Wet wipe chemical mixing system

CYCLECT NISMIX PTE LTD

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MGT LIQUID & PROCESS SYSTEMS

Wet wipe chemical mixing system

MGT Liquid & Process Systems started in 1969 as a producer of stainless steel tanks for the local industrial market.

Based on our thorough understanding of market requirements, we added agitators, mixers and mixing systems, process solutions and liquid transport solutions to our product portfolio. As part of the MGT Liquid & Process Systems Group, MGT's modern production facility specializes in the design and manufacture of custom, innovative stainless steel process systems.

In 2014, we refocused our efforts on providing the global pharmaceutical, cosmetic, food, chemical, ink and paint industries with our high-quality mixing and processing systems

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MGT MIXING

A business unit of MGT Liquid & Process System Ltd.

Started in 2104 developing stand alone Mixing Systems for the Household & Personal Care Industry such as Wet Wipe Chemical Mixing Installations.

MGT Ltd is already for many working with.

Albaad, DPL, Tropical Dagil, & Kimberly Clark for various storage, mixing, solution.
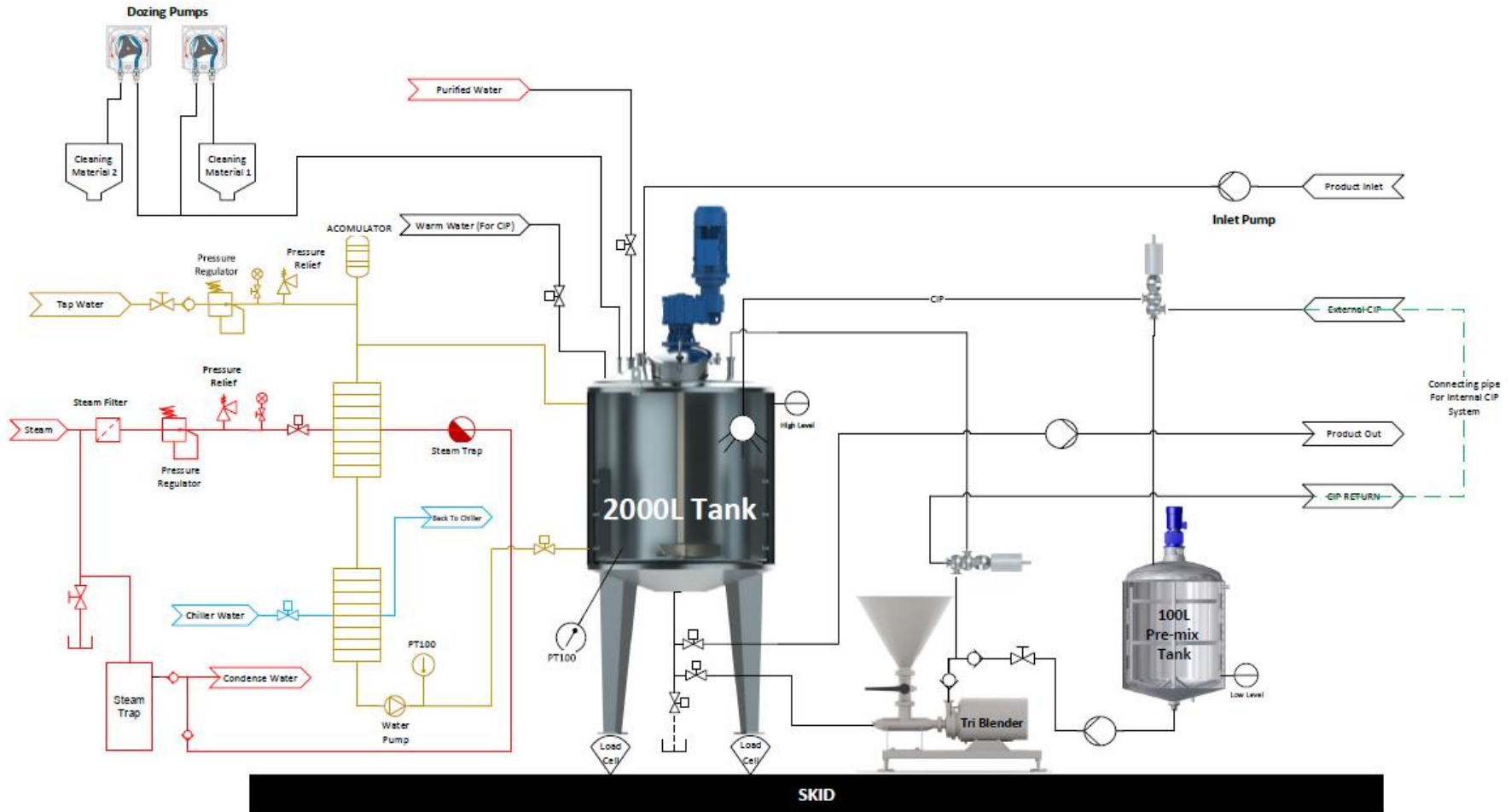
Wet wipe chemical mixing system

