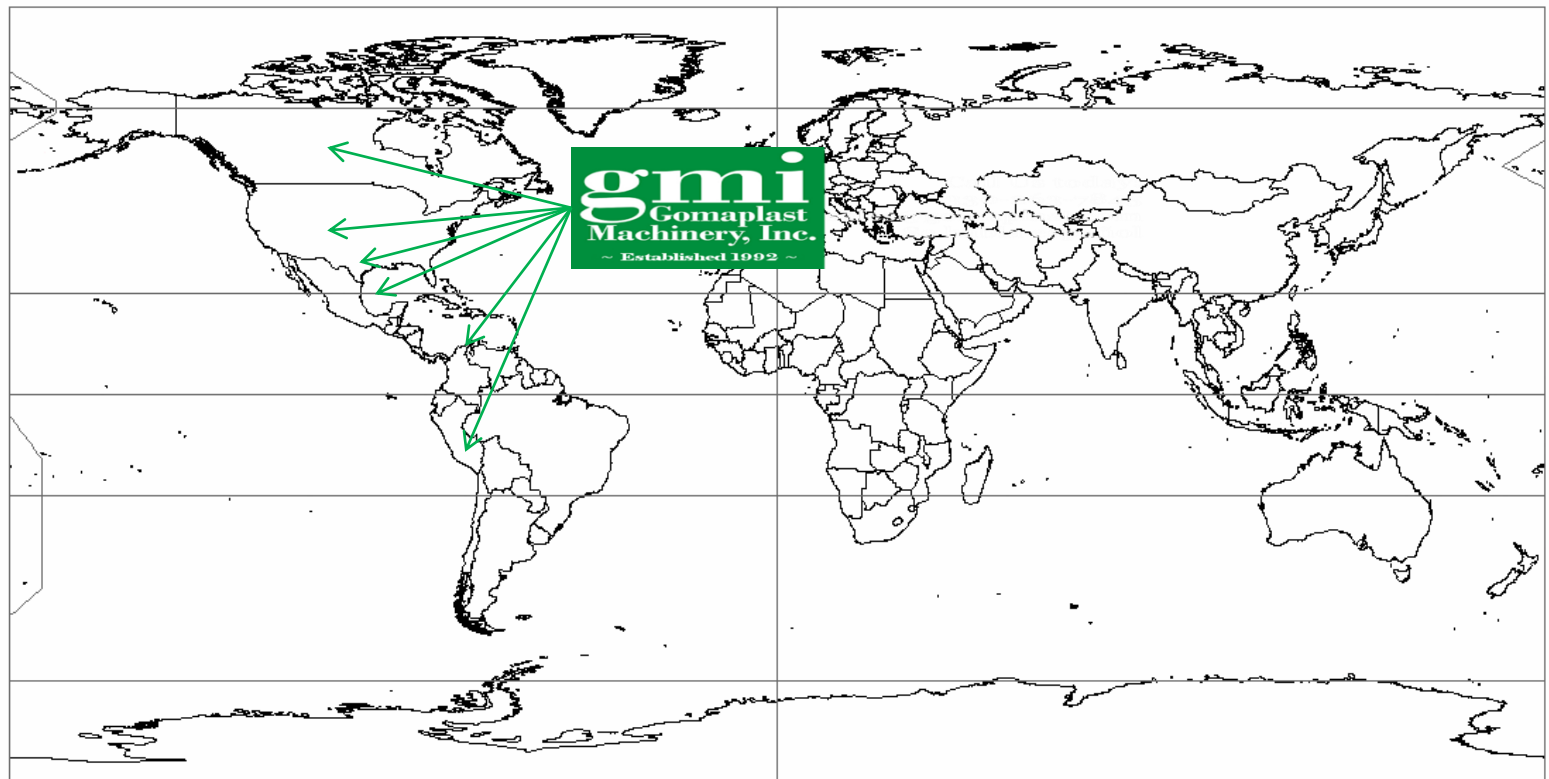




THE NEW WEIGHING SYSTEM

**Past and Future of the
Weighing System**

2015 - .Gomaplast adds the production and marketing of Weighing Systems in Wooster, Ohio-USA to the rest of the World.

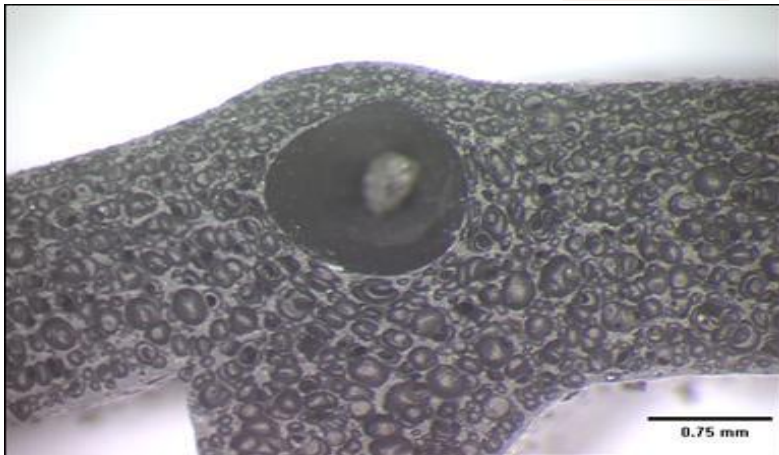
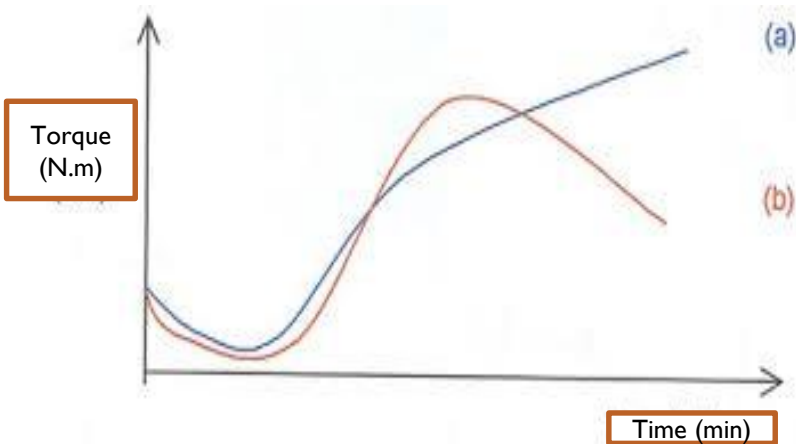


Industries for the Weighing System SGQ15.0:

- **Rubber & Plastics Industry**
- **Animal Feed Industry**
- **Food Industry**
- **Chemical Industry**
- **Pharmaceutical Industry**
- **Pigments Industry**
- **Cosmetics Industry**

