



## Bulk Weighing Solutions & Process Automation



# AAG Engineering Technologies Pvt. Ltd.

## Bulk Weighing Solutions and Process Automation

### Table of Contents

|   |   |
|---|---|
| • <b>About AAG Engineering Products</b> ..... | 1 |
| • <b>Bulk Weighing Solutions:</b>             |   |
| • Conveyor Belt Weigher Systems.....          | 2 |
| • Belt Weigh Feeder.....                      | 2 |
| • Apron Weigh Feeder.....                     | 2 |
| • Screw Weigh Feeder.....                     | 3 |
| • Impact/Mass Flow Measurement System.....    | 3 |
| • Bunker Level Measurement System.....        | 3 |
| • Loss-In-Weight Feeder system.....           | 4 |
| • Conveyor Metal Detector.....                | 4 |
| • Multi-Stage Auto Sampling System.....       | 4 |
| • Vibratory Feeder.....                       | 5 |
| • Bucket Elevator & Belt Conveyor System..... | 5 |
| • <b>Process Automation:</b> .....            | 6 |
| • Glass/Cement Batching System.....           | 7 |
| • Bagging and Packaging System.....           | 8 |
| • <b>Service and Support</b> .....            | 9 |





## About AAG Engineering Bulk Weighing Solutions and Process Automation

AAG Engineering Technologies Pvt Ltd, Mumbai is a well established organisation having vast experience of more than 30 years with business transaction being carried out in India as well as abroad.

The company provides world class solution for bulk weighing system & process automation for process industries & turnkey project execution experts to industries such as steel, cement, power, port, glass, food, chemical, sugar etc. We have rich experience & knowledge in concept selling, designing, engineering, manufacturing, sourcing and erection/commissioning to execute project in Trunkey basis, we are specialised in static/dynamic weighing, batching& bagging systems & Trunkey plant engineering solution.

Our strategy is to provide complete customised solution to our customer to their specification and needs with highest standards/quality with committed delivery, safety & cost effective solution with dedicated service support.

### OUR VISION

To emerge as a leader through innovative technology & techniques with commitment to deliver in time, quality, safety and cost effective solution to the satisfaction of our customer with dedicated service support.

### OUR MISSION

Exceed our customers' expectations by being the leading provider of safe, responsive, value-added services in the Process industry.





## Bulk Weighing Solutions

### Conveyor Belt Weigher Systems

AAG conveyor Belt weigher & Electronic systems ensure reliable performance & helps in optimum usage of raw material and monitor production/inventory, providing vital information for effective management & operation of your plant. Our modern state of art scale design having rugged multiple idler & load cell construction with direct coupled speed sensor ensure to deliver (+/-0.25% to 1%) accuracy with different scale model for any conveyor application & design. ensures high performance & low maintenance product offering.



### Belt Weigh feeder



Precise weighing & feeding of bulk material is critical operation in process operation. Accurate measurement and reliable continues operation is the key factor to reduce material wastage, blending and to increase profit. We at AAG having a vast experience in weigh belt feeders do the design to meet the specific needs of an application by working closely with our customer and manufacture to ensure accurate weighing and minimal material wastage to the customer expectation.

Our feeder systems are rugged and heavy duty construction which can handle capacity ranging from “0.054 tons/hr to 2500 tons/hr” and deliver +/-0.25% to 0.5% accuracy, skirted belt ensures precise control on the flow of material and wastage, and are loaded with array of useful features like totalization, multiple communication, process batch control, ease of belt change and direct actual speed out.

### Apron weigh feeder

Precise weighing & feeding of high temperature material is critical in process operation. Accurate measurement and reliable continues operation at high temperature is the key factor to reduce material wastage, blending and to increase profit. AAG having a vast experience in Apron weigh feeders do the design to meet the specific needs of an application by working closely with our customer and manufacture to ensure accurate weighing and minimal material wastage to the customer expectation. Our Apron systems are rugged and heavy duty construction which can handle capacity ranging from “4 tons/hr to 2500 tons/hr” and deliver 0.5% accuracy, high temperature Pan plates ensures corrosion resistance and wearing of metal even at high harsh environment and are loaded with array of useful features like totalization, multiple communication, process batch control, four load cell construction, heavy duty chain and sprocket having max impact resistance and direct actual speed out.



## Screw Weigh Feeder



These are one of the most accurate and efficient method of weighing & metering bulk material. Many processes being with bulk materials being discharged from hoppers, bins or silos. The inlet area is flood-loaded and designed to meter bulk material at fixed and variable rates.