- **Chemical Mixing System**

- **CIP**

- **Automation & Visualization**

- **Axillaries**

- **Options**

Wet wipe chemical mixing system
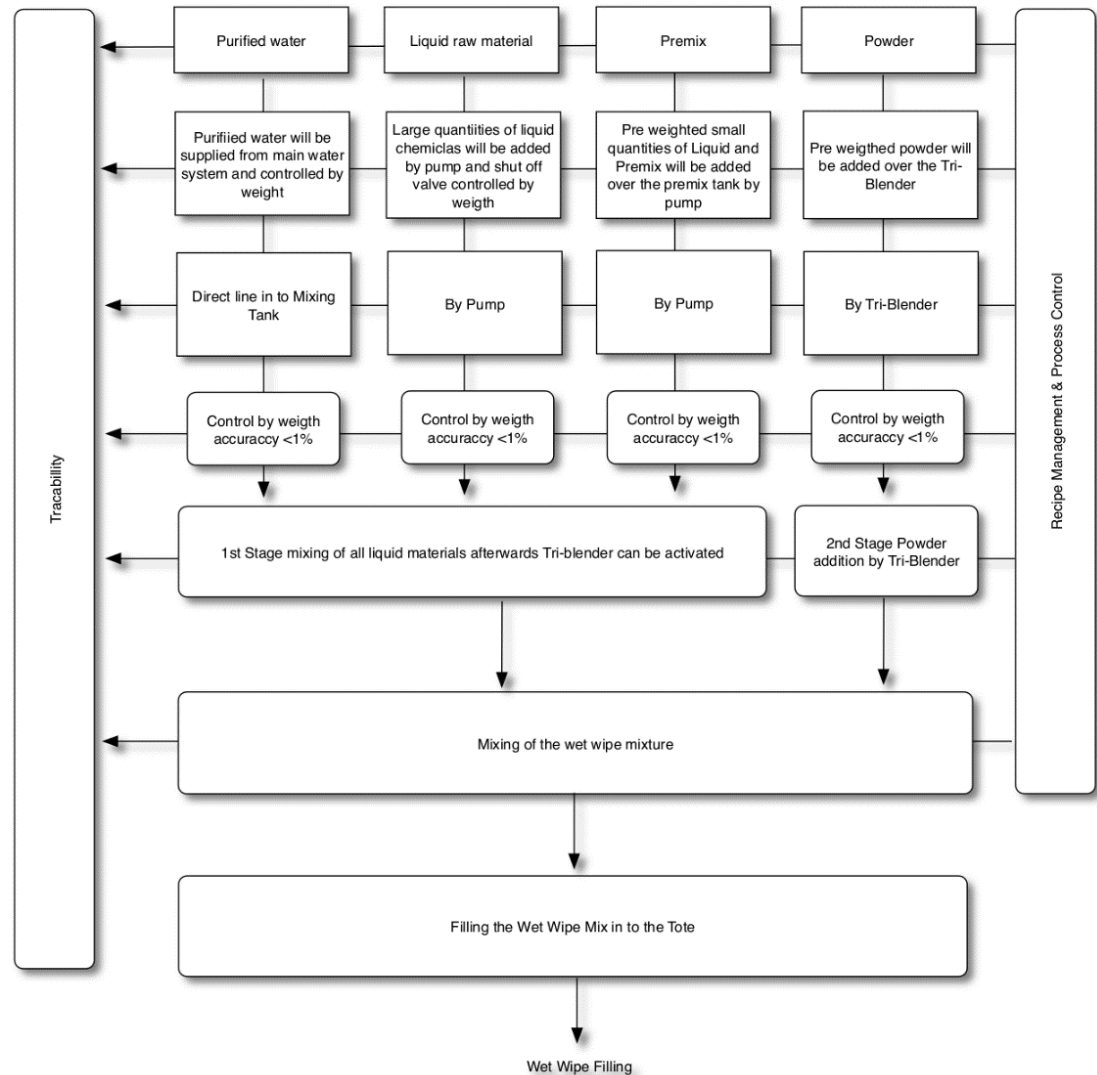
Chemical Mixing System

