



ciss
Commodities
International
Survey Services

**FMCG
SURVEY**



It's Shipping & Survey



**Our Company CISS GROUP
(Commodities International
Survey Services) –
this is a team of professionals
with experience of doing business
in major international survey
companies more than
15 years.**

ABOUT COMPANY

We have teamed up our forces, experience and knowledge in order to offer only the best practice and business solutions in the field of independent inspections for active commodities traders (crude oil, iron ore, bauxites, grains) and others players all over the world.

Operational excellence and high standards of **CISS GROUP** allow our partners feel protected twenty-four-hour a day.





It's Shipping & Survey



Fast-moving consumer goods (FMCG) are products that are sold quickly and at a relatively low cost. Examples include non-durable household goods such as packaged foods, beverages, toiletries, over-the-counter drugs and other consumables.

The following are the main characteristics of FMCGs:

From the consumer perspective

- Frequent purchases
- Low engagement (little or no effort to choose the item)
- Low prices
- Short shelf life
- Rapid consumption
- Price comparison over online purchase by customer

From the marketer perspective

- High volumes
- Low contribution margins
- Extensive distribution
- High inventory turnover

FMCG is the most common acronym for such products across most of Europe, Asia and Oceania, while CPG (consumer packaged goods) is used more frequently in the Americas.



It's Shipping & Survey

PSI – Pre-Shipment Inspection
CLI – Container Loading Inspection
PPI – Pre Production Inspection
DPI – During Production Inspection
FRI – Final Random Inspection



**MAIN POINTS
OF FMCG
INSPECTION**



It's Shipping & Survey

Visual inspection

As industry standards for packaging and labelling become more stringent, the demand for visual inspection technology is increasing. Because visual inspection helps ensure only quality products leave your plant.

Depending on the manufacturer's needs, a visual inspection have the capacity to:

- inspect the presence, position and formation of a code (date code, barcode, etc.)
- validate the presence and position of labels check closures of tamper seals, correct caps by colour, etc.
- detect fill levels in bottles or jars, and the packaging's content
- sort food and beverage products based on marking
- count products