With extensive knowledge and experience, AAG screw weigh feeders are designed to handle most fine powders and bulk solids. These can be custom design specific to customer requirement with specific length and inlet openings. AAG feeders are suitable to be used for very fine to coarse or fibrous products. And with the pivot load cell construction these screw weigh feeder can deliver up to +/-0.5% accuracy. These are also suited to operate in industries that require batching and fine process feeding.

## Impact/Mass Flow Measurement System

These special devices are used for continuous measurement of mass flow rate and totalization of free-flowing material like powder and bulk solids without interrupting the flow of material or any stoppage in the flow. AAG Impact Mass Flow is low cost and highly accurate measuring system for dry solids, food, powders & hazardous chemicals for process control with less human interruption.



These are highly used in vertical flow streams where conveyor scales, belt feeders will not fit or cannot be applied. Our Impact weigher can operate with many pre-feed devices like air slides, rotary valves, conveyor etc. With these many different material and application our impact weigher plates are designed to take high impact load and abrasion resistance and still can deliver accuracy from +/- 0.5% to 1%.

## Bunker Level Measurement System



Measurement of coal being feed to boiler as a fuel is essential to monitor the boiler's efficiency similarly in cement for mill performance and steel plant for blast furnace performance. Knowing the consumption of bulk material or liquids in bunkers bins & vessels will help in inventory monitoring and process control.

Bunker level system from AAG record the bunker level continuously and convert the level difference in mass (Tons/Kgs) by means of press-fit type special and unique strain gauge sensor and compression type gauge, these sensors are fitted on to the support structure of bunker and can operate without any concern of failure and maintenance. The design of sensor is such that it compensates temperature change and wind deflection. The system accuracy can be achieved within "+/-2%" and is not affected by corrosion, abrasion, dusting or sidewalls build-up etc.



## Loss-In-Weight Feeder system

This is regulated by the amount of live load that is lost as a product is discharged. In order to do this effectively the loss in weight feeder

receives constant feedback from a sensitive weighing device. Which ensures precise amount of bulk material is delivered either continuously or in each batch. AAG Loss-In weight feeders are designed to measure the flow rate and total mass of bulk solids, powder, granules & flakes for low capacity and gravimetric feeding system delivering from +/-0.25% to 1% accuracy. There are many advantages like they can handle floodable, hot difficult material and are unaffected by dust and material accumulation.



## Conveyor Metal Detector

Flow of any Foreign (tramp) metal can cause serious damage to process machinery and equipment and lead to stoppage in process and productivity of plant. Metal detectors from AAG ensure that the conveyors and crushers do not get damaged due to metal contamination. Our metal detectors detect both ferrous and non-ferrous metals, be it any metallic scrap, bore crowns, bar scrap, nut, bolts etc. Our metal detectors are capable of detecting all; it can even detect metal when buried in wet conductive materials. These are easy to install and calibrate without disturbing the process.

## Multi-Stage Auto Sampling System

Auto Sampling system is a mandatory process to collect representative sample for coal, minerals for process monitoring and quality control in mining, power and variety of other process industries.



AAG sampling systems are designed and manufactured to meet many international regulatory standards like ASTM & ISO. Sampling systems offer an economical and simple means to procure representative samples directly from conveyor belt streams. Sampling systems can be used as stand-alone devices or multi-stage samplers with crushing to prepare representative samples for sieve analysis. In multi-stage sampling systems, we offer the following equipment: primary sampler, primary belt feeder, crusher, secondary sampler, can collector & reject system (bucket elevator or screw conveyor). We ensure that the total sampling system operates in a dust-tight and moisture-tight process.



## Vibratory Feeder



Known for their corrosion resistance and high performance, heavy-duty electromechanical vibratory feeders are used to increase the bulk handling productivity with controlled high feed rates which further results in improvement of cost-per-ton handling efficiency. These are ruggedly constructed to minimize the maintenance and improve the production efficiency. Vibratory feeders are offered in various models with

different capacities ranging from 10 to 500 tons per hour. AAG Vibro Feeders can serve application where controlled feeding of material is required in industries such as steel, fertilizer, cement, glass and more. The models are also customised based on the application and requirement of the process.

## Bucket Elevator & Belt Conveyor System

High performance Bucket Elevators & conveyor are used for continuous process applications for transport of meal, cement, pulverized coal, cullet and other fine batch materials.

AAG offers for Bucket elevator the conveying heights range from 10m to 100m, and conveying capacities up-to 100 TPH. And for belt conveyor ranging for 400mm belt width to 2000mm belt width.