- **Tank**
  - 1x 2000 Liter Mixing Tank
  - 1x 100 Liter Premix Tank
- **Mixing**
  - 1x High Efficiency Agitator
  - 1x Marine type Agitator
  - 1x Tri-blender
- **Pumps**
  - 2x Sanitary 316 Stainless steel centrifugal pumps

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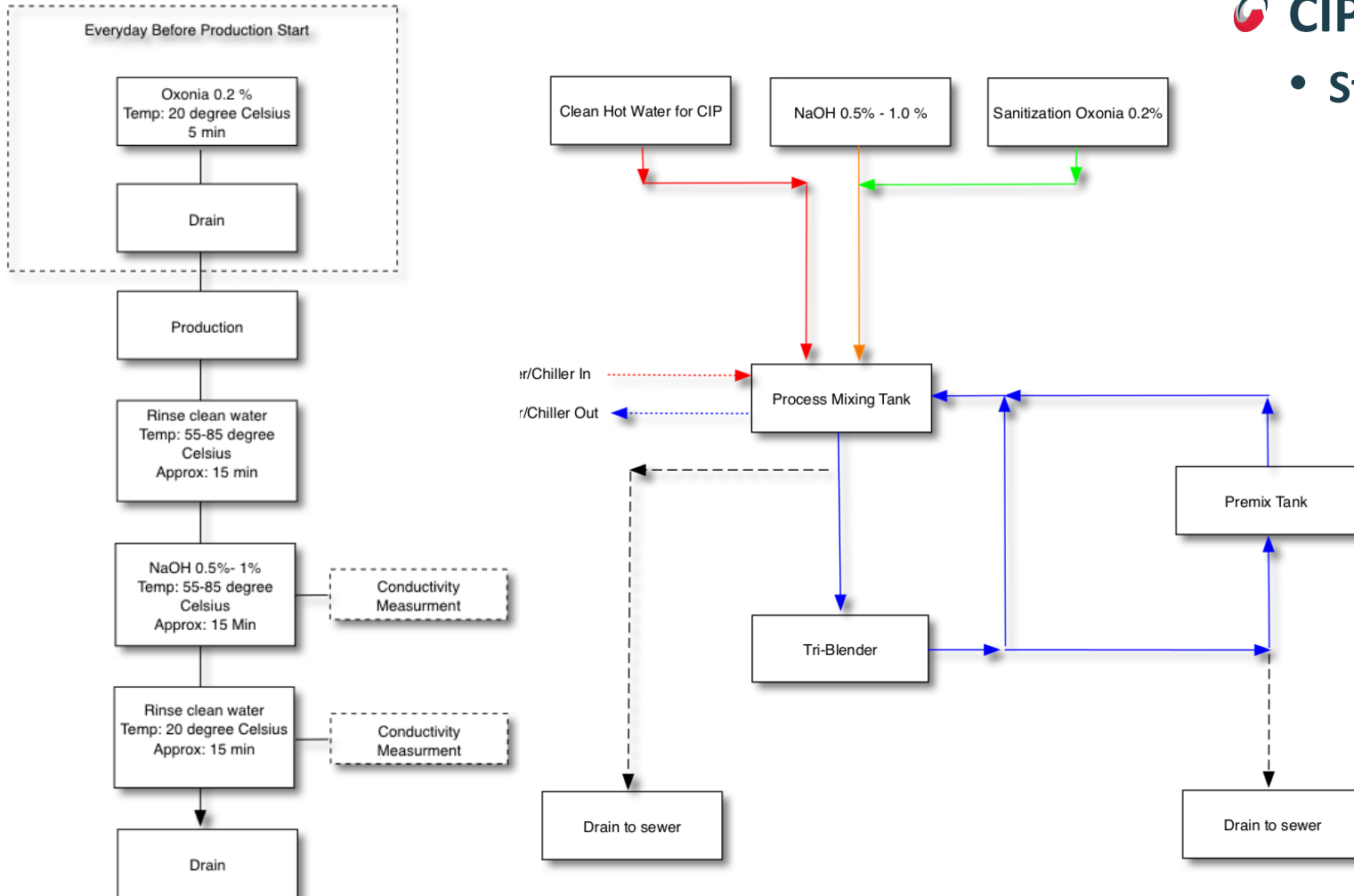
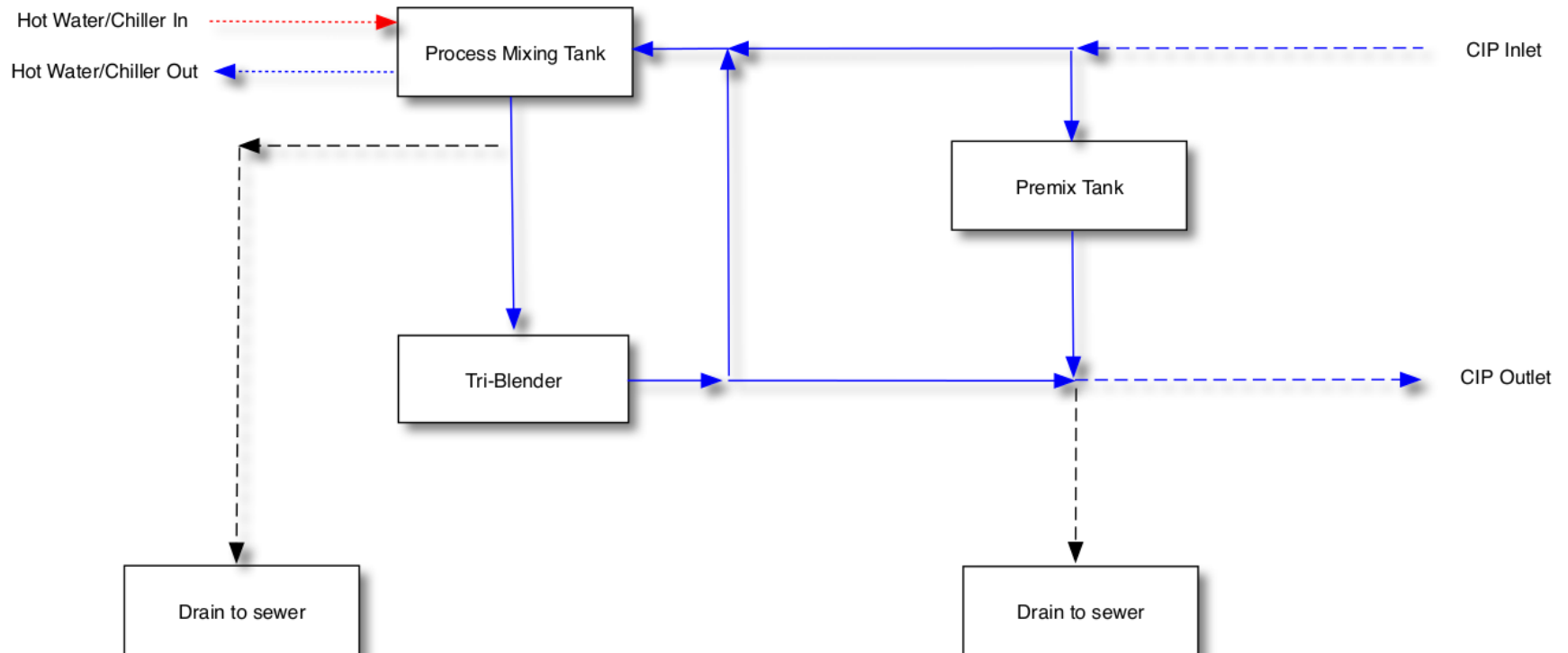# Wet wipe chemical mixing system

