



*Over 20 years experience  
Customized Solutions for Liquid Application*

# Mainflo PPLA System

# Mainflo PPLA Features

- User friendly control panel with full features PLC automated control of bulk material, liquid loading, mixing and spraying.
- Constant feed flowrate controlling for liquid application
- Low or empty tank levels alarm
- Low pressure alarm for enzyme and water
- Low or no liquid flow alarm
- Real-time dosage deviation alarm
- Loss-in-weight & flowmeter double-check usage
- Detailed liquid usage report

**50g/MT**

Low inclusion rate

**< 3%**

Solidflow Accuracy

**< 5%**

Liquid Dosing Accuracy

**< 10%**

CV

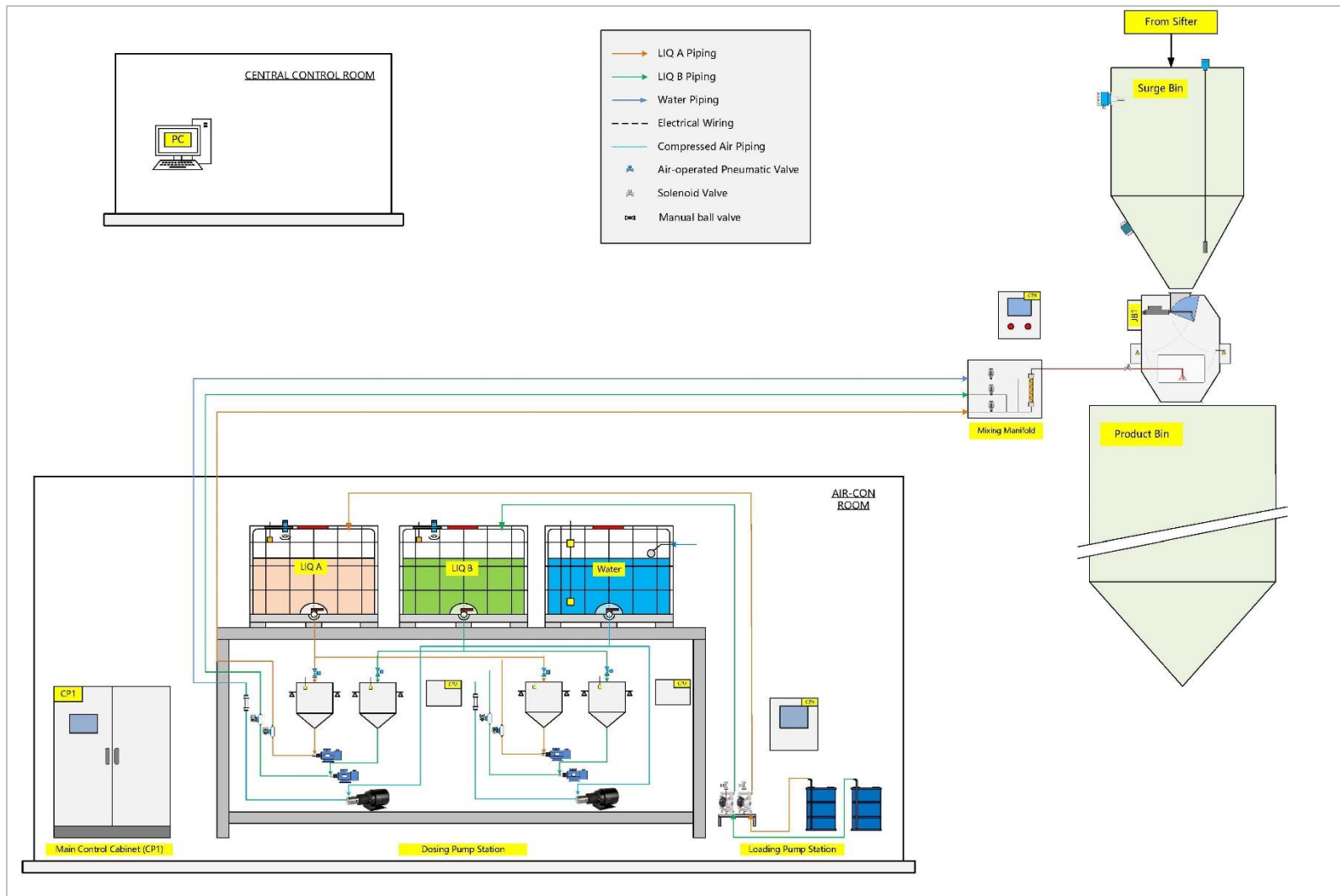
# About PPLA System



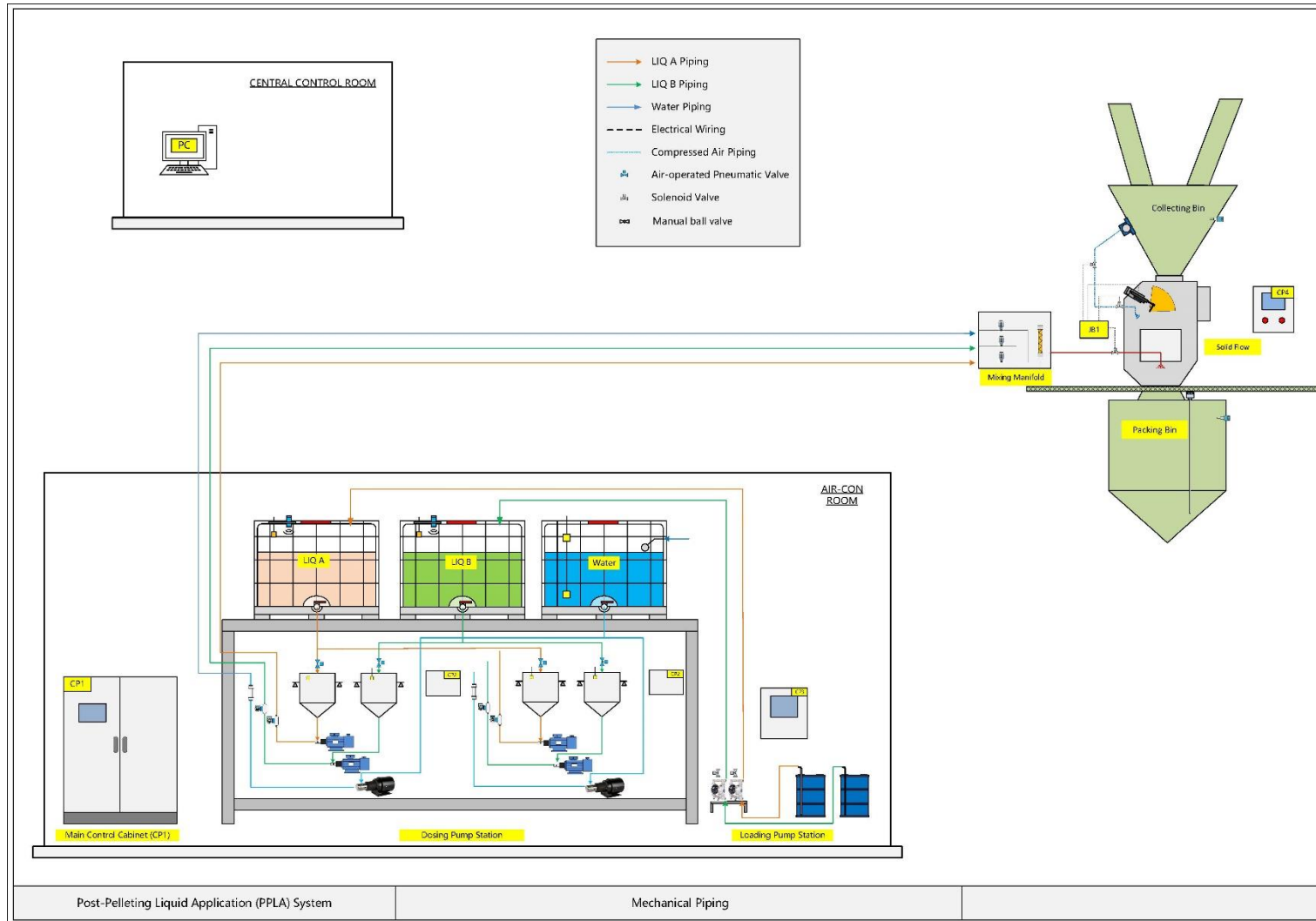
- The purpose of a PPLA system is to add micro inclusion levels of heat-sensitive ingredients downstream in the manufacturing process after any further thermal (heat) was going to be introduced to the feed, instead of directly into the mixer.
- The aim is to apply the liquid with precision and accuracy after the fines are returned and before the feed goes to the feed truck.
- Inclusion rates of 40 to 250 grams per ton of finished feed have created the need for precision equipment.



