



End to End Plant Automation

- Fixed Price contracts
- Deep Domain knowledge
- Strong Multi-disciplinary expertise



FOUNDERS

Before founding Autosys, V Jayakumar, Anup Raj Gauni, G Pichaipillai and V T Pani were the co-founders and leadership team of MELSS Automation Ltd (MAL). They played an instrumental role in growing MAL by 10X times between 2002 and 2012. Prior to MAL, they worked together as a team for over 10 years, at the Industrial automation division of the Chennai based Murugappa Group. .

Kishore has over 30 years experience in manufacturing, operations and business management. Before joining hands with the Autosys team as a cofounder, Kishore was the President and SBU head of USD 100 Million Abrasives business at Carborundum Universal a part of the Chennai based Murugappa Group.

PARTNERS



www.rockwellautomation.com



www.mt.com



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AUTOMATIC DOSING SYSTEMS

Whether it is for dosing a single material or dosing 16 different materials at varying proportions, manual processes affect quality, consistency and rejection rates. Whether it is a few grams or Kilo grams, Autosys, provides very high accuracy dosing systems.

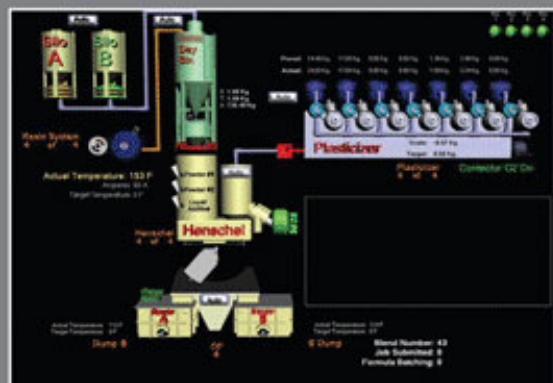
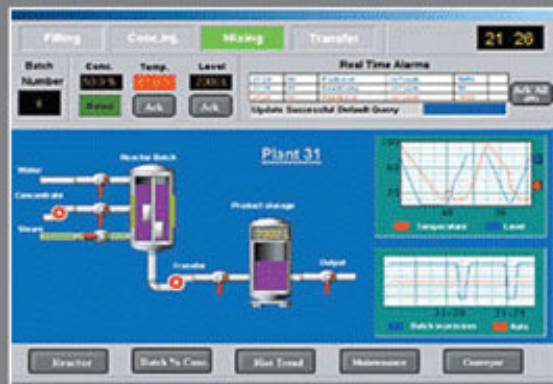
Maintaining dosing accuracy is more challenging for difficult to flow materials and fibrous materials such as Recron Fibres and Fibrous composites. Here Autosys uses very advanced and patented technologies to deliver high through put at high accuracy levels. Some sample applications that we have automated :

- **Fibre/Recron dosing:**
5 Kgs, every minute at an accuracy of 20 grams.
- **Preform composite material dosing :**
100 grams, every 30 seconds, at an accuracy of 1 gram

PRODUCTIZED BATCHING SOFTWARE

The software for a typical batching system, involves PLC programming, PC programming, Man Machine interface programming, Report generation and so on. This constitutes many man months of software engineering as well as coding effort. The quality and robustness of the software is also dependent on the quality and experience of the engineer. Maintaining and making modifications to this software is also time consuming.

To solve this problem, Autosys has productized the batching software,condensing the knowledge and experience of the team accumulated over the last 2 decades. Incorporating the needs of most batching systems, this product is engineered for robust and trouble free operation. The key USP of this product is its flexibility and configurability, so that it can be customized to suit the needs of different projects even by those who do not know any coding.





Autosys undertakes end-to-end turnkey plant automation projects in the range of Rs 100 Lacs to Rs 100 crores. The founding team has a cumulative experience of over 100 years in the field of industrial automation and process control. With deep domain/process knowledge across many industries and strong multi-disciplinary expertise (Mechanical-Electrical-Electronics-Software), Autosys undertakes turnkey fixed price contracts.