Process Flow Chart

Flow chart columns: Purified water | Liquid raw material | Premix | Powder

- **Purified water** → Purifiied water will be supplied from main water system and controlled by weight → Direct line in to Mixing Tank → Control by weigth accuraccy <1%
- **Liquid raw material** → Large quantiities of liquid chemiclas will be added by pump and shut off valve controlled by weigth → By Pump → Control by weigth accuraccy <1%
- **Premix** → Pre weighted small quantities of Liquid and Premix will be added over the premix tank by pump → By Pump → Control by weigth accuraccy <1%
- **Powder** → Pre weigthed powder will be added over the Tri-Blender → By Tri-Blender → Control by weigth accuraccy <1%

1st Stage mixing of all liquid materials afterwards Tri-blender can be activated

2nd Stage Powder addition by Tri-Blender

Mixing of the wet wipe mixture

Filling the Wet Wipe Mix in to the Tote

Wet Wipe Filling

Tracability

Recipe Management & Process Control

Wet wipe chemical mixing system

CIP
- **Stand Alone**

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CIP
- **In line**

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Automation

Initial hand Input or Data base transfer

Recipe & CIP database
Consists 30 recipes
Raw materiall lines 10 per recipe
Process parameters

Database

Process Parameters

Recipe

Data aquisition for intergration in the System

PLC
Allen Bradley

Preparation data Log in Database format
(ID Number required)

Process Parameters Measured

Raw material input
(Barcode)

