COLD END · QUALITY · INSPECTION

QUALITY CONTROL & INSPECTION.

> "The modern quality philosophy in glass container manufacturing must incorporate a 'right first time' attitude..."

This attitude may not automatically result in perfect containers every time but, correctly applied at each stage of manufacture, it minimises the production of substandard goods.

It also highlights the areas of production where they occur, which makes a good standard of production efficiency attainable and helps contain manufacturing costs.

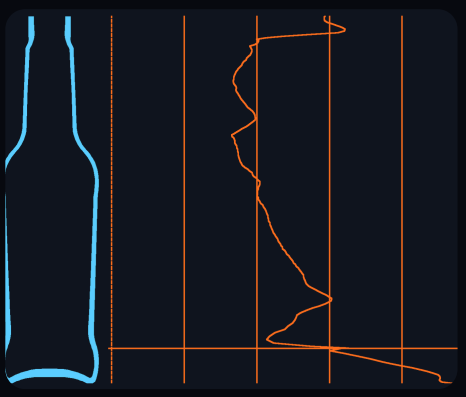
Prevention is the best way to make sure the customer does not receive substandard goods or service. Investment in preventing quality failures protects the customer and pays dividends in lower costs of waste, errors, re-work and checking.

THREE AREAS OF CONTROL.

Process control and quality assurance in glass container manufacturing take place in three main areas:

1. Pre-production quality assurance;
2. Quality assurance and quality control during production;
3. Quality assurance and quality control in the laboratory.







BEYOND MANUFACTURING CONTROLS

In the glass container factory the quality philosophy is not confined to manufacturing controls. It also covers other areas of good manufacturing practice, such as essential hygiene controls.

Some control points in the process are more serious than others. The most critical points are identified through HACCP (Hazard Analysis Critical Control Point) type analyses. These not only determine the critical points, but also the design, type and application of the appropriate control and monitoring procedures.

Empakglass provides integrated support services that embody this approach to quality, for glass producers, fillers, sellers (distributors) and suppliers.

HOW WE SUPPORT YOU.

Our cold end and quality control department supports our partners in the following areas.

IN COURSE OF PRODUCTION

1. Cold end SOPs
2. Quality control SOPs
3. Line flow optimisation and audits
4. Inspection machine tooling development
5. Process control methods
6. Statistical analysis
7. Container technical specification datasheets
8. Gauge design & construction
9. AQL determination according to product specifications
10. Packing development and optimisation

RISK ANALYSIS AND CLAIMS

1. Production line risk assessment based on proven technical expertise
2. Advisory services for risk mitigation
3. Technical expertise in claims investigation
4. Independent analysis of the causes of claims

TRAINING PROGRAMMES.

Empakglass offers five training programmes for the glass packaging industry, delivered at your plant or at our office.

GLASS CONTAINER TECHNOLOGY · 3 DAYS – 24 HOURS

1. Introduction
2. Glass containers standards and nomenclature
3. Glass
4. Process overview
5. Batch
6. Melting
7. Glass conditioning
8. Forming
9. Hot end coating
10. Annealing
11. Cold end coating
12. Inspection and quality control
13. Palletizing, shrink wrapping and warehousing
14. Container requirements

COLD END & QUALITY CONTROL · 4 DAYS – 32 HOURS

1. Introduction
2. Glass
3. Strength of glass
4. Upstream process overview
5. Surface treatments
6. Quality assurance
7. Inspection procedures
8. Automatic inspection
9. Quality laboratory tests
10. Palletizing, shrink wrapping and warehousing
11. Cold end job changes
12. Basic food safety
13. Container requirements

AUDITS, FOOD SAFETY & BREAKAGE.

GLASS CONTAINER PLANTS AUDITS · 2 DAYS – 16 HOURS

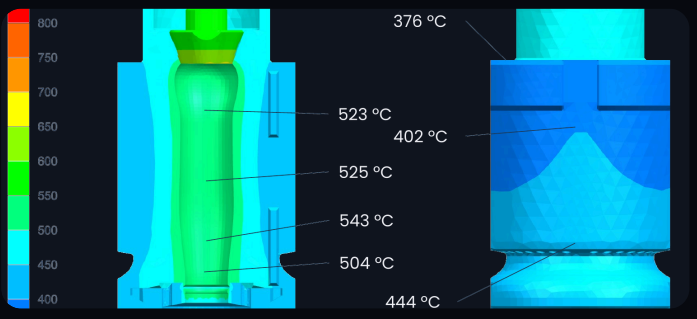
1. Overview
2. Batch
3. Melting
4. Glass conditioning
5. Forming
6. Hot end coating
7. Annealing
8. Cold end coating
9. Inspection and quality control
10. Palletizing, shrink wrapping and warehousing

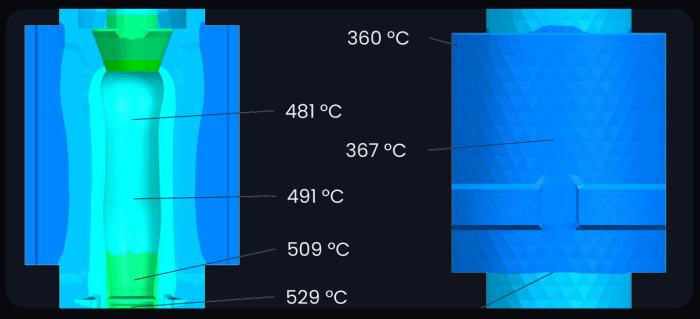
FOOD SAFETY FOR GLASS CONTAINER PLANTS (ISO 22000 AND FSSC 22000) · 3 DAYS – 24 HOURS

1. Introduction to food safety management systems
2. Hazard analysis and critical control point (HACCP) system
3. Prerequisite programs (PRPs)
4. Hazard control accordingly with ISO 22000
5. ISO 22000 requirements
6. FSSC 22000 additional requirements
7. ISO 9001 vs ISO 22000 / FSSC 22000

BREAKAGE ANALYSIS · 1.5 DAYS – 12 HOURS

1. Strength of glass
2. Fractography





TALK TO OUR TEAM

Lisbon · Gabrovo · Plovdiv · Hyderabad

management@empakglass.com
+351 218 079 529
www.empakglass.com