Consequences of Weighing Errors

Rheometric Curve Changes



Formulation Errors



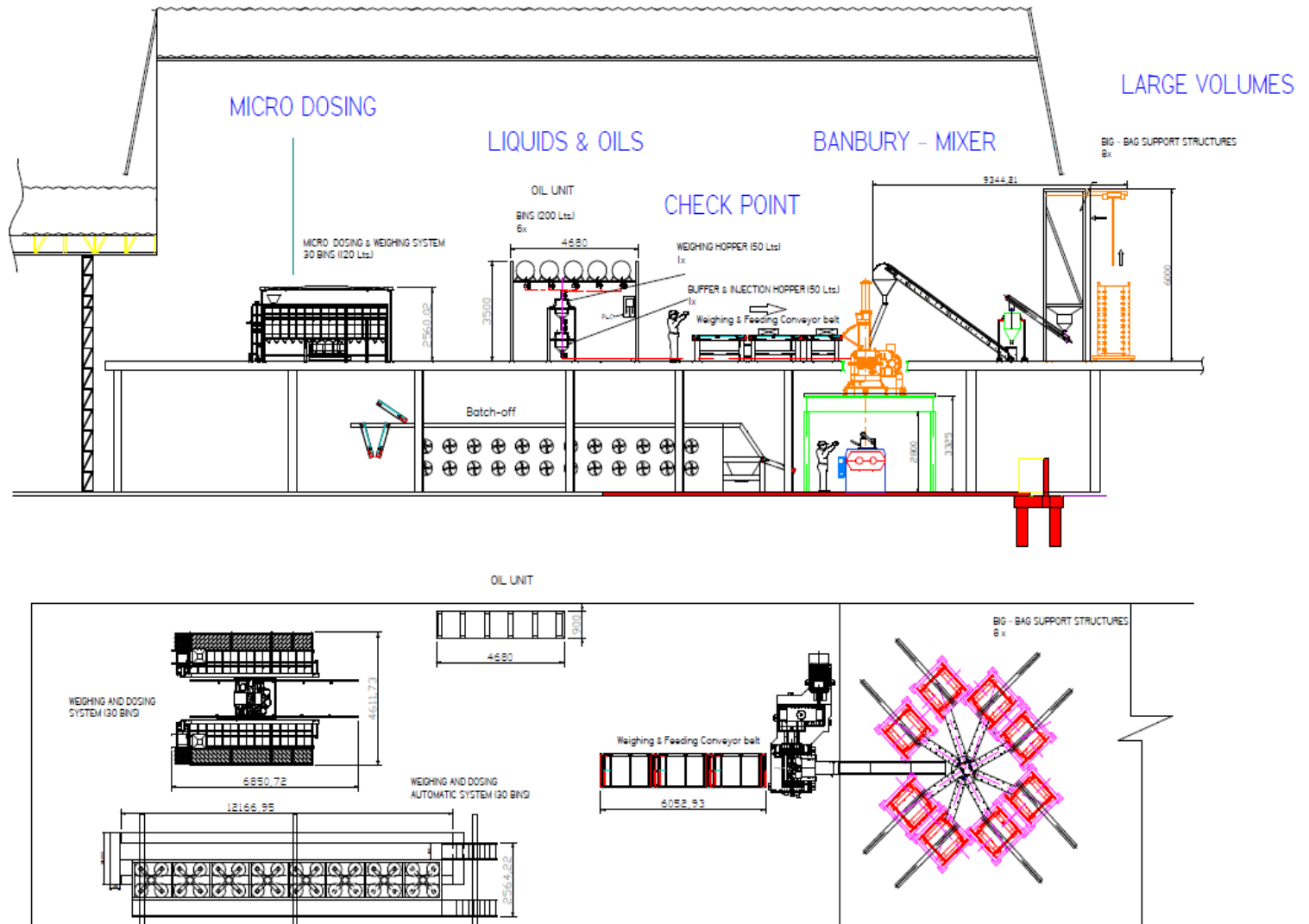
Advantages of Our Weighing Systems

- **SPEED & PRECISION**
- **35% FASTER** and **MORE EFFICIENT** for the following reasons:
 - Easier and more direct access to the bins.
 - Handles 06 to 10 equal recipes simultaneously.
 - Better operator visualization of the recipes on-screen.
 - Improved operator ergonomics, diminishing work strain.
 - Continuous weighing process, even during material feeding.
- **ZERO CONTAMINATION RISK.**
- **PLASTIC (PE) CONTAINERS (BINS)** with **FI-FO** (First-In, First-Out) system.
- **PROPRIETARY SOFTWARE**
- **CONTROL REPORTS:** partial and/or total (day);
- **PRECISE CONTROL** and **MONITORING** of the production stages.
- **DATABASE** recipe storage with full flexibility to amend and manage formulas.
- **STOCK MANAGEMENT** between tanks or silos.
- **LABOR SUPERVISION:** full labor supervision and management (who, when, where).

Areas of Application For Our Weighing System SGQ15.0:

- **Small Volumes (Ingredients) or Micro-Dosing**– From 1 to 160 different ingredients
- **Rubber Weighing Station** – Correct weighing and traceability
- **Large Volumes** – Automatic weighing of Carbon Black and other materials, direct injection into silos, etc
- **Liquids & Oils** – Automatic weighing of liquids/oils and direct injectiin into the Banbury
- **Check Point** – Prepares the right mixing sequence before the Banbury
- **Banbury** – Controls the right mixing steps, times and sequences to be processed
- **Mixer** – Controls the temperature of the rubber compound on the mixer after the Banbury

Areas For the Weighing System SGQ15.0:



Weighing System for Small Ingredients Micro-Dosing



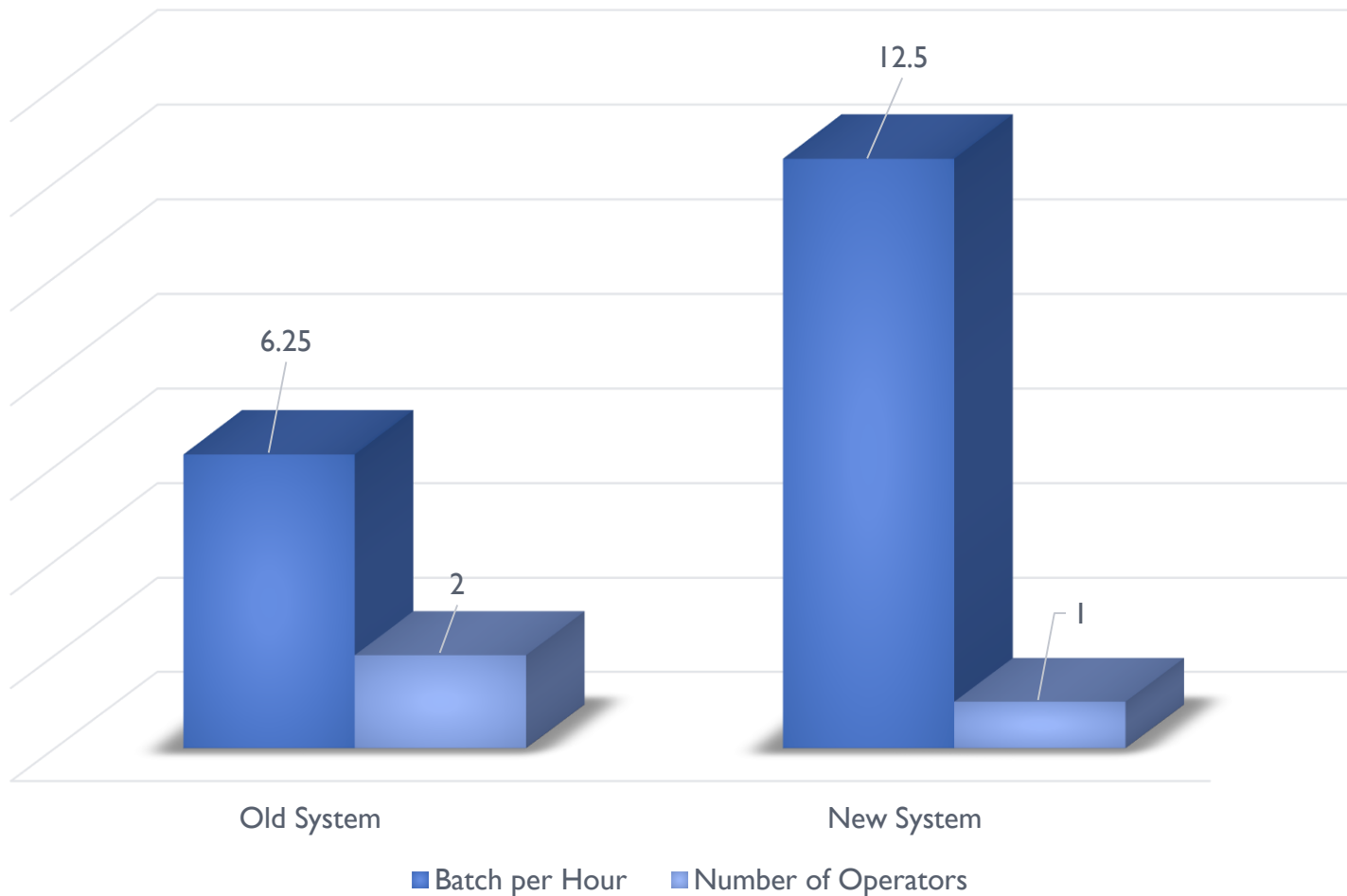
Weighing System - Large Volumes & Liquids

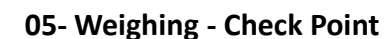
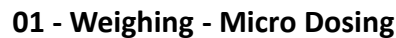


More Than 70 Partners Using Our Weighing Systems

					 BORRACHA TÉCNICA LTDA.
					
					
					
					

Productivity of Old “vs” New Weighing System





New Weighing System – Operator Screen

Recipes control System

Nome Usuário: geromac
 Data e Hora: 16/05/2014 11:46:03
 Versão: Comunicação:



Ack	Processo	Mensagem	Área
	normal	Alerta de nível Crítico atingido reservatório 39	Química Leve
	normal	Alerta de nível Crítico atingido reservatório 42	Química Leve
	normal	Alerta de nível Crítico atingido reservatório 46	Química Leve
	normal	Alerta de nível Crítico atingido reservatório 58	Química Leve
	normal	Alerta de nível baixo atingido tampa 19	Negro de Fumo




Química Leve	Polímero	Negro de fumo
Check point N	Check point B	Barbury
Óleo 1	Óleo 2	Misturador

New Weighing System – Programming Recipes



Imprimir Voltar

ESPECIFICAÇÃO DE PROCESSO DE FABRICAÇÃO			
		Rev. 1 Fl. 1/1 Data: 19 de Setembro de 2014 Elaboração: Aprovação:	
Composto Master Z-EEE Z00000EEE			
Densidade	Fator		
0.93	0.22		
Polímero			
COMPONENTES		Adição	Quantidade
PIG 301	0031-0301	A	1.4 kg
Química Leve			
COMPONENTES		Adição	Quantidade
WAX 5201	0032-5201	D	7.0 kg
PIG 352	0031-0352	D	7.0 kg
RESIN 7522	0032-7522	Z	7.0 kg
Óleo			
COMPONENTES		Adição	Quantidade
OIL 7219	0032-7219	C	14.2 kg
Negro-de-Fumo			
COMPONENTES		Adição	Quantidade
Black 752 Black 772	0030-0752	A	14.2 kg
INSTRUÇÕES DE MISTURA (BANBURY)			
ORDEN DE ADIÇÃO	TEMPO/TEMPERATURA	VELOCIDADE	
Adiciona Química Leve de Química Leve	10° C	2	
Adiciona Negro de Fumo de Negro de Fumo	50° C	2	
Adiciona Polímero de Polímero	100s	2	
Adiciona Óleo de Óleo	50s	2	
Histórico de Revisões			
1	19 de Setembro de 2014	Teste #1	
Revisão	Data	Histórico	