Mainframe

Tracebillity
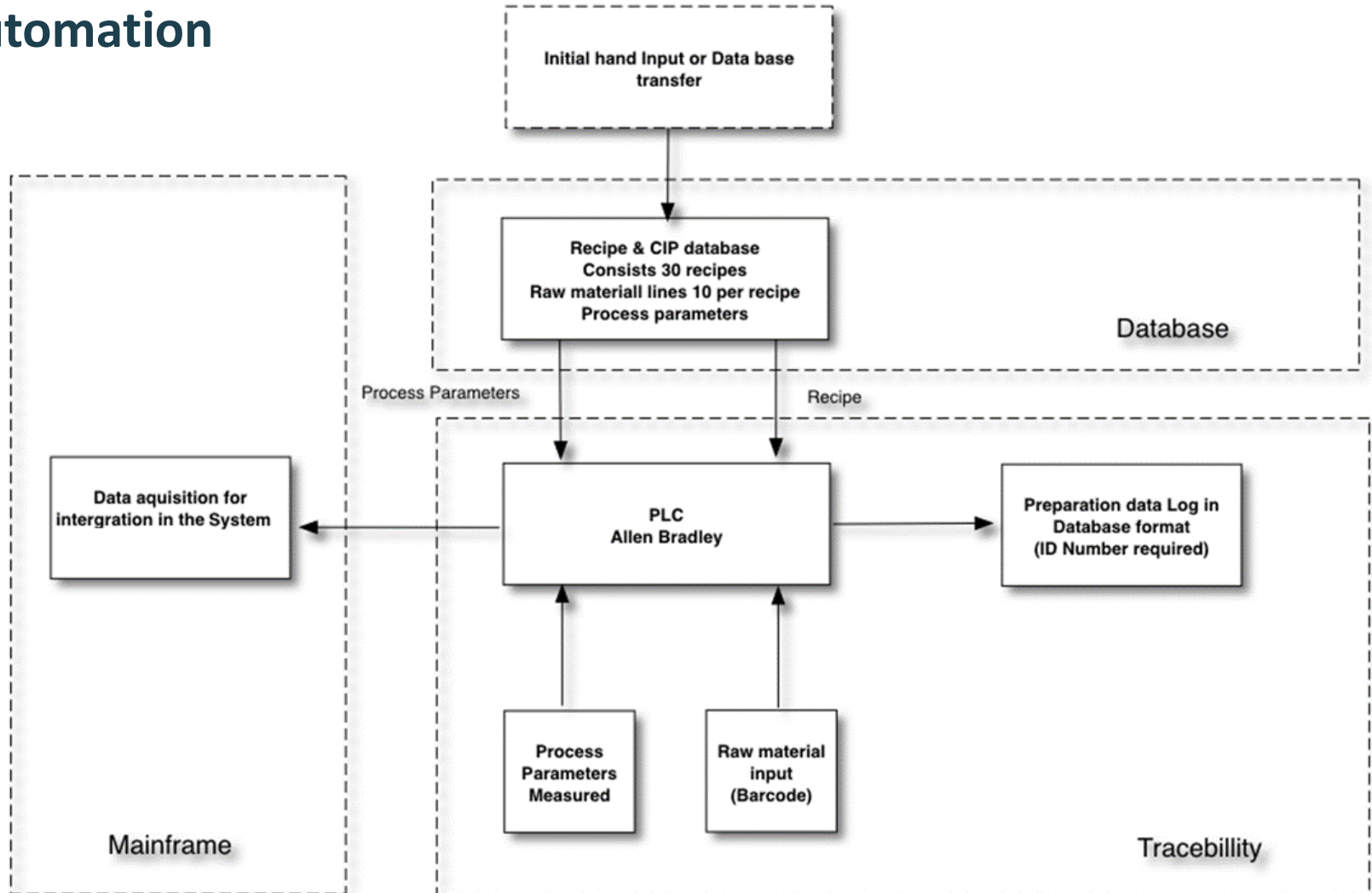
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Automation

Hardware Supply
Allen Bradley Compact logix PLC with I/O cards
- The following types and maximum I/O quantities are assumed:
- Discrete Inputs:
- Type: 24VDC Inputs. Max. quantity: 50
- Discrete Outputs: Type: 24VDC Outputs. Max. quantity: 20
- Analog Inputs: Type: 24VDC, 4-20mA Inputs Max. quantity: 5
- Analog Outputs: Type: 24VDC, 4-20mA Outputs Max. quantity: 4

PC computer, Screen and modem.
- One PC computer and screen for the HMI software, recipes and report data.
- One modem with Internet access for remote programming and support.

Zebra ZT400 Series printer

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- Automation

- **Software Supply**
  - One Wonderware Intouch Runtime software license

- **Application Development**
  - PLC application is developed with RSLogix5000, ver20.03 series.
  - PLC application is developed according to Process Description and Sequence Of Operation given by the customer.
  - Recipe Manager for 30 recipes. (Upload & Download of recipes in MS Access format)
  - Quality data logging per production batch
  - Traceability from chemical to end product by barcode.
  - Intergration in established computer network

PARTNER:

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