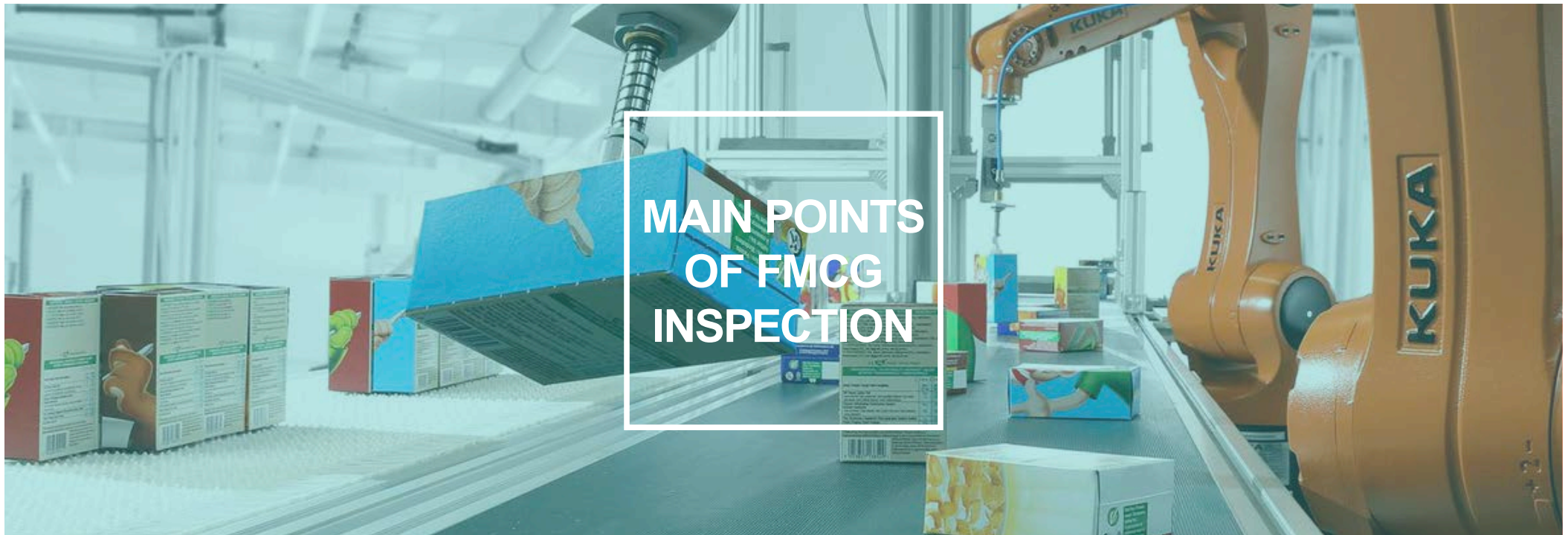


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Weight checking

Every company wants to reduce costs on the manufacturing line, and weighing precision can help you here.

By inspecting portion control of a packaged product, checkweighers ensure that every pack leaving your factory door is within the specified weight range. Because they eliminate unnecessary product waste, they ultimately reduce costs. Checkweigh can also help manufacturers detect issues with product overfill on the production line, so you can correct the problem quickly and save costs.





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Metal detection + x-ray inspection

It's no wonder then, that more and more FMCG manufacturers are using X-ray inspection and metal-detection systems to eliminate the threat of food contamination and, essentially, protect their brand from product recalls and withdrawals.

Among the biggest culprits for food contamination are metal and non-magnetic stainless steel. However, today's metal-detection technology is extremely effective: even products with high moisture content or packaged in metallised film can be checked with advanced metal-detection systems.

But metal isn't the only culprit: glass, stone, high-density plastics and rubber and other contaminants can also make their way into packaging. X-ray inspection equipment can ID foreign bodies by evaluating density throughout the product and packaging – including through thick foil pouches and cans.

**MAIN POINTS
OF FMCG
INSPECTION**





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A photograph of several bunches of green bananas in a cardboard box. The box is yellow and white with a blue stripe and a logo that says 'Chiquita'. A white box with the text 'BANANAS INSPECTION' is overlaid on the right side of the image.

BANANAS INSPECTION

Bananas are grown in practically all the moist tropical countries where they constitute one of the principal foods.

Quality and condition factors:

- Bruising
- Chilling & Freezing
- Discoloration
- Overheating
- Ripeness
- Shape
- Decay