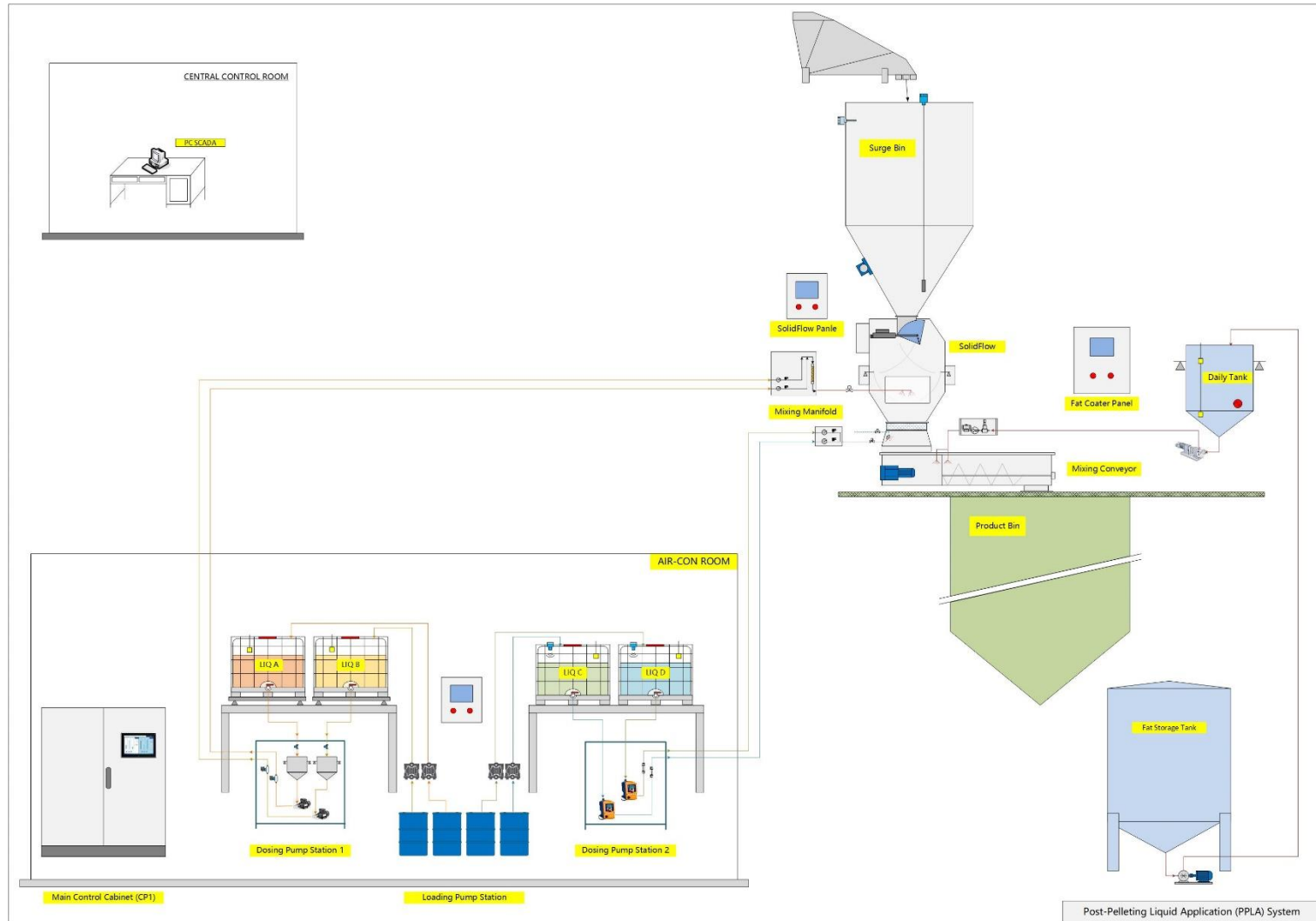
# PPLA Layout Proposal 1 (Location 1)



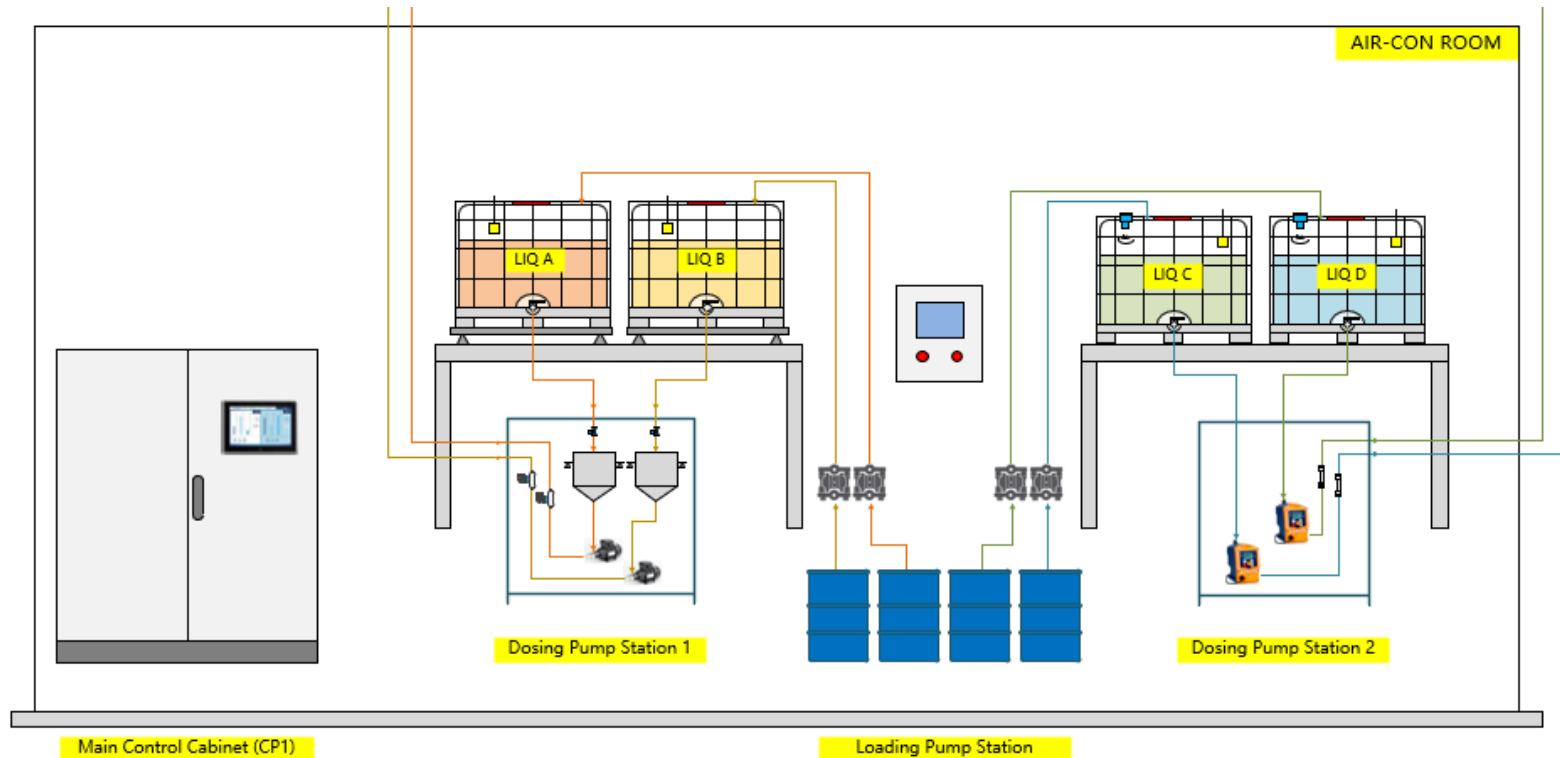
# PPLA Layout Proposal 2 (Location 2)