Long lasting customer relationships and Wow!! testimonials from customers prove that the passion and commitment percolates down to the lowest level engineers and support staff working on and off site.

CAPABILITIES

- Automated material handling (IN gate to OUT gate)
- Automatic weighing, Batching, Dosing (Grams to Tons, Solids and Liquids)
- PLCs, SCADA, MES Software
- MCC and control panels
- Instrumentation & Telemetry
- Project Management & Turnkey contracts

SAMPLE INDUSTRIES

- Ferro alloy • Refractories / Abrasives
- Rubber • Brake shoe
- Food • Pharma
- Pesticides
- Ceramics & Insulators
- Animal / Poultry feed
- Power / Sub stations

PROJECT MANAGEMENT AND TURNKEY CONTRACTS

Accurate estimation and execution within time and budget is the core competence of Autosys. When most other competitors remain as consultants and pass on the risk to their customers, Autosys undertakes complete EPC and turnkey responsibility with fixed price and fixed time contracts.

- Layout design and Plant-capacity design
- Systems study, Systems design, Engineering and Detailed drawings
- Procurement, Manufacturing and Integration
- Inspection, Testing, Trial runs
- Installation, Erection, Commissioning, Training, Support and AMC

AUTOMATED MATERIAL HANDLING

We can handle a wide variety of materials including those that have difficult flow characteristics and very low bulk densities. We provide:

- Loading / Unloading machines
- Skip Hoists • Mobile Trolleys
- Big Bag Handlers, Feeders
- Conveyors • Bucket Elevators
- Storage hoppers, Silos, Structural
- Pneumatic Gates and Valves
- Mixers, Grinders, Pulverisers
- Bagging and Packing machines
- Screw Feeders

We provide optimal solutions after carefully considering multiple dimensions such as the investment budget, availability of manpower, factory space, roof height, existing equipment etc.



AUTOMATED WEIGHING AND BATCHING

With extensive experience in automated weighing and batching of materials from grams to Tons, Autosys can not only improve the quality and consistency of your end product but can also make major improvements in cycle times (process throughput time) and plant output capacity. We provide:

- Weight indicators / Weighing scales
- Batching controllers, PLCs
- Man Machine Interfaces, GUIs
- PC based control room software
- Formulation and Tank weighing
- Mono-rail weighing • Control Panels
- Liquid Weighing and Dosing
- Check Weighing • Carousel Weighing
- Batch weighing as per IS S88 and IS S95 standards





CONTROL AND MCC PANELS.

In addition to providing panels as part of all turnkey projects, Autosys also provides custom built panels for various industrial applications in High current and High Voltage electrical systems

- PLC Cabinets
- MV Panels and MCC Panels up to 5000 Amps
- DG Synchronizing Panels upto 1050 KVA



PLCS, SCADA AND MES

Autosys is an Authorized Solution Integrator for Rockwell Automation. With a wide range of PLCs that can be customized and configured for any application, Autosys provides completely integrated solutions with Control panels and SCADA software.

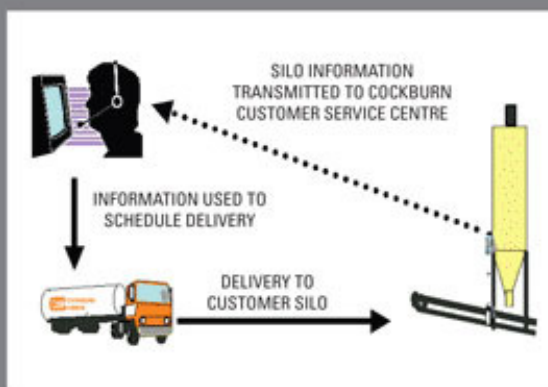
We also provide MES (Manufacturing Execution System) software with SAP/ERP integration to track traceability and genealogy of materials and processes in each batch.



INSTRUMENTATION AND TELEMETRY

Autosys has extensive experience in integrating Instrumentation and Telemetry for remote monitoring. Irrigation Projects, Drinking water projects and Sewage treatment plants are some of the examples.

