

# Milly Glass Works



### **About Us**



- Milly Glass Works started in 1954.
- Industry Segment : Soft Drink, Food and Liquor.
- Customers: Kenya, Uganda, Burundi, Rwanda, Tanzania, Malawi, Zambia & Indian Ocean island countries like Mauritius, Comoros etc.
- State of the art machinery with 3 automated productions lines.
- ❖ Well connected by Sea, Air, Rail and Road in the region.
- Approved by major players like Coca-Cola, Pepsico, Diageo, Distell etc
- 25% of our Production Capacity is exports.
- Milly Glass employs 550+ people directly.





Wide Variety of Soft Drinks, Liquor & Food Containers from 200ml to 1 Litre bottles.

15 Million bottles per month.

# **Annual Printing Capacity**



Decorating Line	CS – Rosario – 150
Printing Capacity	50,000 Bottles per Day
	18.25 Mn Bottles per annum



Coca-Cola & Pepsico Approved.

## Milly Glass: Equipment



Process	Supplier	Salient Features	
Furnace	M/s. Horn Glass Industries Germany	Our 130 TPD new furnace commissioned in Dec 2019. State of Art Design & Controls with SCADA PLC with automatic combustion and flue exhaust. Highly efficient heat exchanging regenerator.	
Distributor & Forehearth	M/s. Horn Glass Industries Germany	Highly efficient differentially fired Glass conditioning zones with auto temperature controls and simultaneous heating & cooling zones.	
Forming Machine	M/s. Bottero Hollow Glass Division	Modern Electronic Servo controlled Glass Forming Machines capable of producing high quality glass bottles at speeds comparable to best of industry standards.  Product Range includes bottles from 200ml to 1 litre capacity with additional Jar Manufacturing features using QUANTUM Plunger Mechanism.	
Annealing LEHR	M/s. Antonini S.R.L	Antonini Install and Forget Annealing LEHR's with PLC control, Temperature Management and highly efficient Gas firing system. Capable of achieving Grade Zero Annealing for Glass containers.	
Inspection Machine	M/s. TIAMA, Italy	Model MX 4 Finish and Base inspection multi camera based inspection machine capable of inspecting 200 Bottles per min accurately.	
	M/s. IRIS France	Evolution NEO 12 – Camera based inspection.	

Milly Glass – A Model Glass Plant in East Africa.

### Sustainable Manufacturing – Roof Top Solar



- ☐ Phase 1: 968 kWp installed
- ☐ Solar Plant started operation from 5<sup>th</sup> July
- ☐ Phase 1: 15 to 20% of our daily power requirement