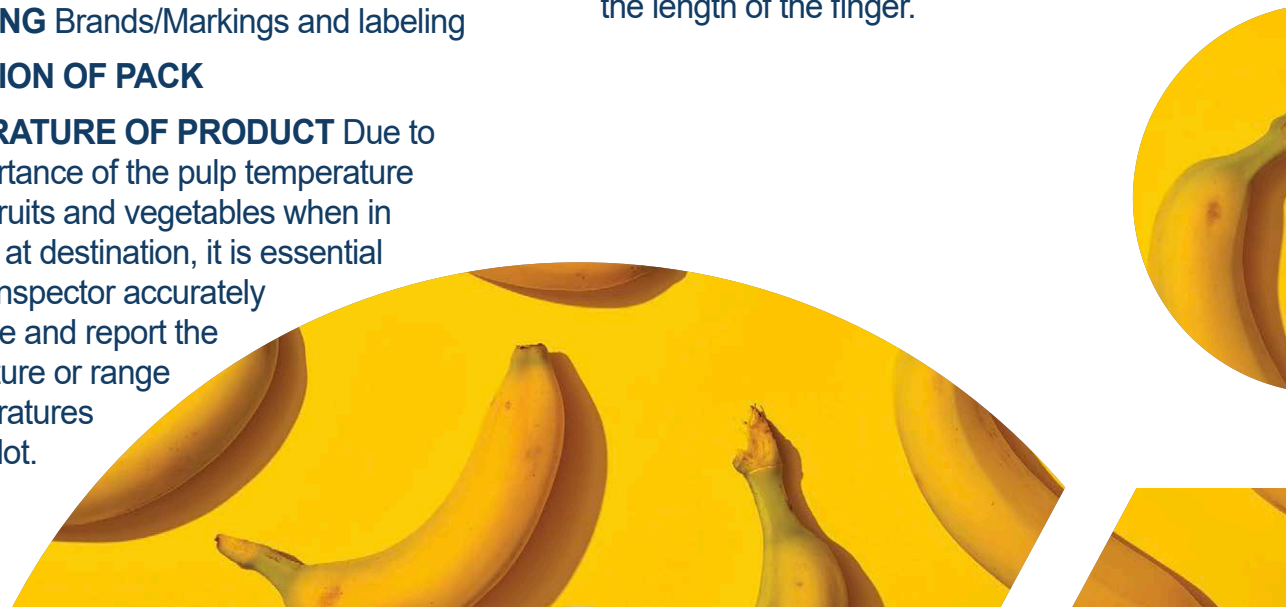


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Main steps of bananas inspection:

- **SAMPLING** The importance of obtaining representative samples cannot be over emphasized. Accurate certification is possible only if the samples examined are truly representative of the entire lot or accessible portion. All portions of a lot or load should receive the same attention in sampling regardless of the difficulty involved in reaching all layers or parts of a lot or load. Anytime the entire lot requested is not accessible for sampling, the inspection and certificate must be restricted to the accessible portion.
- **CHECKING** Brands/Markings and labeling
- **CONDITION OF PACK**
- **TEMPERATURE OF PRODUCT** Due to the importance of the pulp temperature of fresh fruits and vegetables when in transit or at destination, it is essential that the inspector accurately determine and report the temperature or range in temperatures on each lot.
- **SIZE** Statements in reference to size apply only to fingers, even if they are in the form of clusters or hands. The size of fingers should be described in terms of length and fullness. Bananas are generally slightly to decidedly curved. The length is the overall length of the finger measured along the line of the outer curve from blossom end to end of pulp. Measurement can best be accomplished with a flexible ruler or by a known finger span length or by marking the overall length on a flat surface, where it can be accurately measured to determine the length of the finger.

**BANANAS
INSPECTION**





It's Shipping & Survey

CITRUS INSPECTION

Citrus are one of the major fruits exporting in World. Most of this production is exported for fresh consumption, where consumers increasingly demand best quality.

- Tally count
- Weight control
- Sampling
- Sizing / calibration
- Classification in colors
- Detecting defects on the skin surface using wavelengths that are outside the visible spectrum
- Labeling and packaging control
- Laboratory testing of pesticides residues: The use of pesticides is widespread in citrus fruits production for pre- and post-harvest protection and many chemical substances may be applied in order to control undesirable moulds or insects.

It is very important to make a survey of citruses and also to evaluate levels of pesticide residues in citrus fruits in the laboratory!



It's Shipping & Survey

BERRIES INSPECTION

REPRESENTATIVE SAMPLING

The importance of obtaining representative samples cannot be over emphasized.

Accurate certification is only possible if the samples that are examined are truly representative of the entire lot or accessible portion of the lot. All portions of the lot or accessible portion should receive the same attention in sampling. Shipments or lots of berries may be made up of berries from a number of fields, growers or days picking.

This may result in berries that may vary in quality and/or condition from one location to another.