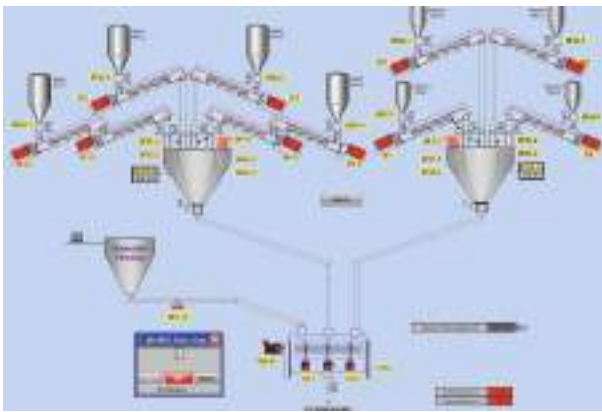




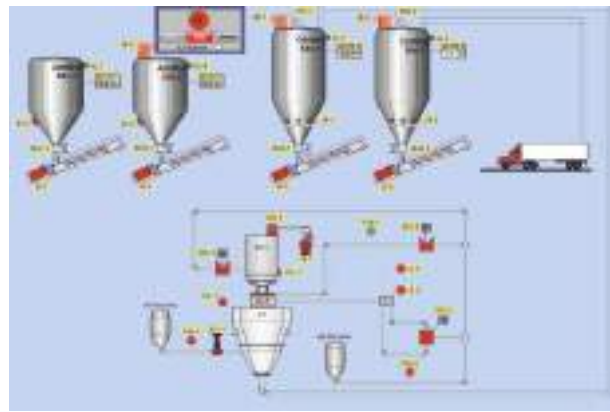
## Process Automation

AAG has immense experience and knowledge about Process Automation. The team has got experience to work on Siemens, Allen Bradley, Schneider and ABB PLC systems. The team has already commissioned many Plant automation. The process automation is efficiently engineered, supplied and commissioned by AAG as the team has immense knowledge about the Cement, Steel, Glass, Power, and Dry Mortar etc. industries. The processes are well known to the team.

Mixer System

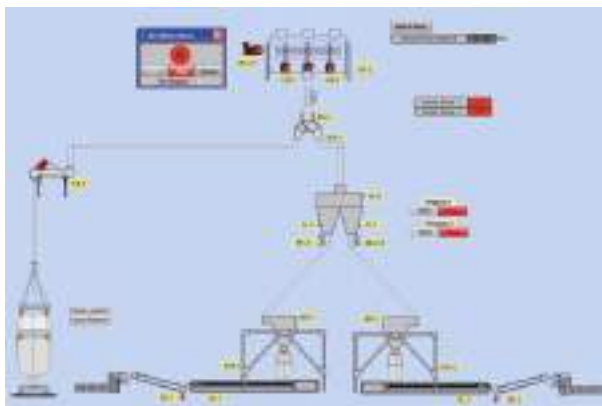


Cement Batching



Understanding client's requirement and then building an automation system suiting to the application is what AAG's process automation team specialize in. We can match your customized requirement or process with the best automation tools available. So, whether you need to upgrade your present system or fully automate it for a new process application, we have the knowledge to design and develop the best automation systems.

