with pneumatic air
- Recirculation of hot air to improve energy efficiency
- PLC controlled that can be integrated with the processing plant control system
- Access doors for inspection and cleaning
- Low maintenance costs
- 24-hour local maintenance support
- IOT enabled

Technical information

- Capacities range between 100 kg/h and 3 000 kg/h
- Pellet sizes from 3 mm diameter and more
- Adjustable product bed height
- Mild steel or stainless steel
Technical information

- 2 to 4 separations available
- Number of sieves and flow scheme designed according to the number of separations required
- Hanging sieve stack, suspended by fiberglass canes
- Standing sieve stack, supported from the ground with flexible couplings

Applications

- For sieving and grading of granular products
- Used in combination with a hammer mill/crusher for better control of particle size

Features

- Robust design, made to last
- Clamp design ensures no cross-contamination of product sifted
- 24-hour local maintenance support
- IOT enabled
EXTRA HEAVY-DUTY SLASHER

Technical information

- Adjustable cutting height between 20mm to 80mm
- Cutting width between 1.5m to 1.8m
- Required tractor power between 40kW to 80kW

Features

- Blades have two cutting edges that can be used which doubles the lifespan of each blade
- Extra heavy duty gearbox
- Appropriate PTO is matched to the slasher with proper slip clutch and guard system
- Durable extra heavy duty construction ensures that it can be used in the toughest conditions
- 24-hour local maintenance support
- IOT enabled

Applications

- Can be used for grass cutting and bush clearing in the most difficult conditions
Technical information

- Heated oil system for fat coating
- Three stage system for high throughput
- Fitted with Z-type elevator for gentle product handling
- Equipped with jacketed oil vessels with heating
- Oil pump can operate at temperatures of up to 120°C
- PLC controlled

Features

- Quick action mixing and coating
- Effective batch mixing
- Coat various products
- Easy operation
- Accurate weight and oil addition
- Painted mild steel or stainless steel
- 24-hour maintenance support
- IOT enabled

Applications

- Mixing of fragile products
- Product mixing with weighing capabilities
- Product coating to protect against bacterial growth
Technical information

- Wide range of granulation possible.
- Production capacity dependent on granulation and product
- Power requirement ranging between 5.5kW and 90kW
- HM-series include: HM5, HM7, HM11, HM22, HM37, HM55, HM75, HM90

Features

- Screen replacements are performed within seconds
- Easy access for maintenance
- High tip speeds for increased throughput
- Fine granulation milling
- Comprehensive spare part inventory available
- 24-hours local maintenance support
- IOT enabled

Applications

- Ideally suited for food and feed applications
- Milling of animal feeds, grains, legumes and other products
- Milling of extruded products to produce flours and porridges
MINI BATCH WEIGHING SYSTEM

Technical information
- Typical bagging capacities ranging from 100g to 2kg per bag
- PLC-based control system
- 2g accuracy

Applications
- High accuracy, automated weighing of granular materials
- Stand-alone or integration with processing plants

Features:
- Simple operation, easy to learn and use
- 24-hour local maintenance support
- IOT enabled
Technical information

- 2 to 4 separations available
- Number of sieves and flow scheme designed according to the number of separations required
- Hanging sieve stack, suspended by fiberglass canes
- Standing sieve stack, supported from the ground with flexible couplings

Applications

- For sieving and grading of granular products
- Used in combination with a hammer mill/crusher for better control of particle size

Features

- Robust design, made to last
- Clamp design ensures no cross-contamination of product sifted
- 24-hour local maintenance support
- IOT enabled
Technical information

- Capacity from 5 tonnes/hour upwards
- Fully automated PLC controlled

Applications

- Continuous measuring of granular products
- Weighing of products entering silos or processes
- Multiple interactable process scales to ensure product safety during food and feed processing