# PPLA WITH FAT COATER



# Air-Con Room



- ✓ Enzyme is heat sensitive. We strongly suggest the whole liquid system was installed in a special air-con room.
- ✓ Typically, the air-con room is located at the ground floor.
- ✓ Set the temperature at 25°C.

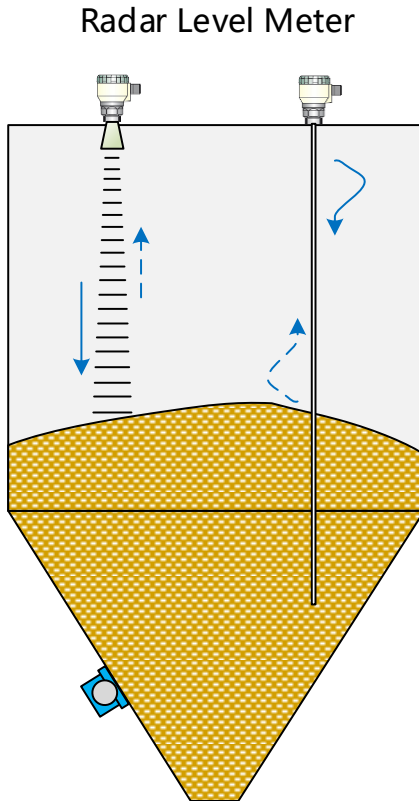


# Solid Flowrate Controlling and Measuring

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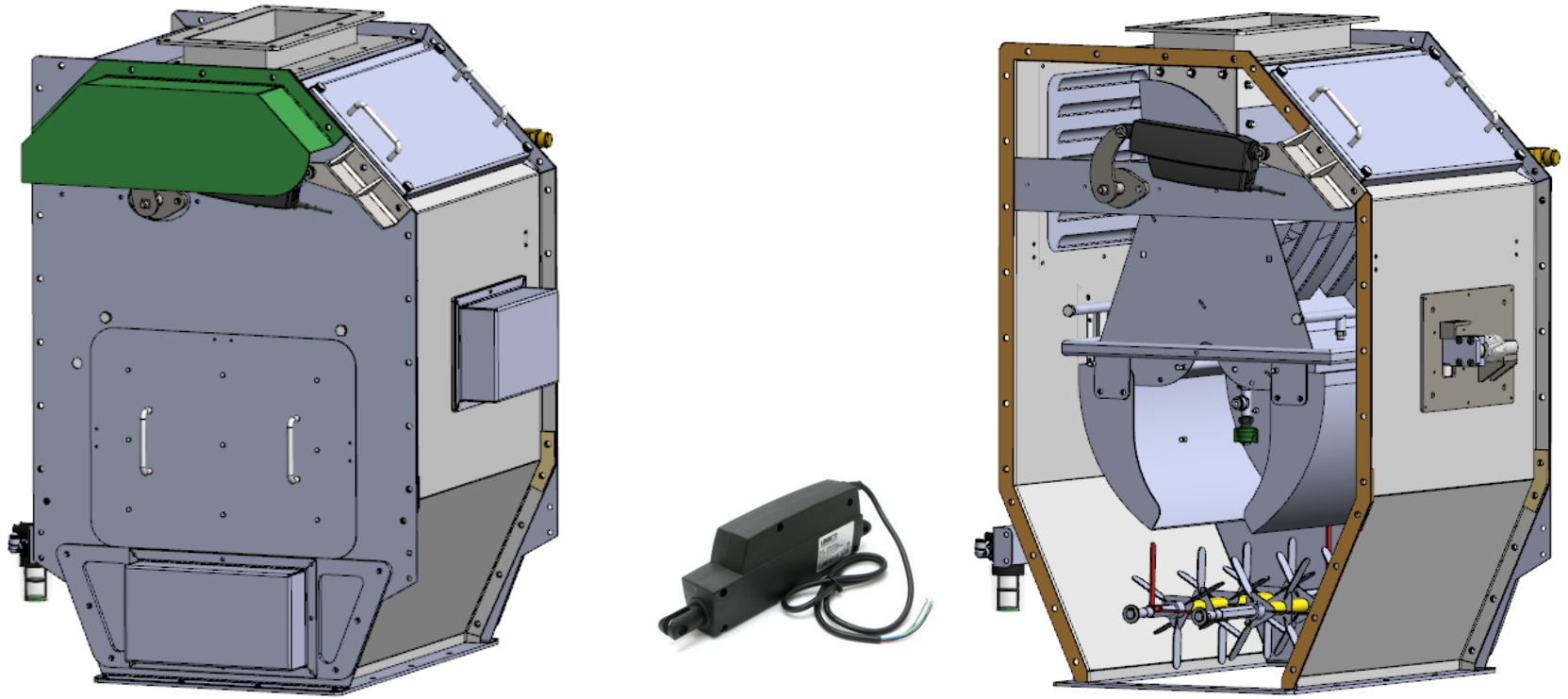
- ❑ Achieving the desired accuracy is greatly dependent upon the level of accuracy obtained from the solid flow measuring device. In general, the steadier the solid flow, the more accurate the liquid can be applied. (Aicher, 1998).
- ❑ In essence, solid flow measuring is the heart of the PPLA. No continuous and constant solid flow, no good PPLA system.
- ❑ The consistent solid flow depends on the controlling of surge bin.