### **Annual Production Capacity**



M-1

15,750 T

M- 2

10,500 T

M - 3

15,750 T

M-1

62.5 Mn Bottles

M- 2

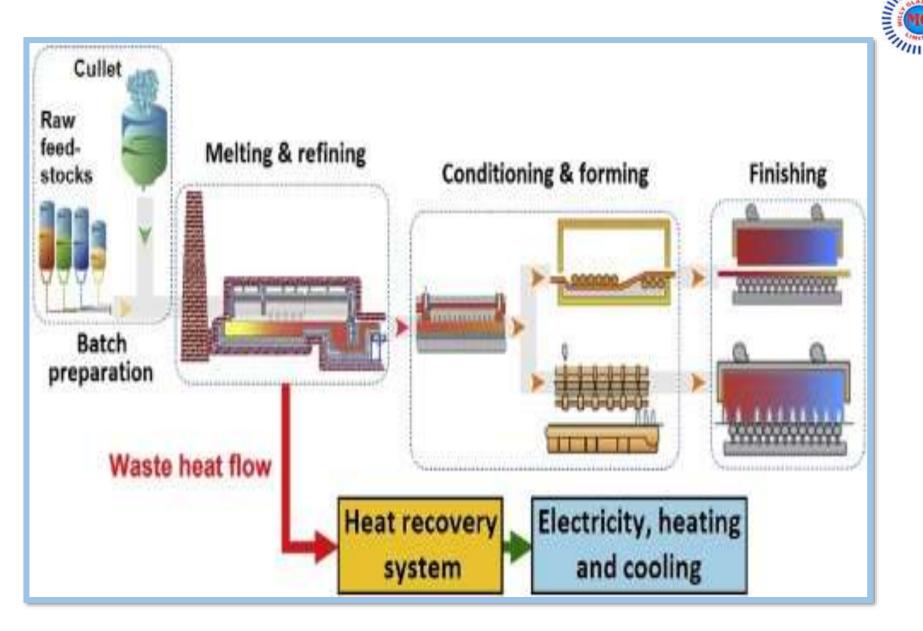
44 Mn Bottles

M - 3

62 Mn Bottles

Annual Capacity 42, 000 Ton Annual
Capacity
148 Mn Bottles





**Batch Formation** 

# Raw Material Process - Sand Washery





### Chemical Lab – IQC of Raw Materials

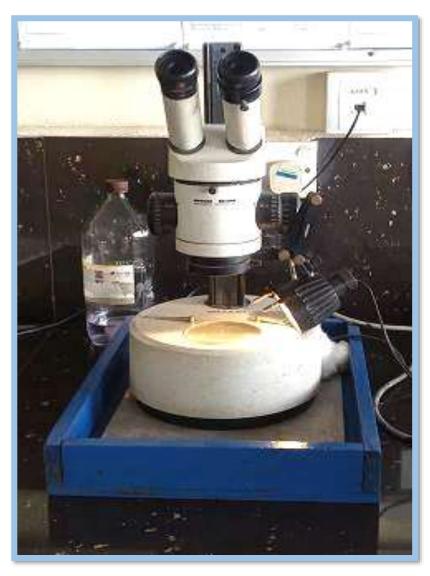


### Sieves



RM Grain Size Analysis

### Stereo Microscope



### Chemical Lab – IQC of Raw Materials



### **Electric Furnace**



## **Density Comparator**



### Chemical Lab – IQC of Raw Materials



### Weighing Scale for trace elements





Lab Analysis Weighing Machine

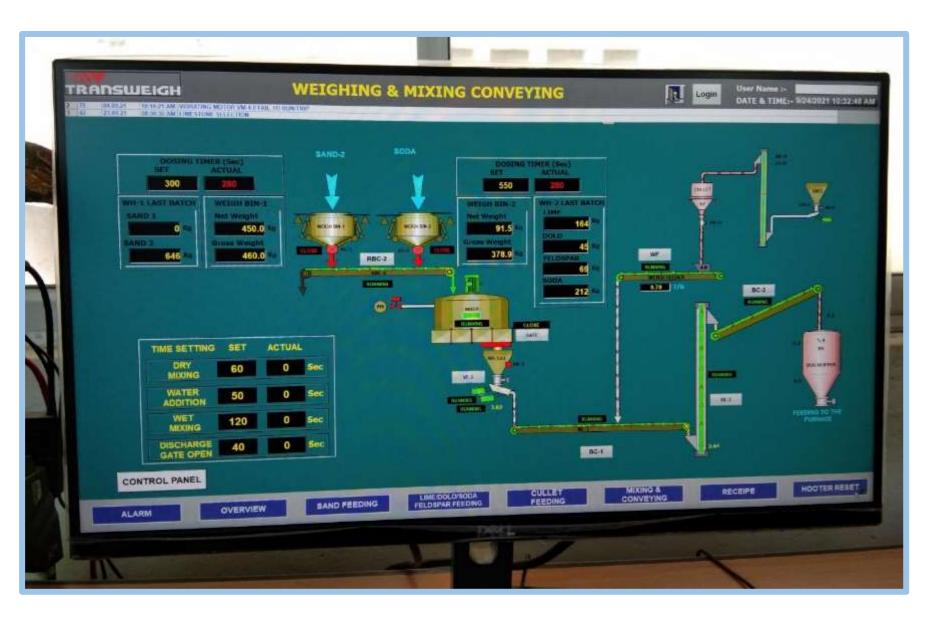
For Weight Calibration

### **HFO Moisture Analyser**



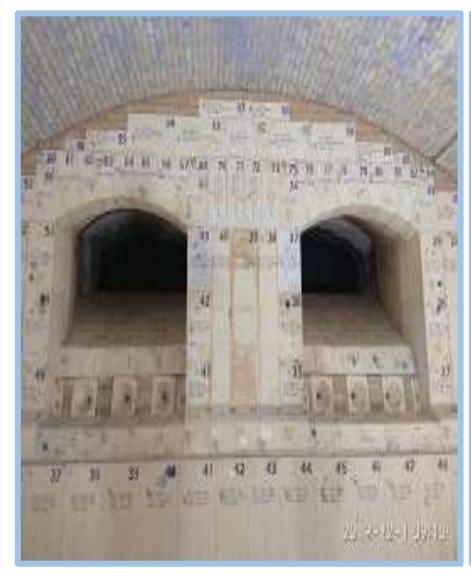