Packing System



Feeding System





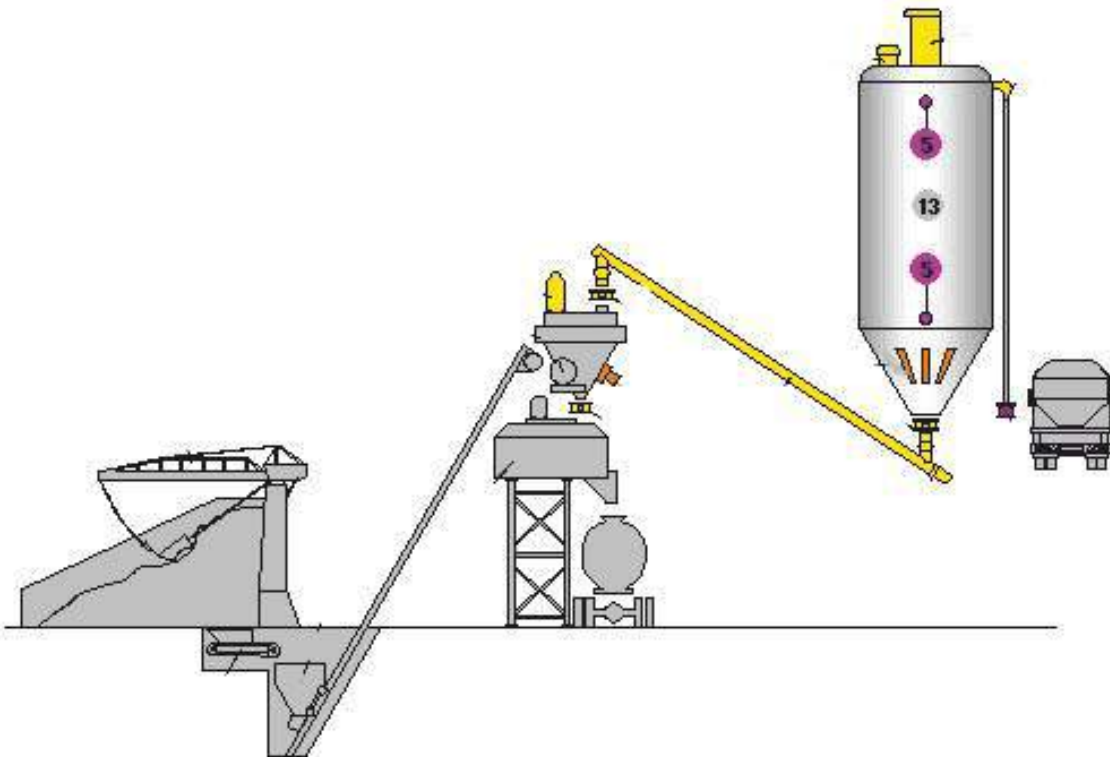


## Glass/Cement Batching System

The main function of a Glass/ Cement Batching system is to ensure the right mix of raw materials (batch). At AAG we design batching systems to meet all of your application needs. Cement batchers from AAG are designed to be self-cleaning and can incorporate vibrators or aeration systems to assist the flow of cement if needed. AAG's cement dosing and delivery systems can meet the most demanding of applications. To ensure accurate dosing, especially for cement screw applications, inverter duty motors are used along with a VFD two-speed control.

The quality of batch cannot be improved or repaired by any further process after the furnace. Therefore, it is important that the process of Dosing, weighing, mixing and control systems which are the main constituents of a Glass Batch system should be properly monitored. Our batching system ensures the right mix.

Even though batching and weighing systems applications forms the core of our skills, our experience is diversified in many other aspects of the process. Be it automation of the pneumatic material handling systems, grinding systems, mechanical conveying equipment, rail/truck loading and unloading systems, and compaction systems, AAG has skills and expertise to provide all.





## Bagging and Packaging System

The compact and robust bagging system offers exceptional reliability, advance filtering, ability to perform under heavy interference and the most severe industrial environment. It is customized for automatic three speeds (Coarse, Medium and Fine), bagging with highest response, speed and accuracy in industries like Grain, Sugar, Atta / Suji, Plastic, Metals, Bulk Drugs, Paints /Pigments, Chemical, Fertilizer, Minerals, Cement and Powder etc.

Our solutions are innovation driven through extensive research and development. Our team of specialists at AAG works closely with customers to develop the right bagging and packaging solution to meet the requirements. We evaluate the entire bag packaging operation including bagging machines, bag materials and services. Based on the assessment, we develop complete packaging solutions that help increase process productivity and enhance profitability.



## Service and Support



AAG Engineering Technologies is a provider of Bulk Weighing Solutions and Process Automation products. However, the list doesn't end here. We also provide extended service and support to our clients; before, during and after the product purchase and installation. With an array of support and services, we make sure that our customers' satisfaction level is enhanced.

Our customer support and services include training your staff on our products. The training is designed by our expert team, so that its tailor made for your operation-specific needs. Besides, we our team of proficient engineers and designers always try to make advancements in our products and solutions. We extend all these enhancements to our customers, so that they can leverage maximum benefits of the solutions provided by us.

Afterall, we are committed to providing supreme customer satisfaction by supplying products and solutions that meet client's requirements, specifications and budget.

## Our services also include...

### **Building Management Systems** *Setting up a high performance building*

Building Management Systems from AAG Engineering Technologies Pvt. Ltd. aims to provide safety, security, resident's comfort and most importantly methods to save energy. We offer an integrated system that combines multiple systems on a dedicated network. Data from these multiple systems is then combined and sent as useful information that guides residents of the building to take necessary actions.

Our Integrated Building Management Systems for Residential buildings, commercial spaces, Hotels and Hospitals consists of following services:

- HVAC
- Lift Management System
- DG Backup
- STP and WTP
- PA system
- Security and Safety Solutions
- Lighting Management



## **AAG ENGINEERING TECHNOLOGIES PVT. LTD.**

**Bulk Weighing Solutions • Process Automation • Building Management Systems**

116, 2nd Floor, Sunrays Shopping Center, Charkop Market, Kandivali (W), Mumbai 400 067 ● Tel: 022-28677016  
● Email: [sales@aagenggtech.com](mailto:sales@aagenggtech.com) / [project@aagenggtech.com](mailto:project@aagenggtech.com) ● Website: [www.aagenggtech.com](http://www.aagenggtech.com)