# Analog Level Sensor for Bin



- With level switches, it is very difficult to adjust the suitable opening of slide gate. Analog level is a better choice.
- Either Non-contact or guide level meter can be used to detect level of bulk solids.
- Analog level measurement will help us to archive constant flow of feed, which is of the most important for PPLA system.

# Solid Flowmeter

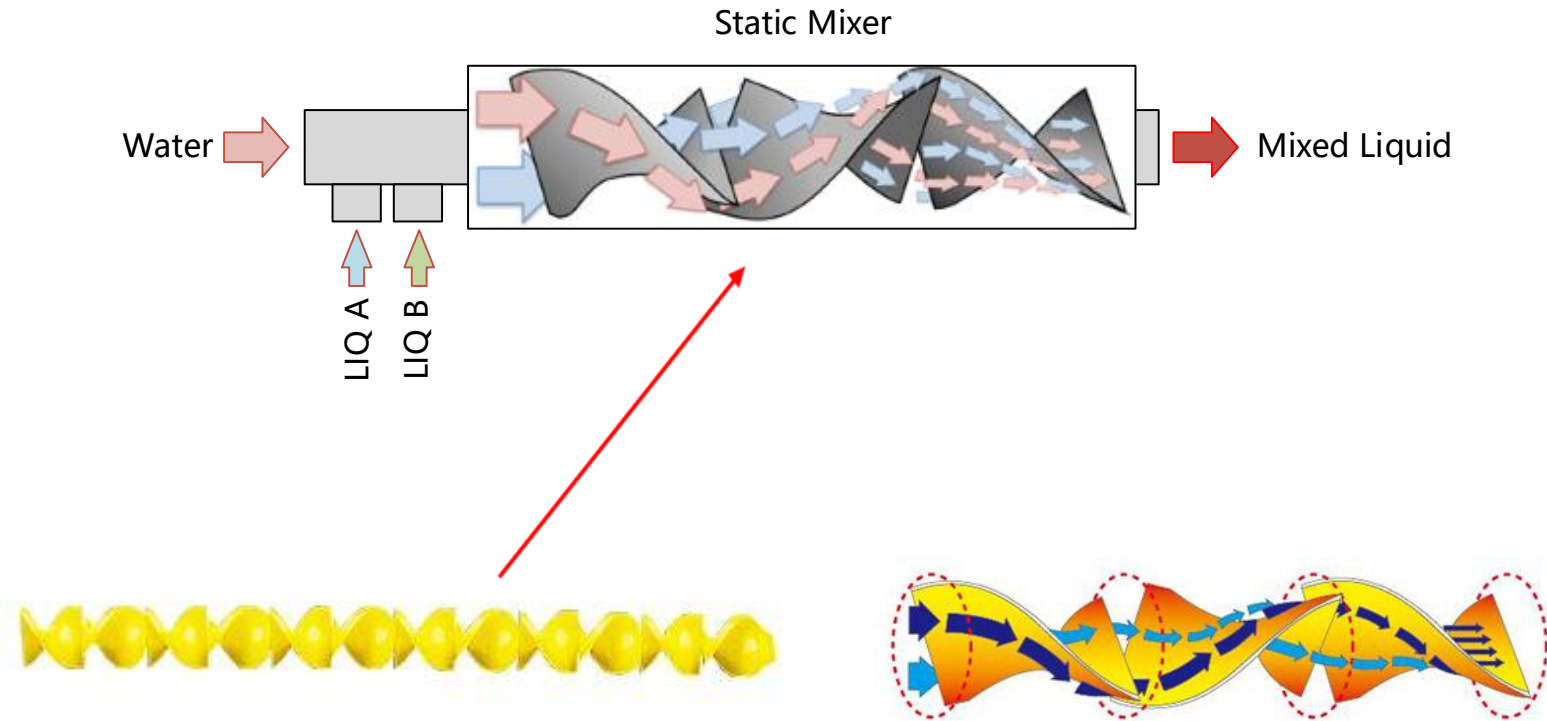


- ✓ Unique splitter structure to reduce the thickness of material flow.
- ✓ Gate opening controlled by linear actuator.