### Batch House – SCADA | Automatic Weighing Control of Raw Materials





### Furnace Rebuild – HORN 2019

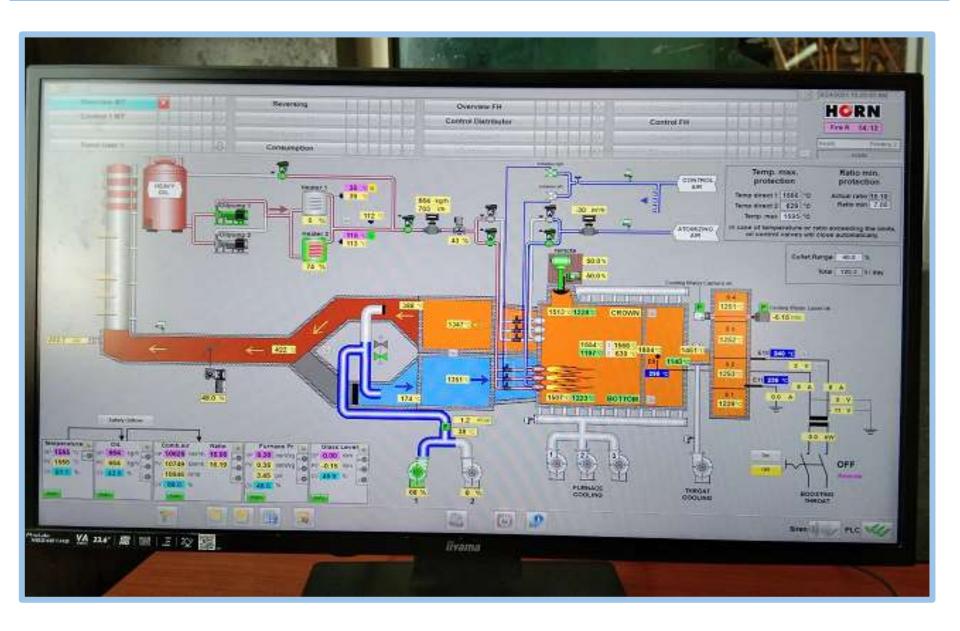






### Furnace Systems & Controls – HORN Germany 2019







# Newly commissioned 8 Section IS Machine – Bottero, Italy





# Newly commissioned 8 Section IS Machine – Bottero, Italy



In operation from September 2021.

### Process Control - RONDOT Blank Temperature Measurement HHT





To Check and maintain optimum Blank Skin temperature for Glass thickness.

### **Production Line 1.1**



Newly commissioned LEHR – Antonini, Italy



In operation from September 2021

### **Production Line 1.1**



# Newly commissioned LEHR – Antonini, Italy



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# Newly commissioned LEHR – Antonini, Italy