New Weighing System

gmi Gomaplast Machinery, Inc.
2424 Long Road, Wooster, OH 44691 • 330-263-7845 • Fax 330-263-7846 • sales@gomaplast.com

GEROMAQ | Usuário / Operador | Parâmetros | Planta Física | Estoque | Produtos | Receitas | Ordem de Produção | Consulta | geromac

PLANTA FÍSICA

QUÍMICA LEVE

CALHA 1

CALHA 2

CALHA 3

CALHA 4

CALHA 5

NEGRO DE FUMO

CALHA 1

CALHA 2

CALHA 3

CALHA 4

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CADASTRO DE RECEITAS QUÍMICA LEVE

NOME RECEITA	CALHA	PRODUTO	PESO (g)	MANUTENÇÃO
MASSA TREVES QL	1			<input type="button" value="OK"/>
T1 QL	1			<input type="button" value="OK"/>
MASSA HONDA	1			<input type="button" value="OK"/>
MASSA PELZER	1			<input type="button" value="OK"/>

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---SE DA FASE

MASSA TREVES F. RETALHO

ETAPA 1	ETAPA 2	ETAPA 3	ETAPA 4	ETAPA 5
Ação <input type="text" value="ACAO"/>	Ação <input type="text" value="TEMPO"/>	Ação <input type="text" value=""/>	Ação <input type="text" value=""/>	Ação <input type="text" value=""/>
Atuação <input type="text" value="DISP"/>	Atuação <input type="text" value="BAT"/>	Atuação <input type="text" value=""/>	Atuação <input type="text" value=""/>	Atuação <input type="text" value=""/>
Ingrediente <input type="text" value="Bomacha"/>	Ingrediente <input type="text" value=""/>	Ingrediente <input type="text" value=""/>	Ingrediente <input type="text" value=""/>	Ingrediente <input type="text" value=""/>
Tempo Válvula (seg) <input type="text" value=""/>	Tempo Válvula (seg) <input type="text" value=""/>	Tempo Válvula (seg) <input type="text" value=""/>	Tempo Válvula (seg) <input type="text" value=""/>	Tempo Válvula (seg) <input type="text" value=""/>

ETAPA 6	ETAPA 7	ETAPA 8	ETAPA 9	ETAPA 10
Ação <input type="text" value=""/>	Ação <input type="text" value=""/>	Ação <input type="text" value=""/>	Ação <input type="text" value=""/>	Ação <input type="text" value=""/>
Atuação <input type="text" value=""/>	Atuação <input type="text" value=""/>	Atuação <input type="text" value=""/>	Atuação <input type="text" value=""/>	Atuação <input type="text" value=""/>
Ingrediente <input type="text" value=""/>	Ingrediente <input type="text" value=""/>	Ingrediente <input type="text" value=""/>	Ingrediente <input type="text" value=""/>	Ingrediente <input type="text" value=""/>
Tempo Válvula (seg) <input type="text" value=""/>	Tempo Válvula (seg) <input type="text" value=""/>	Tempo Válvula (seg) <input type="text" value=""/>	Tempo Válvula (seg) <input type="text" value=""/>	Tempo Válvula (seg) <input type="text" value=""/>

TEMPO BATIMENTO (seg)