# Solid Flow in Progress (Video)



# Liquid In-line Mixing (Static Mixer)



# Project Picture (Air-Con Room)





# Project Picture (Air-Con Room)



# Project Picture (Air-Con Room)





# Project Picture (Surge Bin, Solid Flow and Mixing Cabinet)



Mixing Cabinet

# Project Picture (Surge Bin, Solid Flow and Mixing Cabinet)





# PPLA With Fat Coater



# Automated Control Cabinet



# Comprehensive Usage Report

The screenshot displays the Mainflo PPLA System interface. At the top, the system name "Mainflo PPLA System" is visible, along with navigation options for "Home" and "Login", and system information including the date "2014/10/14" and time "22:38". Below this, a breadcrumb trail shows "Report" > "Batch Report".

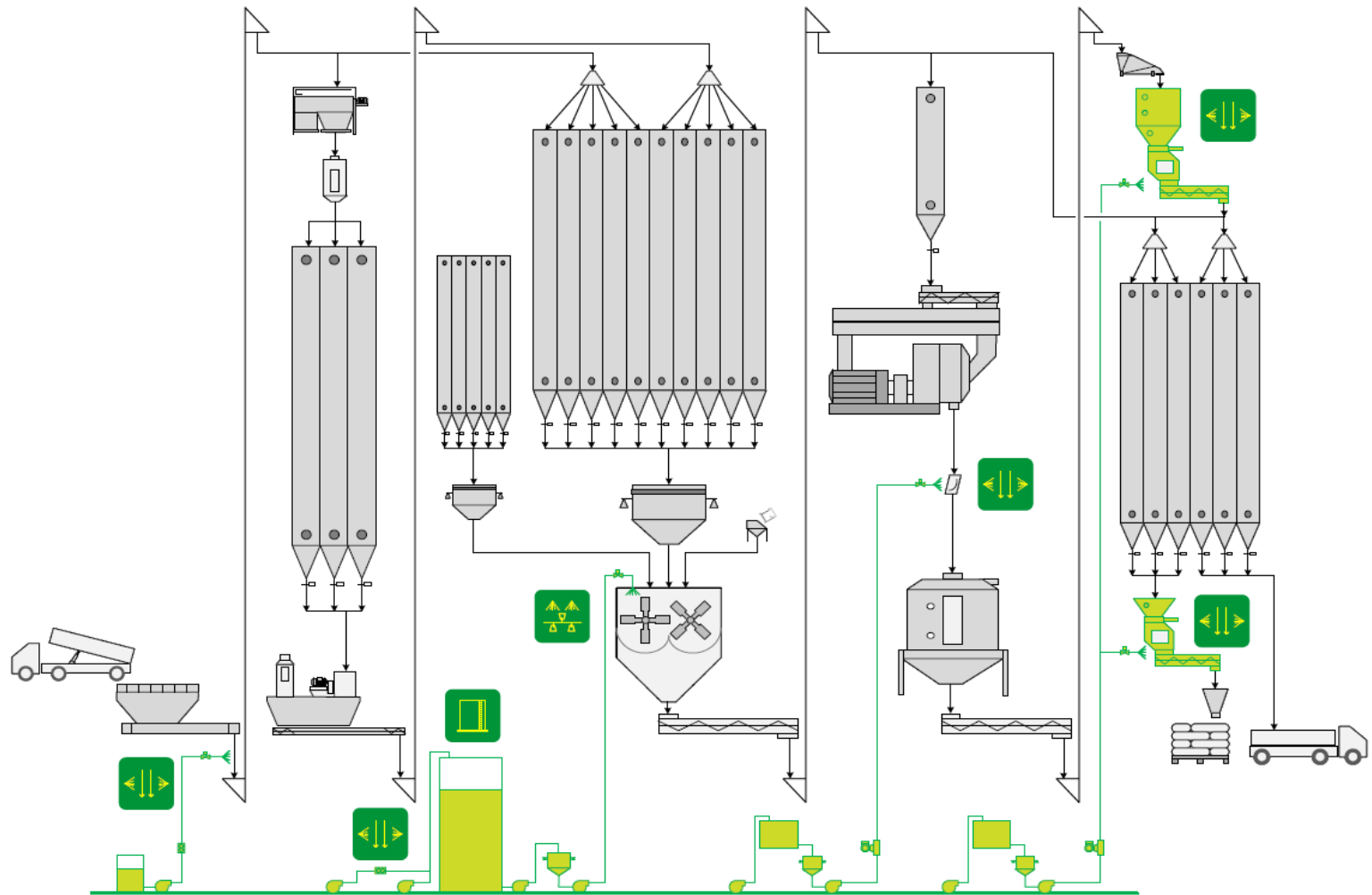
The main content area features a table with the following columns: ID, Date, Start Time, End Time, SolidFlow(T), Ez.Target(kg), Ez.Actual(kg), Dev(%), and Water(kg). The table contains 12 rows of data, each with placeholder values represented by "#".