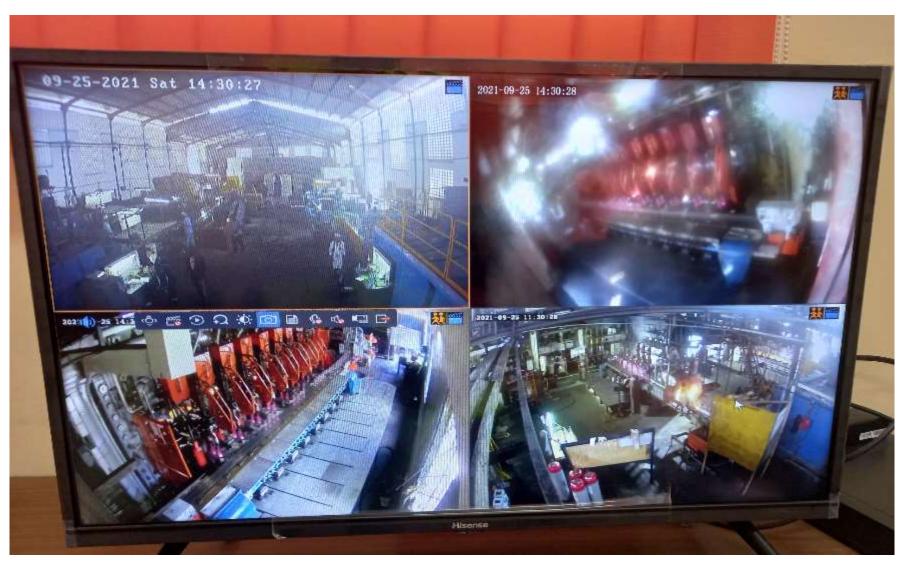
# Production Line 1.1 – IRIS Inspection Machine





## Remote Monitoring of Shop floor





24 x 7 remote monitoring.

## 3D – Printing for product simulation









# Polariscope for Inspection of Annealing Grade



## **Quality Assurance**



### Digital Height Vernier Gauge



# AGR Digital Glass Wall Thickness Tester



### **Quality Assurance**

### **AGR Coating Testing**



Hot End Coating Thickness Tester

### **Lubricity Tester System**

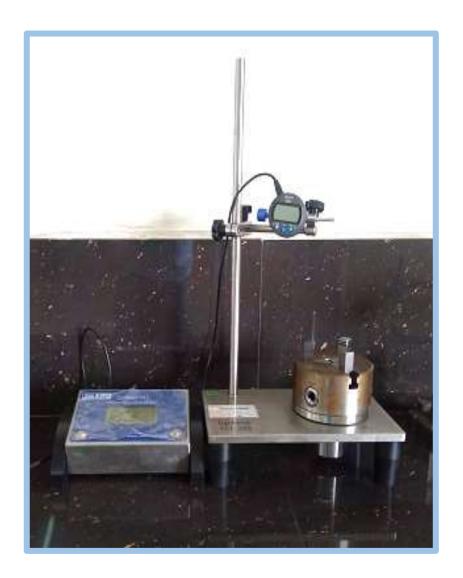


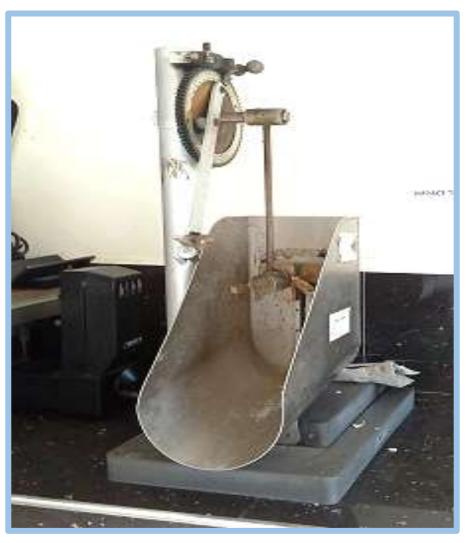
Tilt Angle Testing Machine



### Caneed Verticality Measuring Inst.







Minimum Impact 85 cm/sec



Filling Line Simulator



Ramp Pressure Tester



All Liquor bottles subjected to pressure test



### **Automated Thermal Shock Testing Bath**



## **Quality Assurance**





Job Cards Display Board

## Quality Assurance – IQC of Packing Materials



### **Bursting Strength Tester**



### **Moisture Tester**



# Finished Goods Storage





# Despatches





### Statutory Compliances: ISO 9001:2015





### Statutory Compliances: Food Safety Certification FSSC 22000









### MILLY GLASS WORKS LTD

P.O. BOX 80180-80100, Mombasa- Kenya.