AÇÃO FINAL TEMPO (?) ☐

AÇÃO APÓS TEMPO (?) ☐

VAZIO ANTES TEMPO (?) ☐

ALTERAR

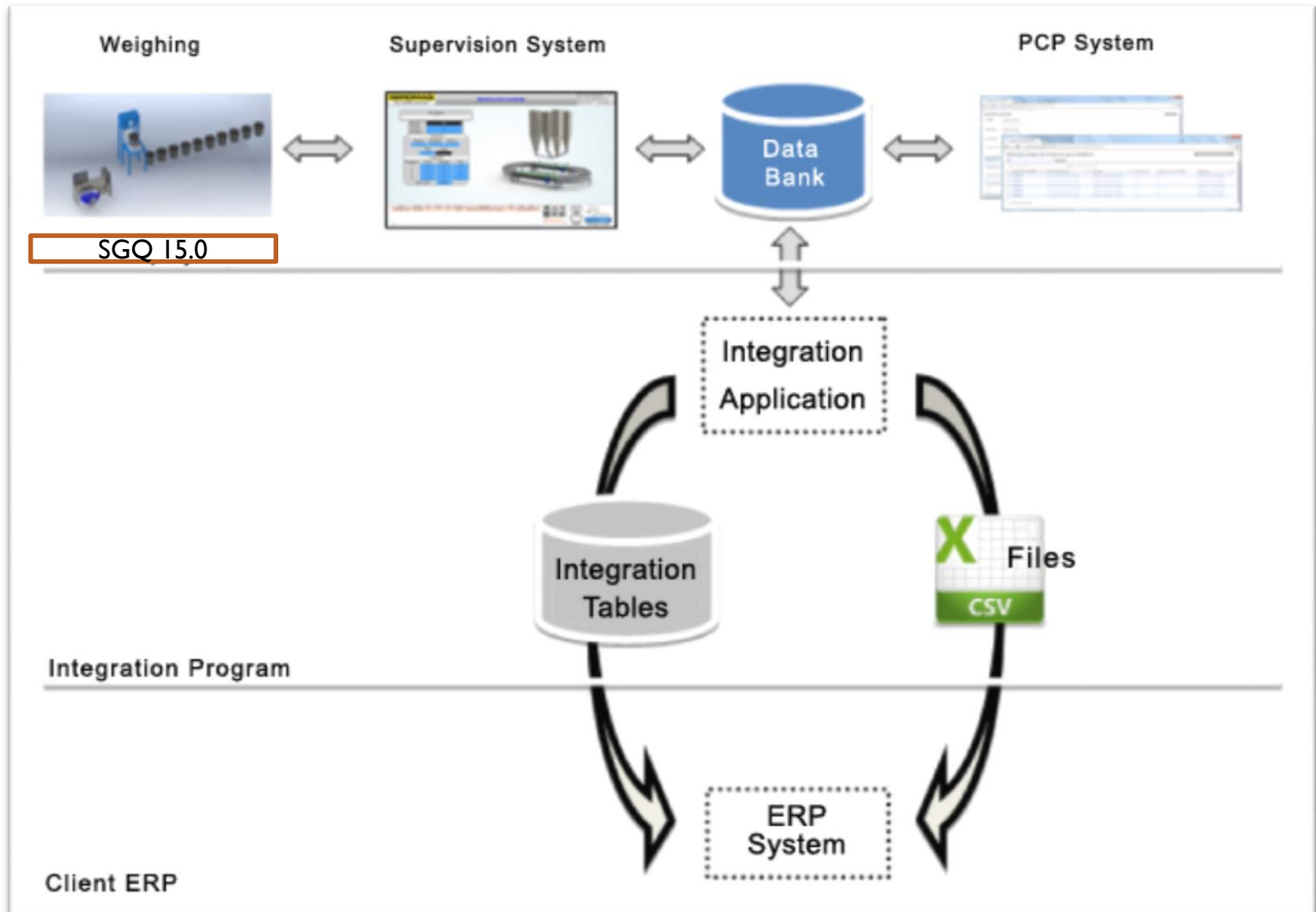
LIMPAR

EXCLUIR

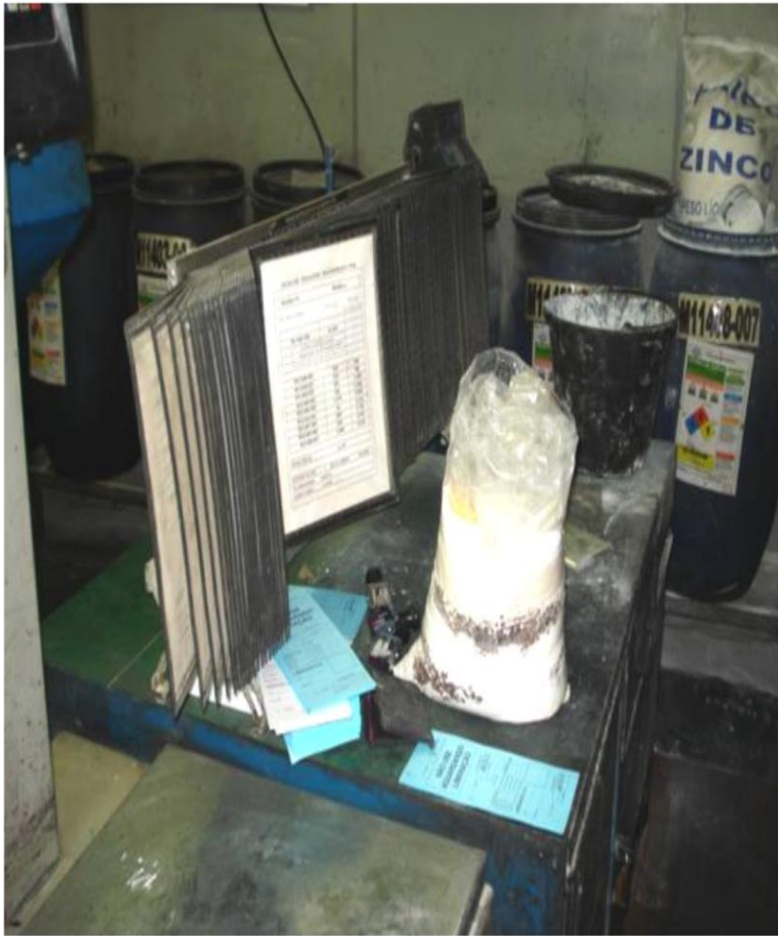
INCLUIR

SABR

New Weighing System - Integration of ERP & SGQ 15.0



Current Weighing Systems



Current Weighing Systems



Current Weighing Systems

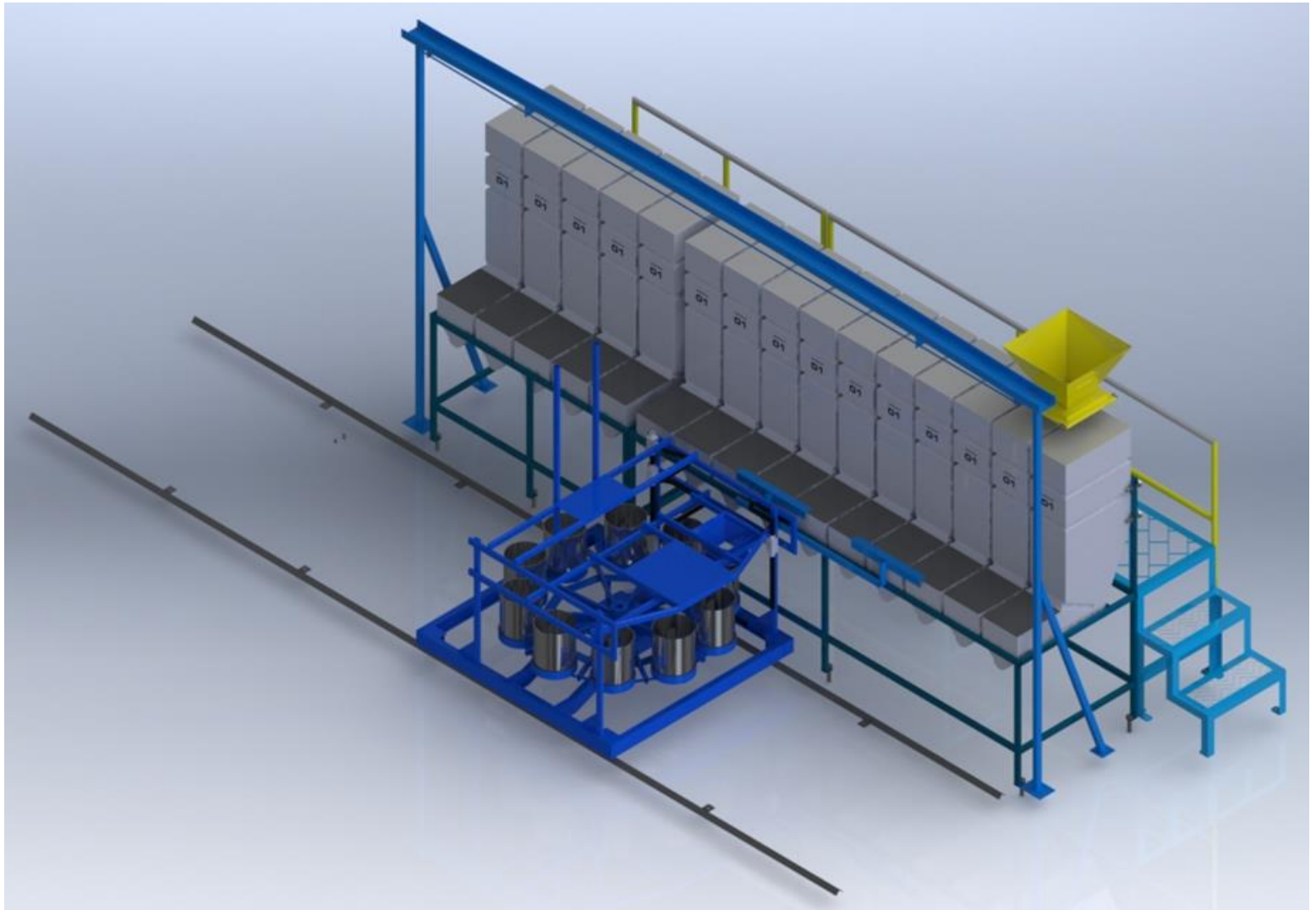


Weighing Systems

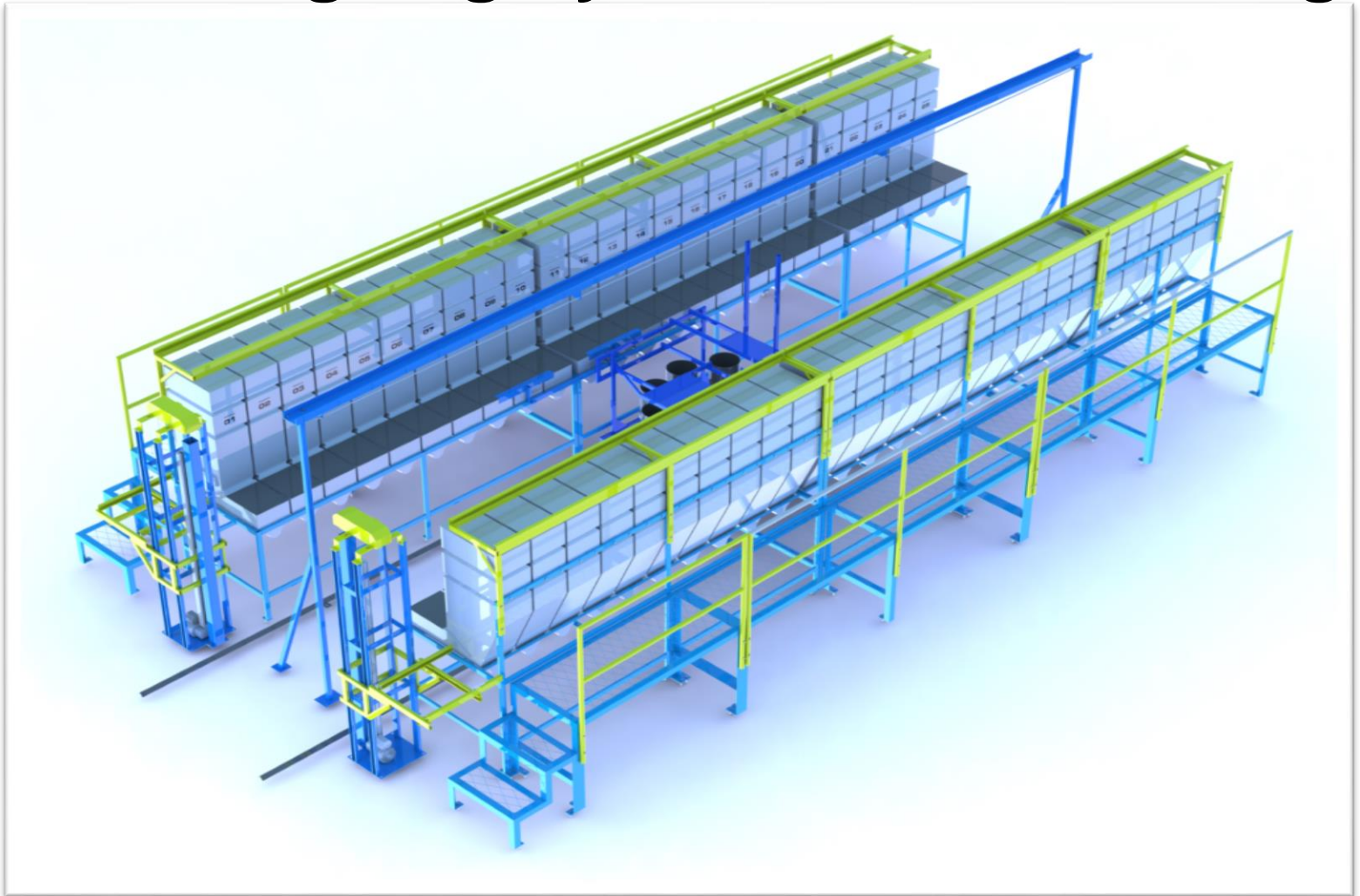
Current New



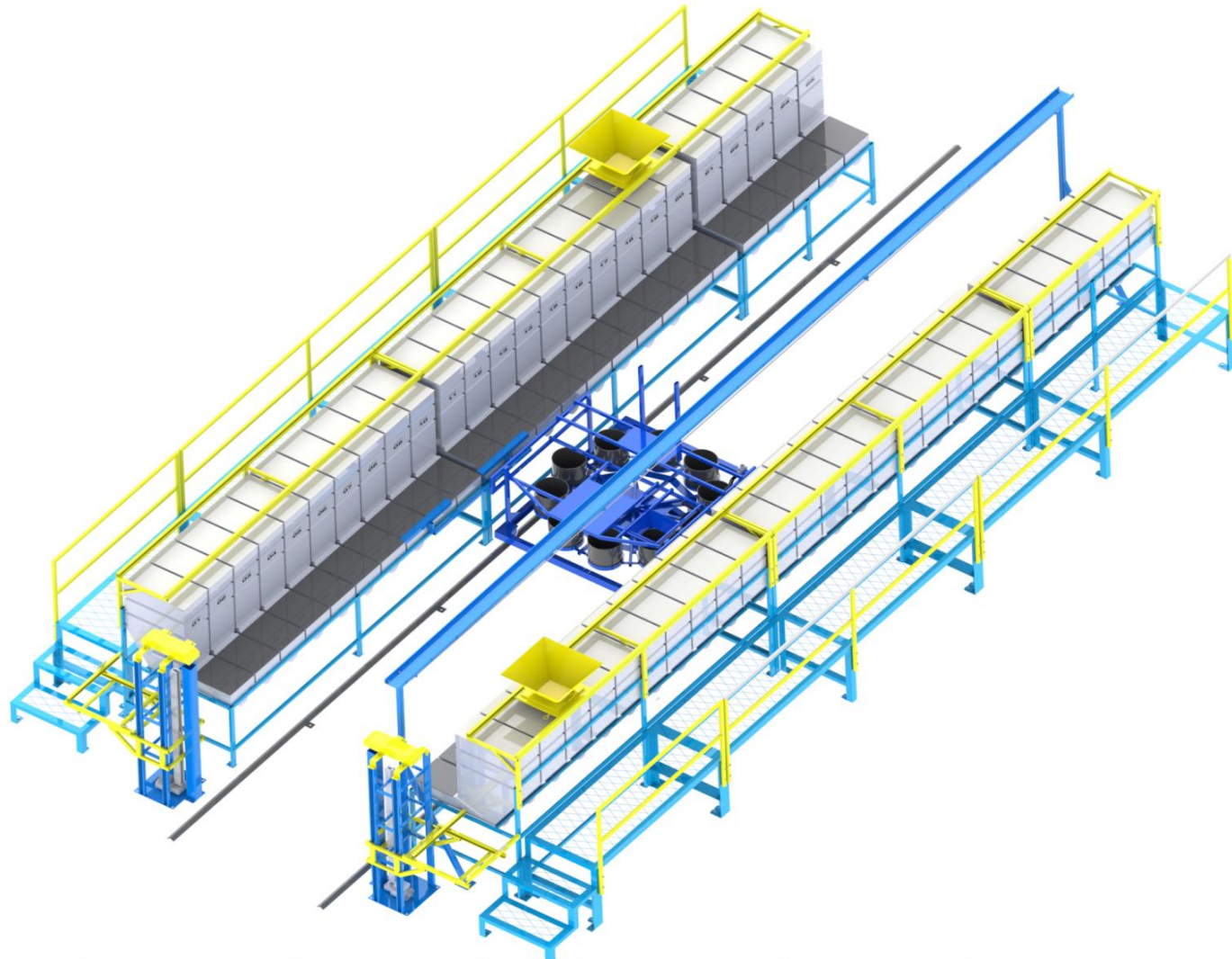