It's Shipping & Survey

DEFECTS (QUALITY AND CONDITION)

- Brightness of strawberries is not a grade requirement and cannot be scored as a defect, although it is an important marketing factor.
- Bruises may appear as flattened, sunken, mushy and/or discolored areas. Berries, which are soft from being overripe, should be scored for serious damage as “overripe” and should not be combined with bruising.
- Calyxes/Cores
- Color
- Dirt or Foreign Matter
- Discoloration - may result from any one of a number of causes, such as disease or sunburn
- Freezing or Frozen Berries
- Hail, Insect, Bird, Rodent Injury - When injury is slight, it should be overlooked, otherwise it should be scored as damage or serious damage based on the appearance of the individual berry. Presence of live insects, fruit flies or larvae is always considered serious damage.
- Mold - the berries should be free from mold. That means that any amount of mold on a berry should be scored as serious damage.
- Moisture
- Overripe/Soft Berries

**BERRIES
INSPECTION**





It's Shipping & Survey



APPLES INSPECTION

REPRESENTATIVE SAMPLING

In order to be sure in quality of apples, it is important to obtain good representative samples.

Correct certification can take place if samples taken are really representing the whole shipping lot/amount. All portions of a lot or load should receive the accurate attention in sampling regardless of the difficulty involved in reaching all layers or parts of a lot or load.

CONDITION OF PACK

When describing pack, report any liners or pads within the container, also report if apples are wrapped.

TEMPERATURE OF PRODUCT

Inspectors would not normally determine or report temperatures at shipping point. However, when in transit or at destination, due to the importance of the pulp temperature of fresh fruits and vegetables it is essential that the inspector accurately determine and report the temperature or range in temperatures on each lot.



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DEFECTS (QUALITY AND CONDITION)

- Bitter Pit is a physiological disorder that appears to be related to reduced calcium in developing fruit.
- Jonathan Spot is a physiological disease, but its exact cause is unknown. It is primarily a disease that occurs during storage or transit or on the market.
- Brown Surface Discoloration-are several defects of apples both pathological and physiological that result in the surface of the apple becoming discolored without affecting the underlying flesh.
- Bruising may be caused by rough handling, or by the pack being too loose or too tight. The variety, stage of firmness, and type of pack can influence the amount of bruising found.
- Broken skins and cuts may occur during harvest or when being packed. Healed skin breaks and cuts are scored as a quality factor; unhealed skin breaks are scored as a condition factor.
- Apple Cedar Rust usually appears on the calyx end of the fruit as grayish-yellow to yellow color.
- Quince-Cedar Rust can cause apples to be dwarf and distorted at the calyx end. Also, the internal discoloration caused by Quince-Cedar Rust penetrates the fruit tissue much deeper than Apple-Cedar Rust. Quince-Cedar Rust shall be reported as AppleCedar Rust.

**APPLES
INSPECTION**



It's Shipping & Survey

Cleanness:

- Wax residue may be visible on the surface of apples for several reasons ranging from excessive application to blistering and peeling of wax. The wax is actually food grade shellac. Sometimes when apples have been cooled and then left out in warm, humid areas and cooled again, the shellac blisters and peels.

Color:

- Firmness is an important factor when determining the overall condition of the fruit. Before an apple becomes overripe it will show varying degrees of firmness, depending upon the stage of the ripening process
- Ground color can be an indicator of the ripeness of the fruit. Depending upon the variety, it may be the only color the apple possesses or it may be overspread with a blush.

Chewing Test:

- Chewing a thin slice of apple flesh is one of the best ways to determine firmness. Sweetness or sourness to the taste cannot be considered to any extent in determining the degree of firmness.

Thumb Pressure:

- The resistance of the apple flesh to pressure of the thumb is one of the quick and practical methods of determining firmness along with observation of ground color and wax development. Thumb pressure, as an index of firmness should be used in conjunction with cutting test, chewing test and pressure test.

Wax Development:

With most fall and winter apple varieties, firmness decreases in storage and the skin of the fruit gives off a waxy film.