On the left side, a vertical navigation menu includes icons and labels for "Overview", "Recipe", "Calibrate", "Alarm", "Trend", "Report", "Service", "Setting", and "About".

At the bottom of the interface, there are four filter buttons: "BY BATCH", "BY DAY", "BY MONTH", and "BY YEAR". The "BY BATCH" button is currently selected. To the right of these buttons is an "EXPORT TO USB" button with a USB icon.

ID	Date	Start Time	End Time	SolidFlow(T)	Ez.Target(kg)	Ez.Actual(kg)	Dev(%)	Water(kg)
1	## -##	## :##	## :##	##	##.	##.	##.	##.
2	## -##	## :##	## :##	##	##.	##.	##.	##.
3	## -##	## :##	## :##	##	##.	##.	##.	##.
4	## -##	## :##	## :##	##	##.	##.	##.	##.
5	## -##	## :##	## :##	##	##.	##.	##.	##.
6	## -##	## :##	## :##	##	##.	##.	##.	##.
7	## -##	## :##	## :##	##	##.	##.	##.	##.
8	## -##	## :##	## :##	##	##.	##.	##.	##.
9	## -##	## :##	## :##	##	##.	##.	##.	##.
10	## -##	## :##	## :##	##	##.	##.	##.	##.
11	## -##	## :##	## :##	##	##.	##.	##.	##.
12	## -##	## :##	## :##	##	##.	##.	##.	##.

# Mainflo Business Focus

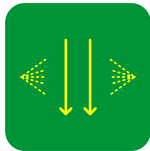


# Our Products



## **MIXER LIQUID APPLICATION SYSTEM (MLA)**

Suitable for dosing liquids into the main mixer batch by batch.



## **POST-PELLETING LIQUID APPLICATION SYSTEM (PPLA)**

Suitable for dosing liquids proportional continuously after pelleting and cooling.



## **BULK TANK INVENTORY MANAGEMENT SYSTEM (BTS)**

Suitable for liquids shipped in bulk. Unload liquids from ISO tank and transfer to daily tank automatically when low level, meanwhile generating report of every in/out stock.

# Covered Area of Our System



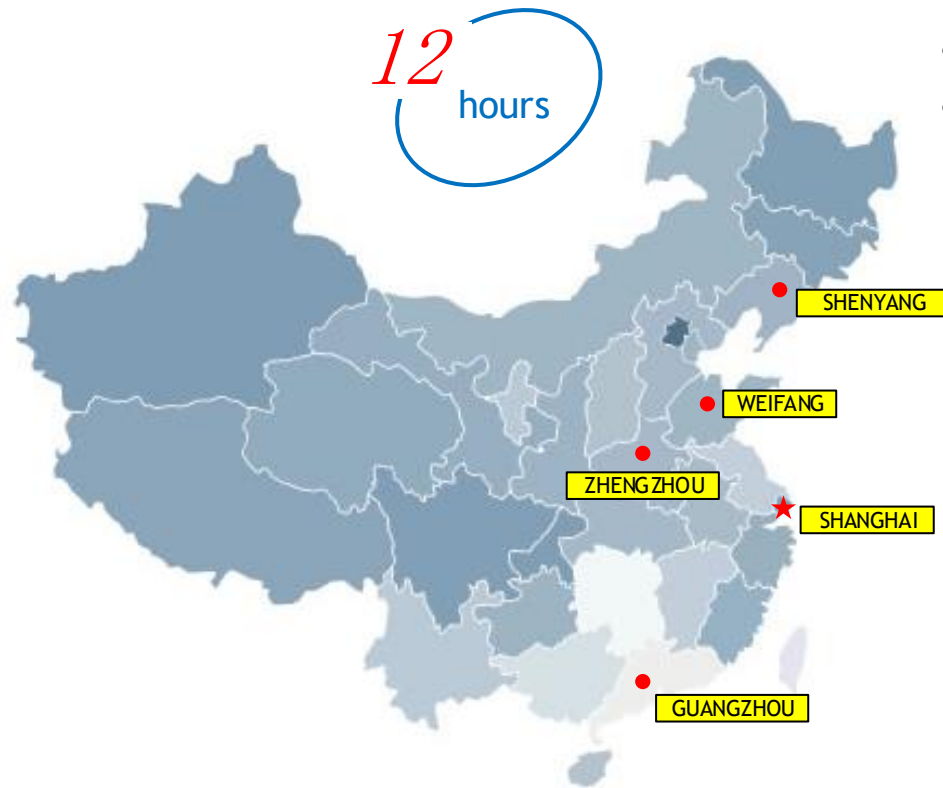
1500+

 Mainflo Covered Area

- Most of the applicators are still in operation and have been upgraded with latest technology from time to time.