New Weighing System – Micro Dosing



New Weighing System – Micro Dosing



New Weighing System - Micro Dosing



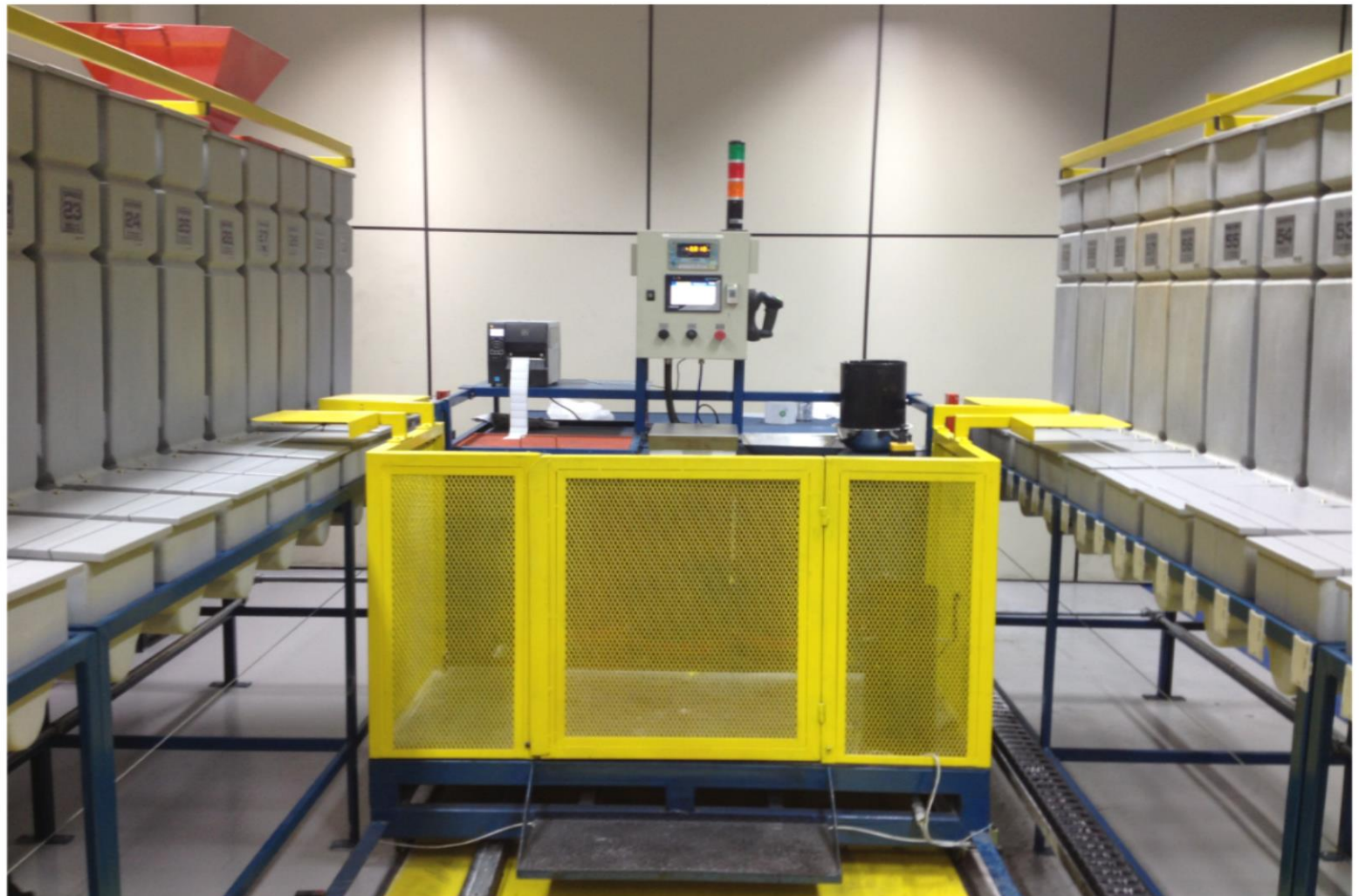
New Weighing System - Micro Dosing



New Weighing System - Micro Dosing



New Weighing System - Micro Dosing



New Weighing System - Feeding Materials in Bins



Feeding Process

1. BAG Scan

2. BIN Scan

3. TOP LID Scan



New Weighing System - Feeding System



° New Weighing System - Feeding Materials in Bins