- GPRS and GSM enabled instrumentation systems
- Conventional or Solar powered measurement points



CUSTOM PROJECTS

Apart from the above, Autosys can undertake custom projects in any application area that requires integration between materials, mechanics, electricals, electronics and software. Customized machinery, control panels and systems, custom software, remote monitoring, web based interfaces, mobile and android based solutions, these are some examples of custom solutions that we can deliver.

STOP
taking chances with
**Consistency
& Quality**

START
saving precious
materials by dosing
correct quantities

Xeleer



Automatic Dosing

Fibres / Recron @ 20 gram accuracy



Patent pending

Fibrous Composites @ 2 gram accuracy



Patent pending



Fibre/Recron Dosing

	FIB-A	FIB-B
No of materials per machine	1	1
Typical material	Fibre/Recron	Fibre/Recron
Capacity	1 – 5 Kg	1 – 10 Kg
Typical cycle time	1 min	2 min
Resolution	10 grams	20 grams
Accuracy	+/- 20 g	+/- 40 g
Minimum Bulk density	300 Kg/m ³	300 Kg/m ³
Power Supply required	440 V, 3 Phase, 0.75 KW	
Receiving Hopper	300 Kg	
Jumbo Bag handling	Optional	
Controller	PLC + Touch MMI	
No of set points per batch	3 (Coarse, Fine, Super fine)	
Contact Parts	SS 304	
Mounting	Self Standing	
Dimensions	1750 X 1145 X 1325 (H)	
Weight	700 Kgs	

Applications / Industries

All Industrial Manufacturing Processes requiring additions of difficult-to-flow materials (like fibres and its composites) or low bulk density materials, at regular intervals. Like friction materials, composites used in brake/clutch manufacturing, composites added in construction mixes, composites used in fire proofing material etc.