### OCCUPATIONAL HEALTH AND SAFETY POLICY

Rev no. 01

Milly Glass Works Ltd is committed to providing a clean, healthy and safe working environment to all employees and stakeholders at large.

The management of Milly Glass Works is committed to

- Appointing and sustaining an occupational health and safety committee which shall have the mandate to carry out all the activities pertaining to health and safety in our plant.
- Create awareness to all employees on safe and healthy working practices through continual awareness and training.
- Ensure adequate emergency preparedness, response and crisis management capacity at all times.
- Maintain and continually improve an effective occupational health and safety programmes, which meet statutory, legal and regulatory requirements.
- Minimize the occurrence of OHS accidents by identifying hazards and initiating appropriate corrective and preventive action plans.
- Regular inspection and service of plant equipment and machinery to ensure constant operational safety in accordance with relevant laws.

This policy will be continually reviewed to ensure its continuing suitability and effectiveness.

Approved by: Deputy General Manager		First Issue:July-2009
Document No.MG-POL-004	Page 1 of 1	Last revised: 11-02-20

### Statutory Compliances: Hygiene Policy





### MILLY GLASS WORKS LTD

P.O. BOX 80180-80100, Mombasa- Kenya.

### HYGIENE POLICY

**REV 01** 

Milly Glass Works is committed to maintaining high standards of hygiene in our plant.

We shall ensure food safety is not compromised at all stages of our production process.

We are committed to ensuring that the effectiveness of measures taken to protect against contamination are periodically and continually reviewed.

### Scope

This policy statement applies to all personnel, visitors and contractors visiting our plant It covers hygiene training and personal hygiene requirements.

### **Hygiene Training**

All new employees will undergo GMP (good manufacturing practices) induction training before commencing work.

All employees will periodically trained on the current hygiene practices. This will cover current GMP and programs.

Visitors /contractors will be advised of hygiene requirements as they sign in to enter the Factory, at the Reception, and a Visitor's/contractor's pass is issued.

### Personnel Hygiene

We shall provide adequate number of toilets, changing facilities and sinks in designated areas within the plant with hand sanitizers for critical personnel handling products. We shalls provide appropriate PPEs (personal protective equipments) to all staff/visitors entering the production area.

The following personal hygiene rules shall apply:

### Hand washing & sanitization

 Hands should be washed regularly e.g. after every visit to the toilet, after breaks, eating, drinking, maintenance etc. Hand washing facilities are available in all production areas.



### MILLY GLASS WORKS LTD

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### HYGIENE POLICY

REV 01

- All hand washing facilities are supplied with soap dispensers containing non-scented bactericidal soaps and hand drying facilities.
- Product handlers i.e. Line inspectors, sorters, checkers, Packers etc will be required to sanitize their hands frequently after the breaks mention above.
- Regular checks are carried out by the housekeeping supervisor to make sure that the hand wash facilities are kept clean and are properly supplied with soap and records updated daily.

### Personal cleanliness

- · Fragrances like perfumes, aftershaves etc. must not be worn in production area
- Personnel shall be required to refrain from sneezing or coughing over materials or products, spitting (expectorating) is prohibited
- Lockers shall always be clean free from rubbish and soiled clothing, Food stuffs shall not be kept in lockers.
- Factory clothing and civilian wear shall be kept separately
- Head cover provided must be worn properly so as to cover all hair and ears, beards must be shaved or covered with beard snood
- In product handling areas personnel with burns and wound shall be required to cover them
  with waterproof brightly colored dressing, any dressing lost shall be reported to the
  supervisor immediately who shall order for an inspection of the product batch in the area
  to ensure no contamination of the product with the dressing.

### Smoking, eating and drinking

- Smoking is prohibited on the site, see smoking policy
- . Chewing/bubble gums are not allowed in production areas
- Eating and drinking is not allowed in production areas.
- Light snacks are allowed in admin block offices. Such food items must be well covered and put away in designated areas.
- Medication shall not be carried in production area.

### Jewellery and other implements

- Nails should be kept short and clean. False nails, evelashes and nail varnish are not allowed.
- Jewellery is not allowed in production areas.

One writing equipment i.e. pen shall be allowed.

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# DIAGEO 12.





















# Thank You