# Our Service Team in China



- 5 service team
- 1 hour fault call respond
- 12 hours troubleshooting guarantee

SHANGHAI	HQ
WEIFANG	3 technicians
ZHENGZHOU	6 technicians
GUANGZHOU	2 technicians
SHENYANG	2 technicians

# Our Service Team in Asia

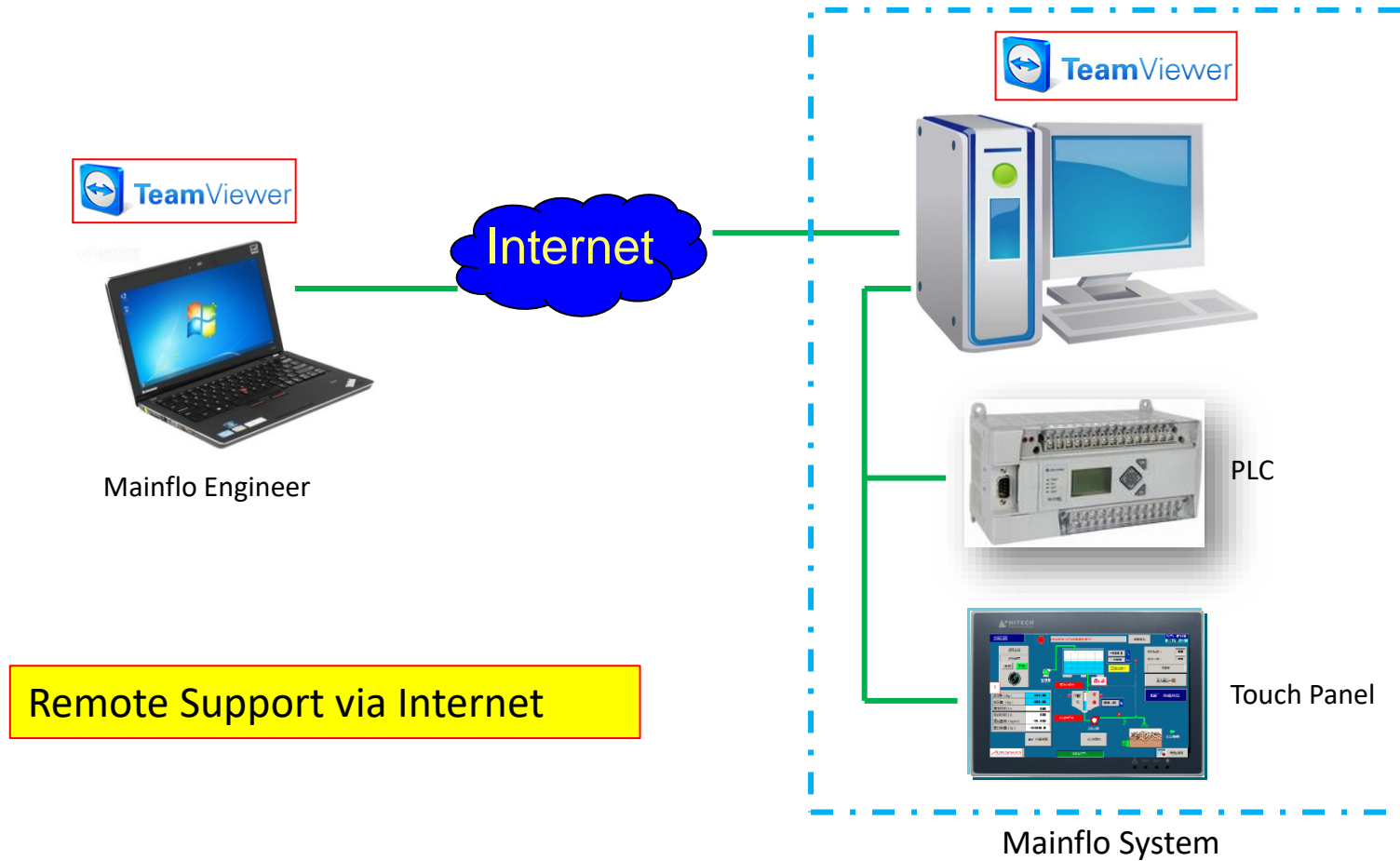


## Service Team

-  Pakistan
-  Thailand
-  Vietnam
-  Malaysia
-  Indonesia
-  Philippines
-  India
-  Myanmar

Local engineer  
Fast and Dedicated Service

# Our Remote Support Services



# What can we do via remote support?

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- Troubleshooting from PLC program
- Update the program(PC, PLC and HMI)
- Monitor the system running health status
- Optimize the running parameters
- Customize program to meet special requirement

# Mainflo Advantages

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- Latest liquid addition technology with independent intellectual property rights
- Focus on system and service quality, esp. user experience
- Data and Statistics is standard on Mainflo system
- Front – End engineering, beyond customer expectation
- Fast respond and attentive serviced provided by local engineering team
- Customizable system according to feedmill's request
- Being customer centric
- Decades of practical experience since 1997

# Contact Us

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**Thank You!**

For more information contact us at  
**[www.mainflo.com](http://www.mainflo.com)**

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