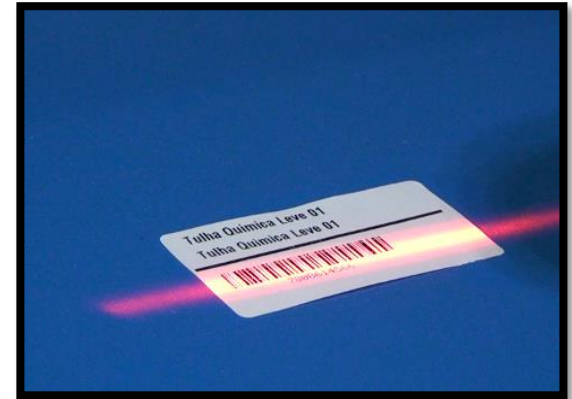
1. SCAN PRODUCT



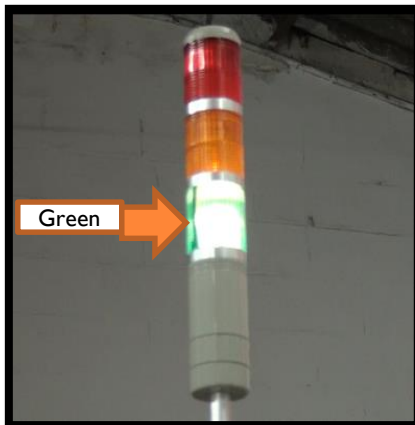
2. SCAN BIN



3. SCAN COVER



4. GREEN LIGHT



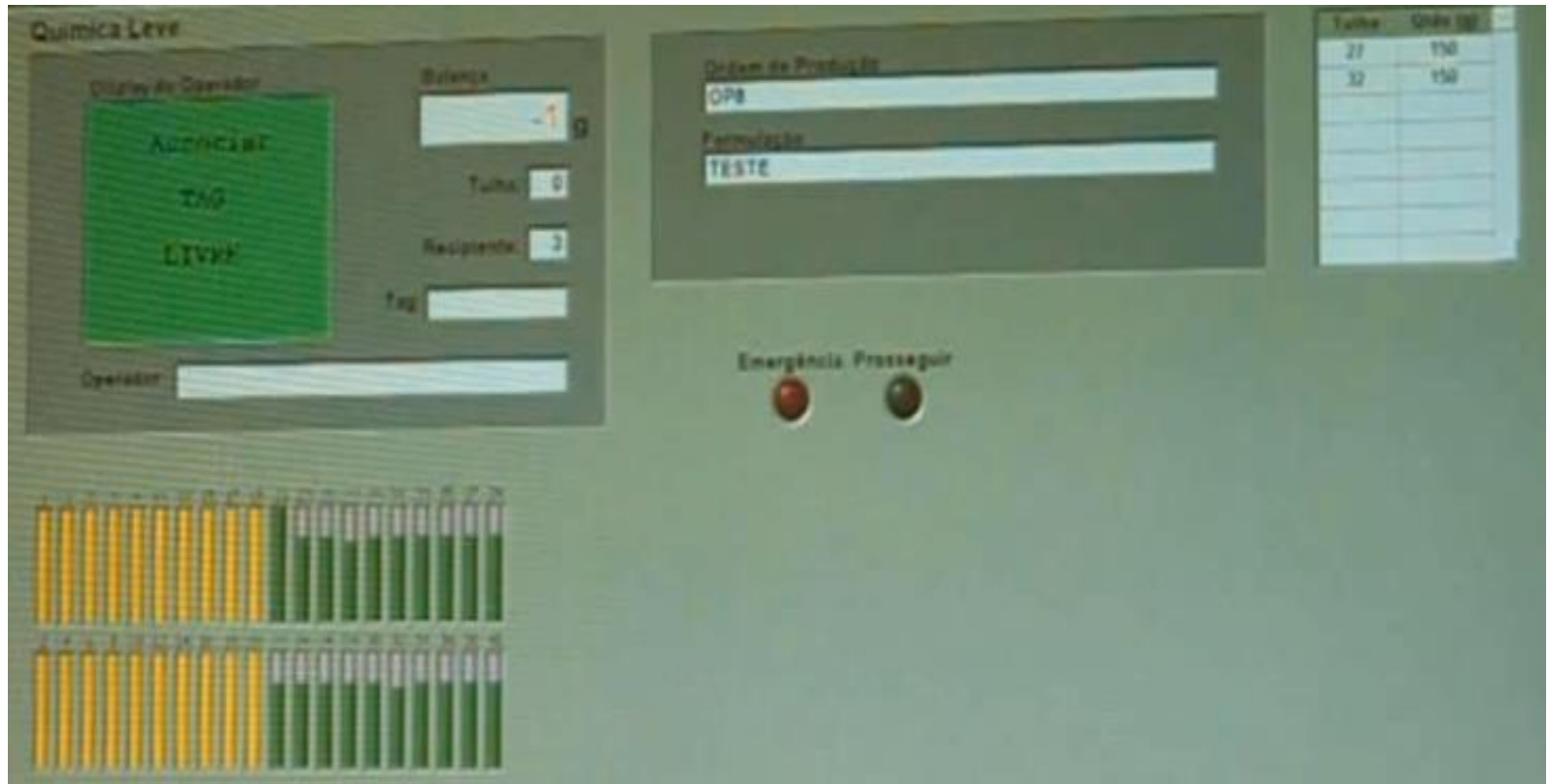
4. FEEDING



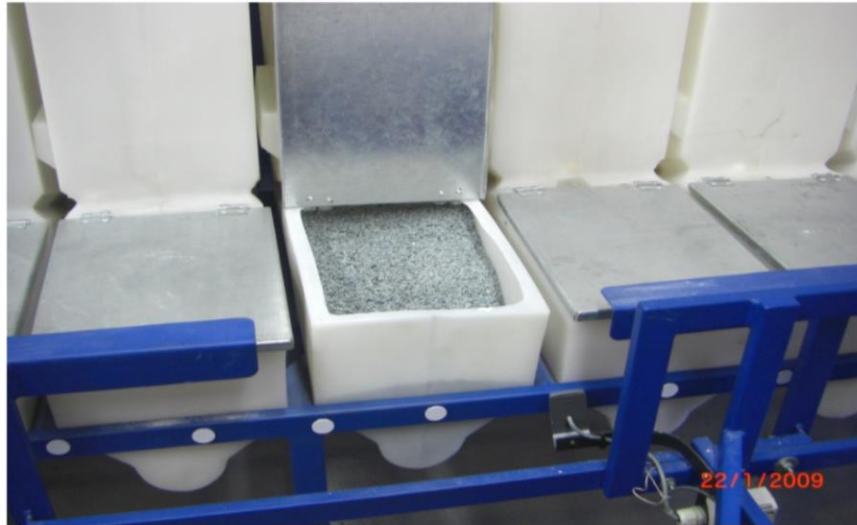
5. FINISHED FEEDING PROCESS



New Weighing System - Material in Bins



New Weighing System - Mechanical Locking System



New Weighing System - Mechanical Locking System



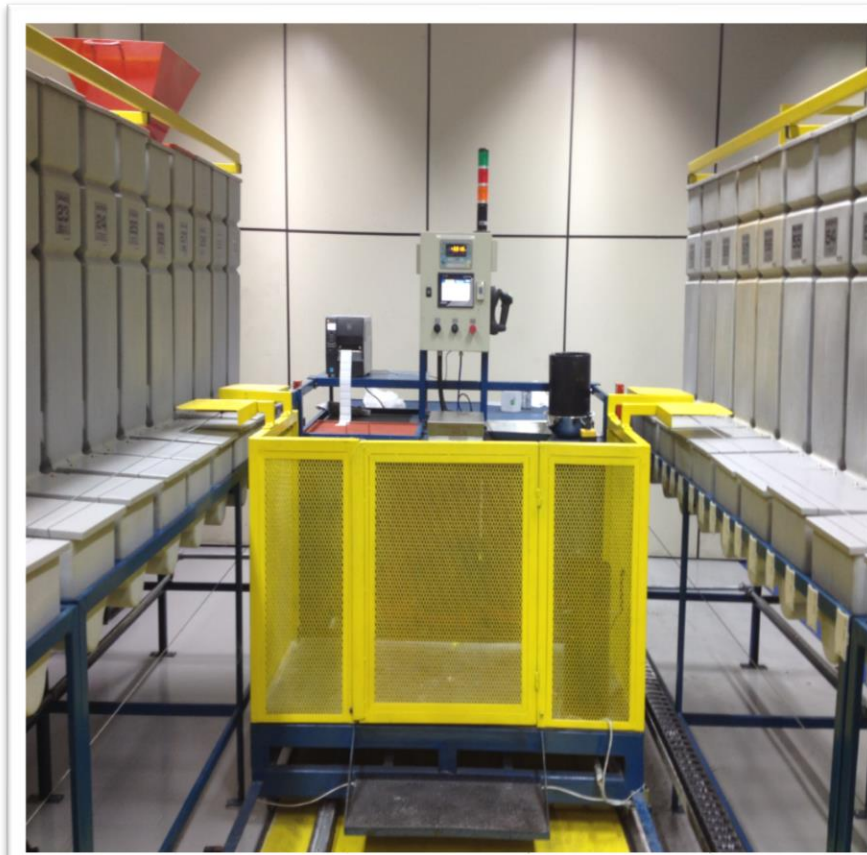