Cutting Test:

The resistance offered by the knife blade on cutting the flesh is one index of firmness. A hard apple cuts with resistance and snap, while a ripe apple cuts easily with little if any snap.

- Pressure Testing can be useful in determining the firmness of apples, especially in the case of “borderline” firmness of apples
- Flyspeck and Sooty Blotch will often appear together. Flyspeck appears as small, slightly raised, black specks on the surface of the fruit.
- Insects and Worms - an insect sting is a small insect puncture, which extends only slightly below the skin of the fruit while a worm hole continues well into the flesh and is unusually larger
- Sunburn/Sprayburn - Apples that are exposed to direct intense sunlight while on the trees may become sunburned. The exposure causes the skin to become golden or bronze in color.



It's Shipping & Survey

MEAT AND FISH INSPECTION

Main steps of inspection:

- Acceptance of container for cleanliness and readiness to load cargo
- Tally count
- Loading / discharge supervision
- Sampling
- Label checking
- Temperature control, including checking out of working condition of container's refrigerator equipment
- Laboratory analyses and testing



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Hygienic requirements for food safety testing in the laboratory:

Toxic elements:

- lead
- arsenic
- cadmium
- mercury

Antibiotics:

- cloramphenical
- tetracyclinum
- grizin
- bacitracin

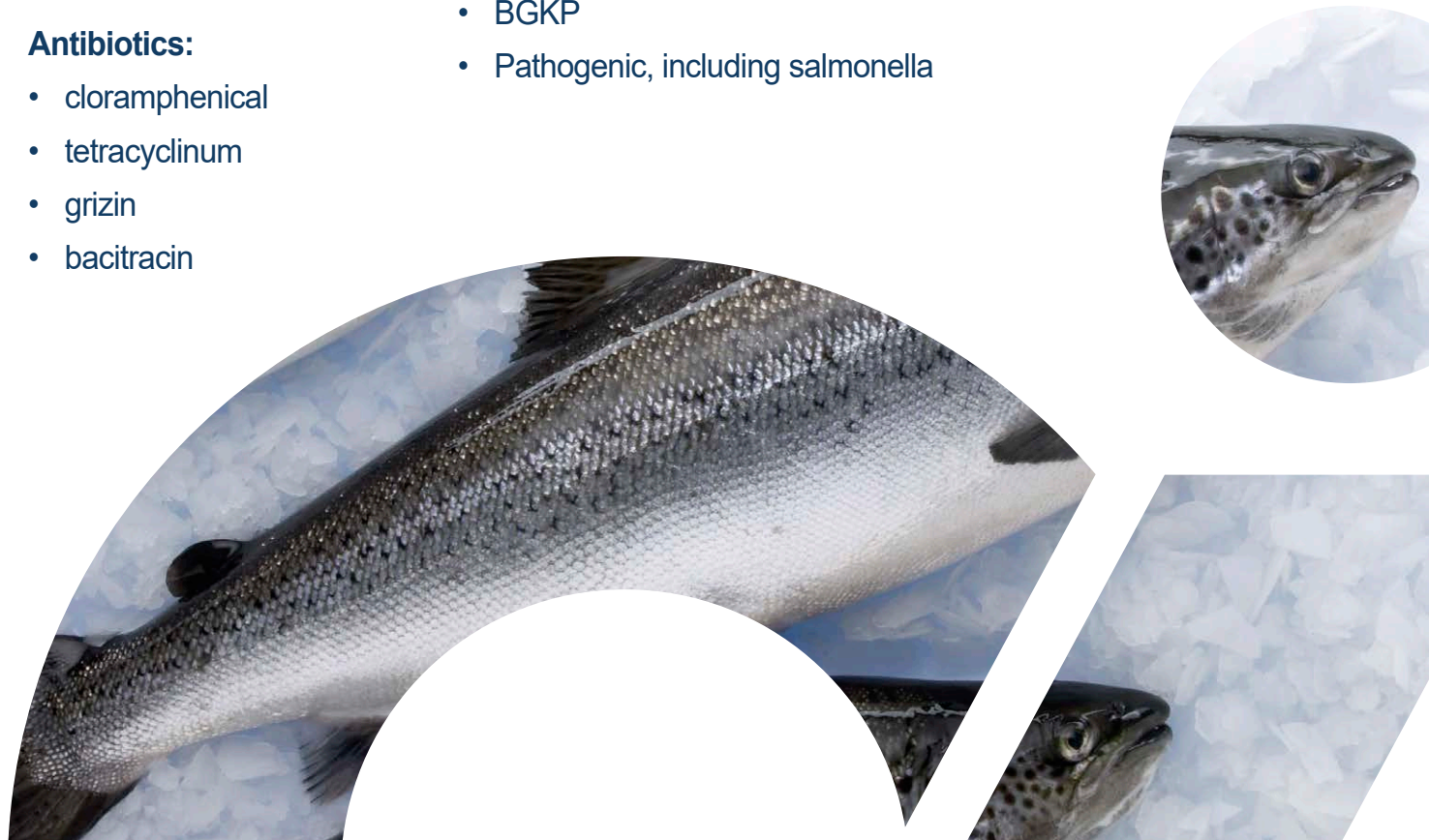
Pesticides

Radionuclides

Microbiological indicators:

- QMAFAnM
- BGKP
- Pathogenic, including salmonella

**MEAT
AND FISH
INSPECTION**





It's Shipping & Survey



TEA QUALITY CONTROL

- Inspection of loading and discharge of tea cargos
- Tea cargo weight and quantity verification
- Inspection of tea loading discharge and storage of facilities
- Representative sampling of tea for lab tests
- Certification of tea quantity and quality
- Container/Truck inspection for cleanliness
- Physical assessment of tea
- Chemical assessment of tea
- Entomological assessment of tea and spices
- Essential oil testing
- Aflatoxin testing
- Microbiological analysis
- Pesticide residue testing