Features

- High accuracy measurements
- Multiple process scales interactable in one system
- 24-hours local maintenance support
- Can be integrated with SCADA and similar systems
- IOT enabled
Technical information
- Production capacities ranging from 1 tph to 8 tph
- Die inner ring diameters between 280 mm and 450 mm
- 18 kW to 110 low drive motor power
- Pressure ratios between 6 and 18
- Pellet lengths between 10 mm and 50 mm

Features
- Fully detachable feeder
- Easy access for service and maintenance
- Built in safety mechanisms
- Adjustable knife plates for both directions of rotation
- Adjustable rollers
- Optional steam pre-conditioning
- 24-hour local maintenance support
- IOT enabled

Applications
- Pelleting of grains, fibrous materials and mixtures thereof
- Production of pelleted feeds for chickens, sheep, cattle, game, etc.
RAPTOR BAGGING SYSTEM

Technical information

- Best in class weighing accuracy
- Typical bag weight capacities ranging between 2 kg and 50 kg per bag
- PLC-based control system
- High filling production capacity
- Multi-drop weighing capability to accommodate larger bag weights
- Auger feeding for granular products as well as belt feeding for fragile products e.g pet food.

Applications

- Automated bagging of dry materials
- High accuracy bagging and batching
- Stand-alone or integration with processing plants

Features

- High accuracy measurements
- Logging of production data
- Production data exported as CSV file
- 24-hours local maintenance support
- IOT enabled
Distinct airlocks available for fragile products i.e. pet food to prevent product damage

24-hour local maintenance support

Robust design, made to last

IOT enabled

Ideally suited to handle free flowing ingredients in the food, chemical and pet food industries

Options between food grade 304 stainless steel and 3Cr12 stainless steel rotor and housing

Various sizes available

Various options on rotor types and rotor speed

Technical information

Applications

Features

Technical information

Applications

Features
Technical information

- Production capacities from 1 tonne/hour upwards
- Twin-shaft paddle mixer
- Sizes: 100l, 250l, 500l, 1000l, 2000l
- Power requirement ranging between 5 kW and 37 kW
- Can be used to directly feed downstream equipment i.e packaging line, extruders etc.

Features

- Fast mixing – less than 20 seconds per batch
- High accuracy mixing
- Quick discharge of less than two seconds
- Fully automated PLC control system
- Available in epoxy coated mild steel, 3Cr12 stainless steel or 304 stainless steel
- 24-hours local maintenance support
- IOT enabled

Applications

- High efficiency mixing of dry ingredients
- Can be used as stand-alone batching and mixing system
- Can be integrated with the control system of processing plant
Applications

- Food, feed, snacks, aqua feed and other processing applications
- Pre-processing plants that include materials handling, milling and mixing, etc.
- Post-processing plants that include drying, coating, milling, mixing, bagging, packaging etc.
- Ready-to-eat or precooked products for various industries
- Extensive experience in: instant maize porridge plants, snack plants, cereal plants, aqua feed plants, pet food plants

Features

- Fully integrated PLC controlled
- User-friendly operator interface
- Integration of projects with processing plants
- Full turn-key solutions
- 24-hours local maintenance support
- Fully automated, robust system, requiring minimum human input
- Remotely accessible from CFAM factory
- IOT enabled
Technical information

- Design and manufacture of instrumentation, control and automation systems
- Electrical panel construction
- Installation and commissioning
- Maintenance support
- Training, mentoring, skills development and capacity building

Features and possibilities

- Robust and reliable
- Wide range of communication protocols used
- User-friendly human machine interface
- Ease of use pre-programmed operator decision support systems
- Recipe management for high quality reliability and product consistency
- Fault finding diagnostics and data logging for root cause analysis
- Remote diagnostics and data statistics
- 24-hours local maintenance support
- IOT enabled

Industries

- Food, feed, agro-processing and general industrial applications
- Stand-alone control systems
- Full fourth industrial revolution readiness

info@CFAMinternational.com | www.CFAMinternational.com | +27 (0) 18 285 1031