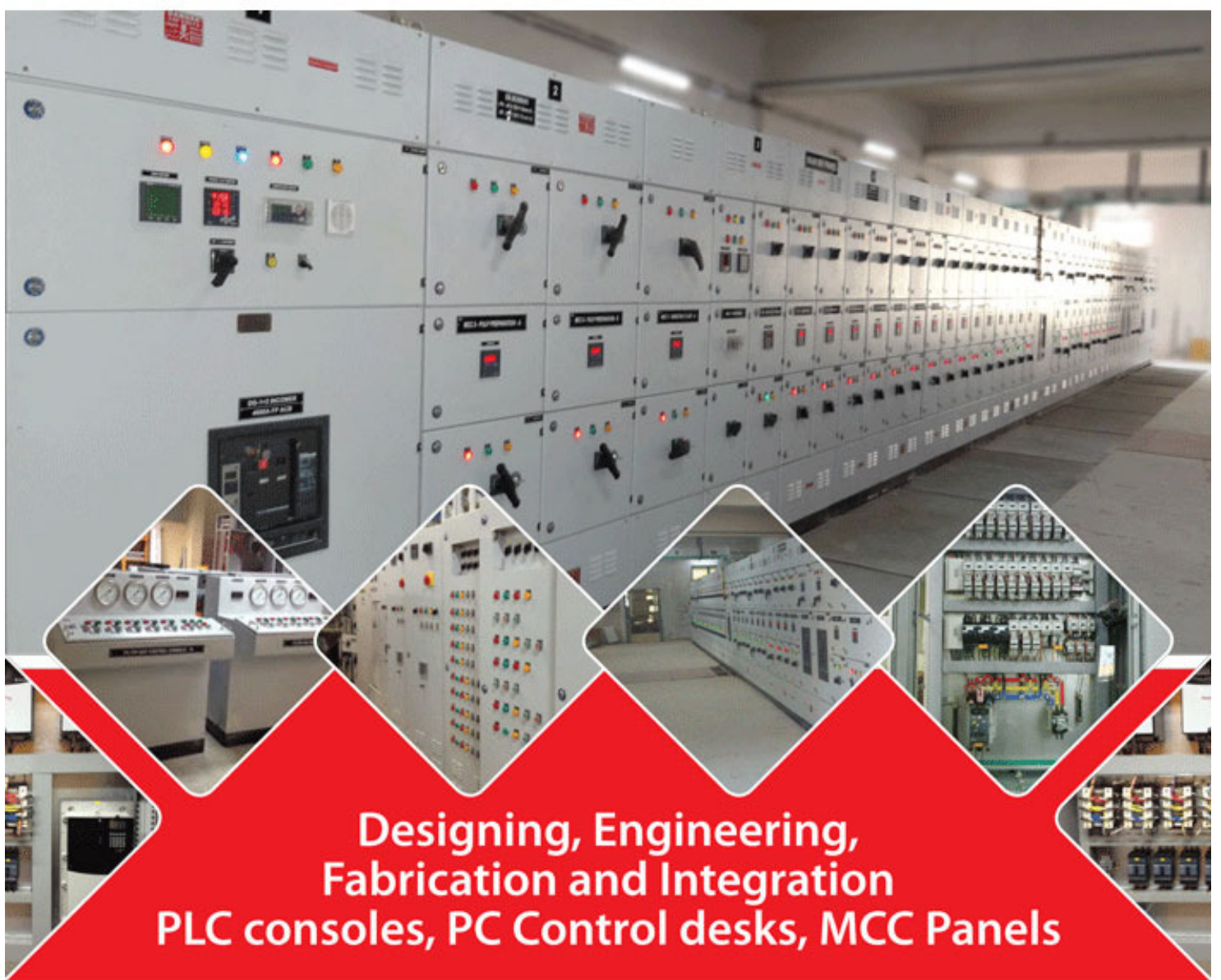
Fibrous Composites / Preform dosing

	PRE-A	PRE-B
No of materials per machine	1	1
Typical material	Fibrous Composites	
Capacity	10 – 125 grams	100-500 grams
Typical cycle time	25 seconds	25 seconds
Resolution	0.5 grams	0.5 grams
Accuracy	+/- 2 grams	+/- 3 grams
Minimum Bulk density	500 Kg/m ³	500 Kg/m ³
Power Supply required	440 V, 3 Phase, 0.75 KW	
Receiving Hopper	5 Kg	30 Kg
Jumbo Bag handling	Not Available	
Controller	PLC + Touch MMI	
No of set points per batch	3 (Coarse, Fine, Super fine)	
Contact Parts	SS 304	
Mounting	Self Standing	
Dimensions	900 X 650 X 700 (H)	
Weight	50 Kgs	

Xeleer

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Designing, Engineering, Fabrication and Integration PLC consoles, PC Control desks, MCC Panels

- Compartmental Type or Fabricated panels
- Static Mimic panels (integrated LEDs, Flashing circuits, Annunciators, Alarm Buzzers)
- Air conditioned Panels with Environmental Conditioning Systems
- PC Kiosk and Desk type Enclosures
- Integrated Bus bar based MCC Panels with built in PLC enclosures
- MV Panels and MCC panels upto 5000A
- Bus ducts from 5000A to 1000A
- DG Synchronizing Panels up to 1050 KVA
- In house FAT test
- Compliance to relevant IP ratings and safety standards
- IEC standard wiring with FRL cables
- Color coded cable standards
- Proper isolation between power and control circuits,
- Separate Cable ducts for Analog signals
- Documentation in Autocad



- PLC CABINETS
- MCC PANELS
- MV PANELS
- DG SYNCHRONISING
- APFC PANELS
- MIMIC PANELS
- MLDB
- INTELLIGENT MCC
- DRAWOUT PANELS
- INTEGRATED BUSBAR



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Setting up a new plant?

Please come for the inauguration
of your IN gate and OUT gate.
And pay a **FIXED PRICE** for the rest.



End to End Plant Automation

Capabilities

- ◆ Automated Material handling (IN gate to OUT gate)
- ◆ Automatic Weighing & Batching (Grams to Tons)
- ◆ Automatic Dosing (Upto 1 gram accuracy,
Bulk densities upto 0.15)
- ◆ PLCs, SCADA, MES Software
- ◆ Instrumentation & Telemetry
- ◆ Project Management & Turnkey contracts

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