New Weighing System - In Operation



New Weighing System - In Operation



Easy Integration - Bar Code Reading & Printing

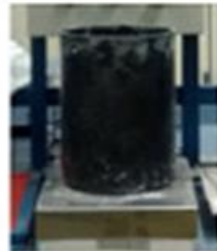


Weighing & Micro Dosing System

Bar Code Reader



Scale



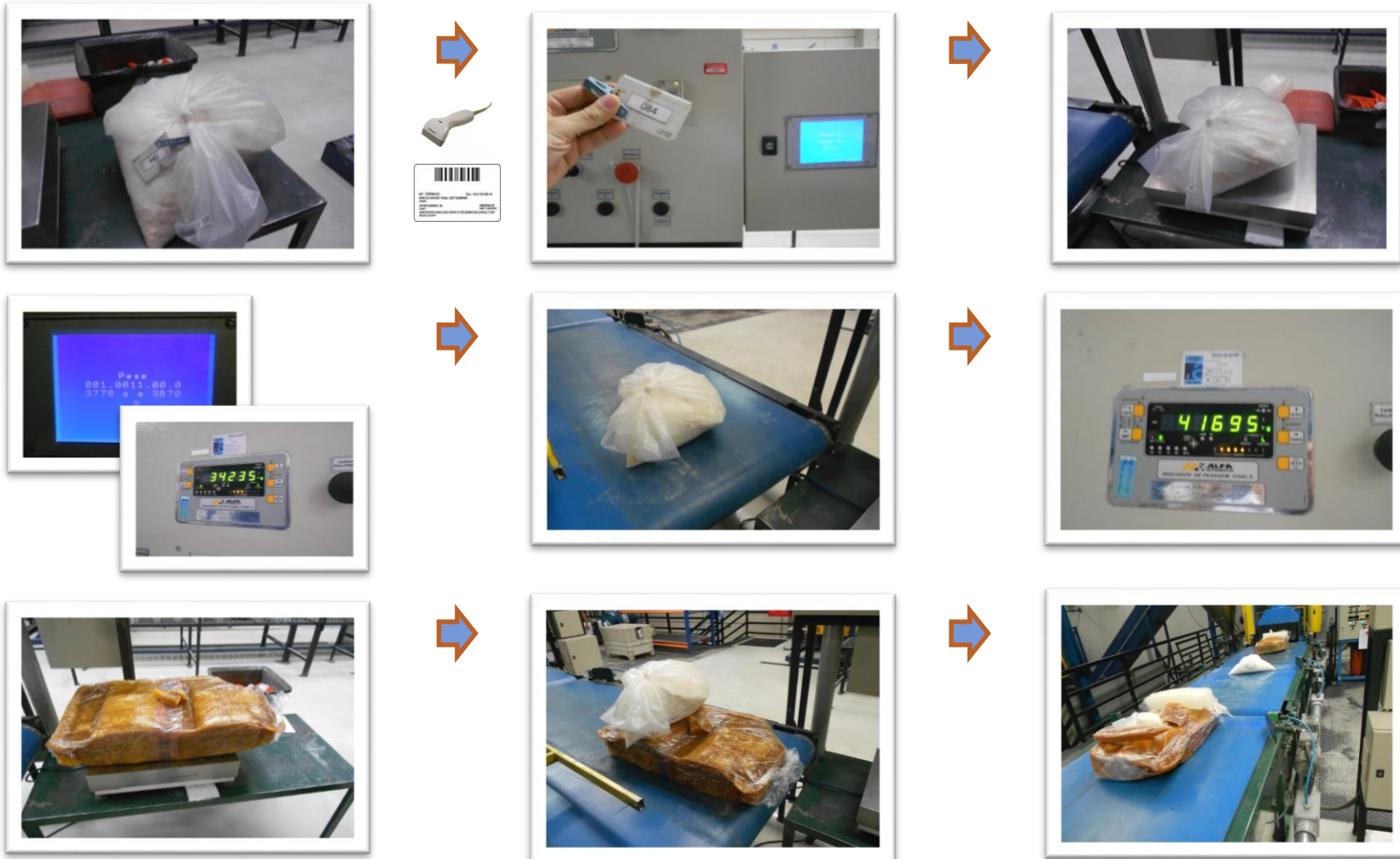
Bar Code Printer



RFID Reader



New Weighing System – Rubber Weighing Station



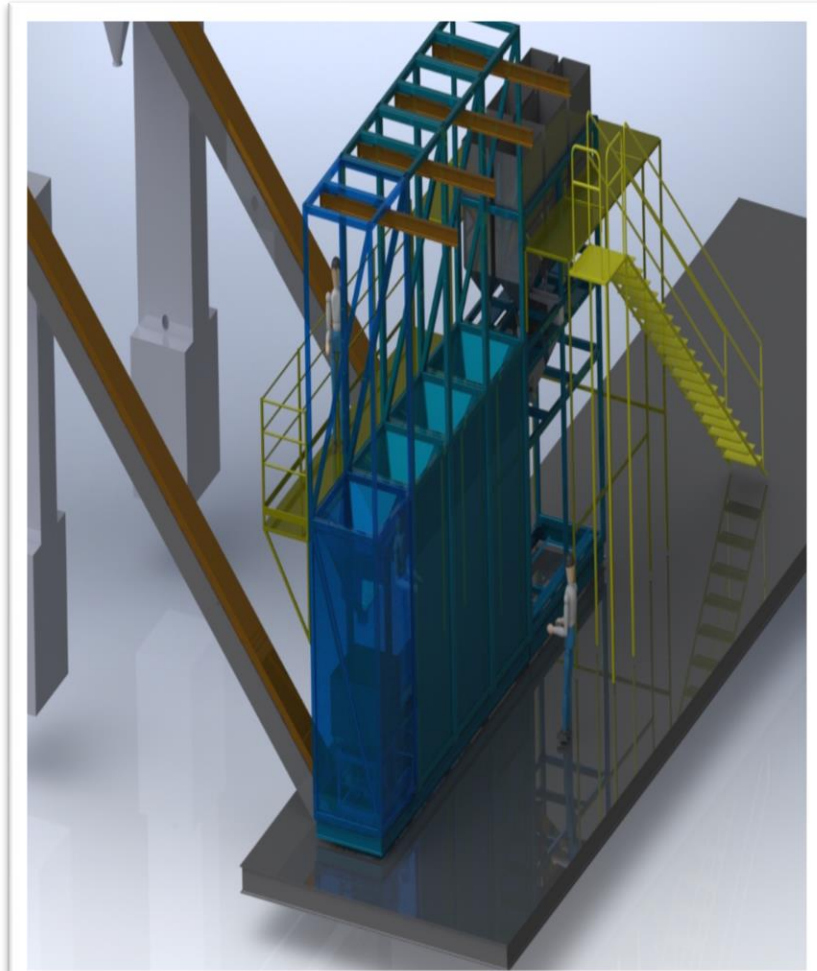
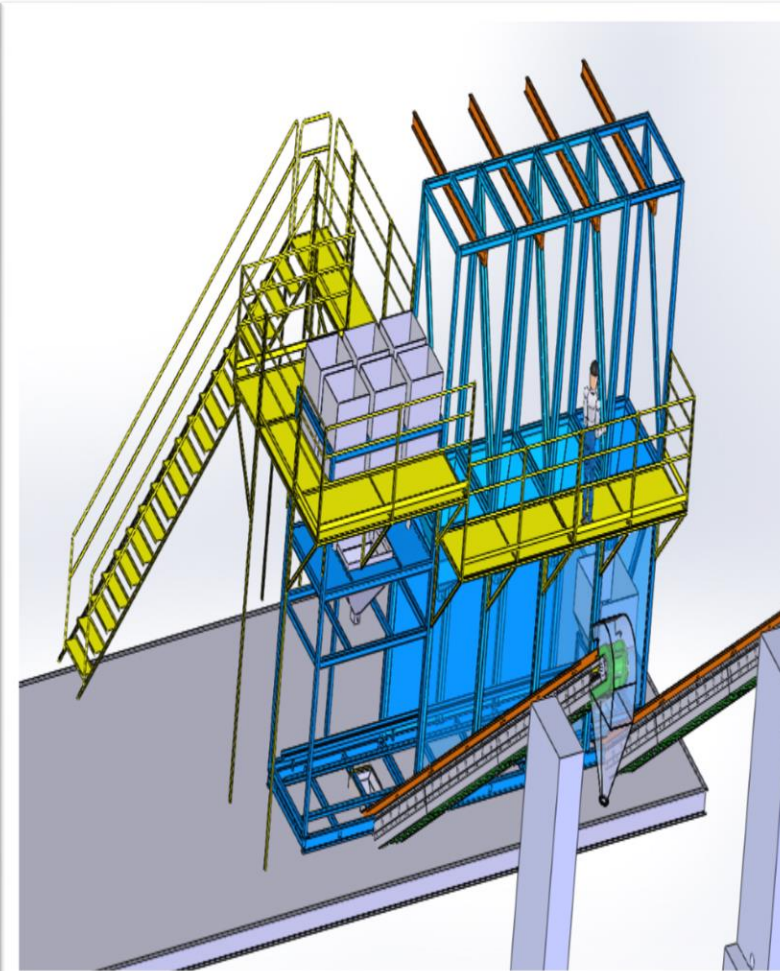
Current Weighing System - Liquids & Oils



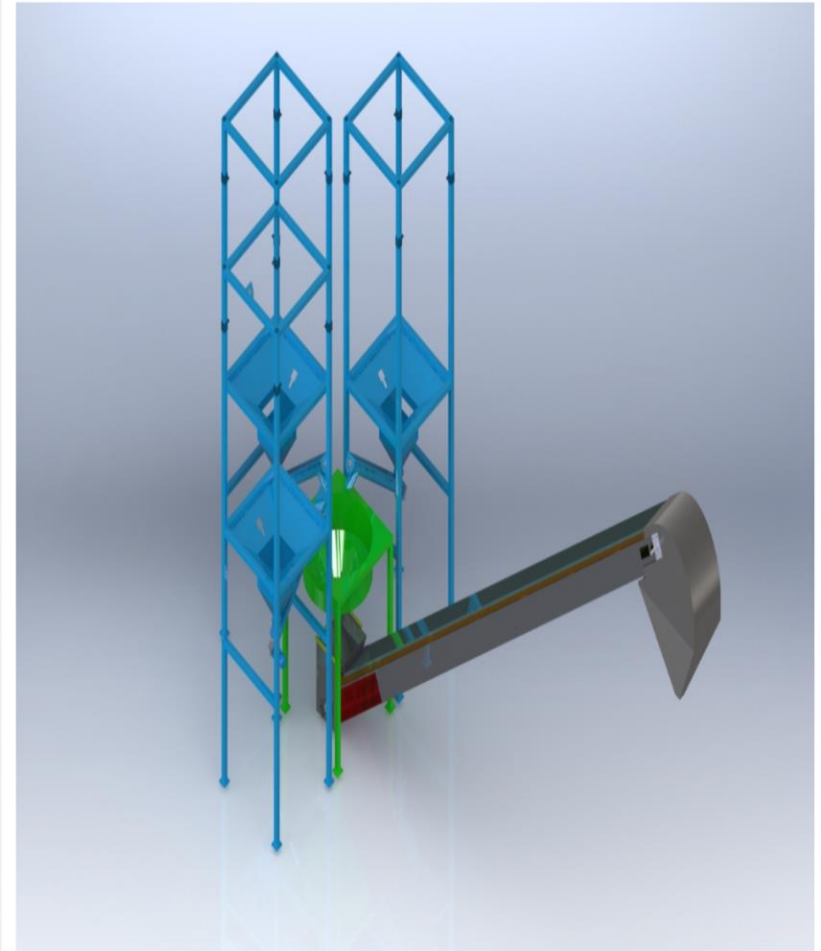
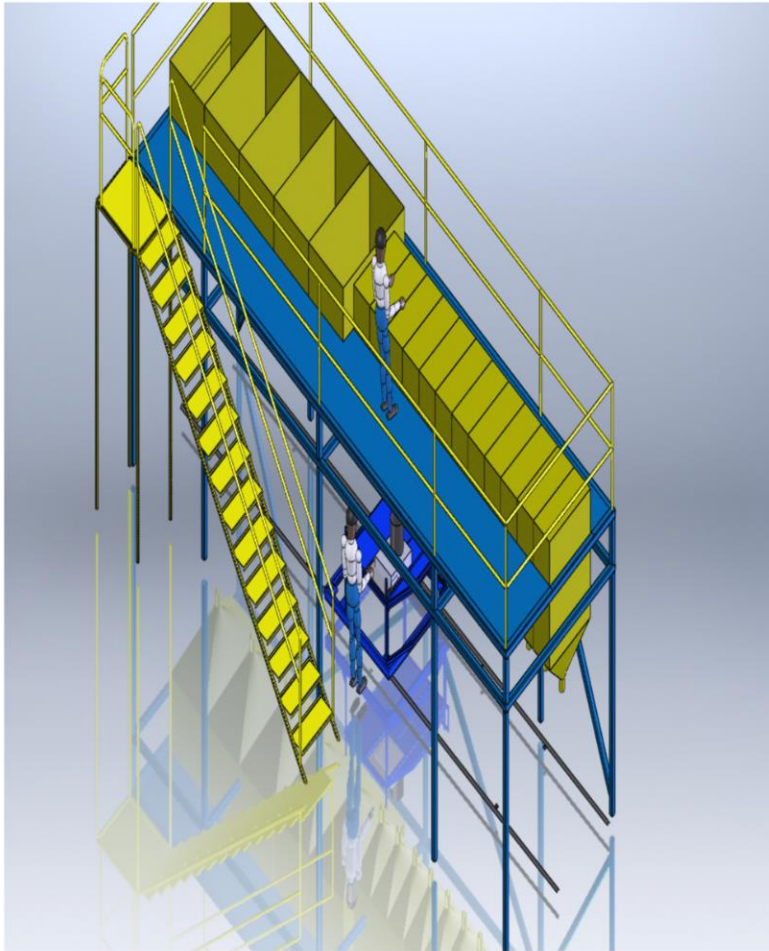
New Weighing System - Liquids & Oils



New Weighing System - Large Volumes



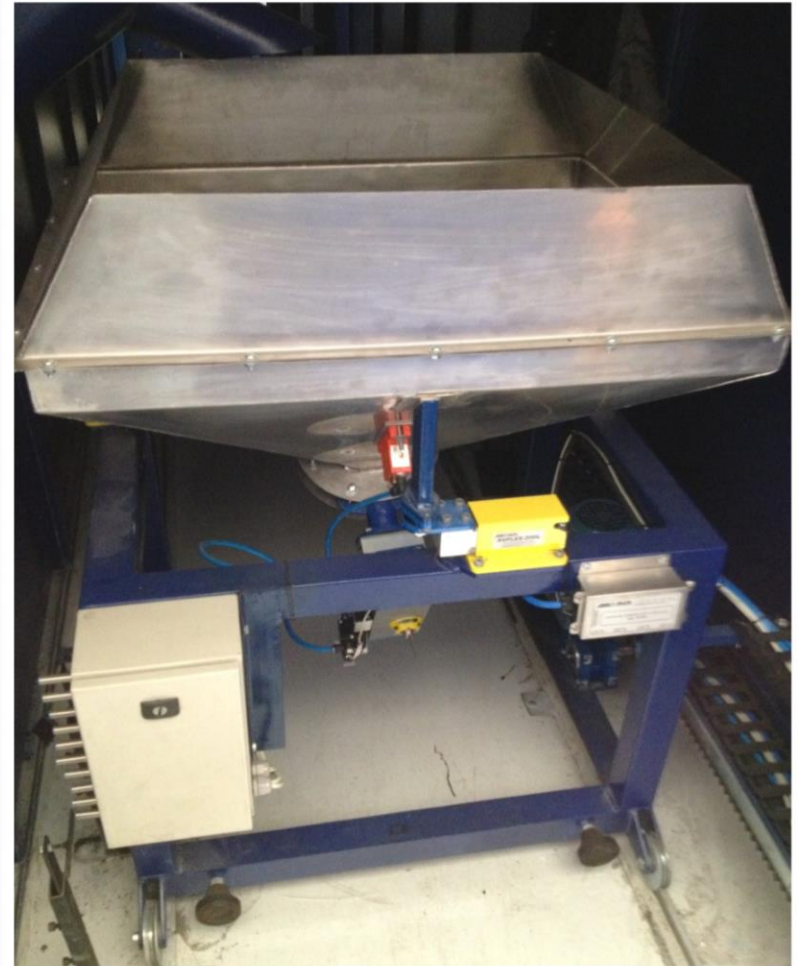
New Weighing System – Large Volumes



New Weighing System - Large Volumes



New Weighing System - Large Volumes



New Weighing System – Large Volumes



Weighing System - Check Point



Weighing System - Check Point



Large Volumes - Direct Discharge into Banbury



System for Tracking & Sequencing 2-Roll Mills

PROCESSO DO MISTURADOR

RELATÓRIO DO MISTURADOR

RECEITA :

Peça :	Coxim
Lote :	01234-wfz
Código da Receita :	85698-wfz
Tempo de Mistura:	4 minutos
Adicionar Acelerador :	sim
Tipo 1:	não
Tipo 2:	sim
Tipo 3 :	não

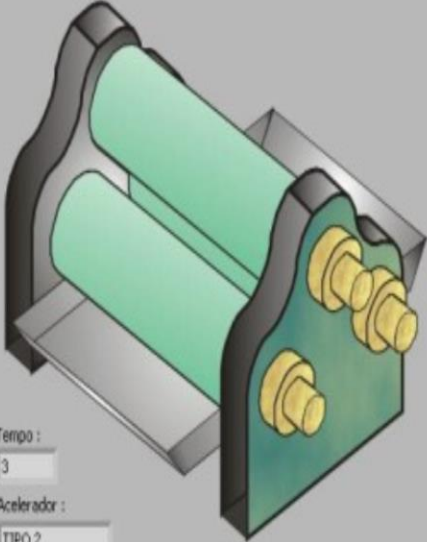
Escolher Receita

Início do Processo

OK

OK

PROCESSO DO MISTURADOR



Tempo :
3

Acelerador :
TIPO 2

Gerar Relatório

Fim do Processo

OK

OK



GMI Gomaplast Machinery, Inc.

- Peter Gessert
- peter@gomaplast.com
- www.gomaplast.com
- 330-263-7845
- 2424 Long Road
- Wooster, Ohio 44691