- Particle size
- Aroma
- Color
- Taste



It's Shipping & Survey



CANNED FOOD INSPECTION

The safety of canned foods is assured primarily by the application of Good Manufacturing Practices in the manufacture of the containers, processing and handling the container in the processing establishment, storage and distribution of the finished product.

Some container defects can increase the potential for microbiological contamination of canned foods resulting in spoilage and in some instances in foodborne illness. While some of these defects are hidden, many are visible on the container surfaces permitting their detection without destructive analysis.

The lot should be examined visually for the presence of damaged, wetted or stained cartons. To properly conduct this overview inspection, as many of the cartons as possible should be exposed to view. Any damaged, wetted or stained cartons should be separated from the lot for a more detailed inspection. It should be kept in mind that the wetting or staining of cartons can often be the result of leakage of cartons immediately above which may not show any visible signs of leakage.



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UNACCEPTABLE DEFECTS

The following defects are considered to comply with the definition given for unacceptable defects:

- Perforated external corrosion
- Severe body denting (plate fracture with leakage evident)
- Severe double seam denting (fracture evident)
- Defective side seam weld (wild burn through)
- Defective side seam weld (wild blow out)
- Incomplete side seam weld
- Incomplete open side seam weld (leakage evident)
- Mislocked side seam
- Body puncture
- Body perforated
- Hard swell or buckle swell or blown
- Cable-cut (end plate cutthrough, leakage evident)
- Sharp embossed code (endplate fractured)
- Deadhead or skidder
- Incomplete double seam (2nd operation incomplete)
- Cut-over or cut-through (plate fractured)
- Torn flange (visible hole)
- Knocked down curl
- Knocked down flange
- Torn back curl
- Score line fracture

**CANNED
FOOD
INSPECTION**





It's Shipping & Survey



TOOTHPASTE INSPECTION

Warnings and rumors about a dangerous toothpaste made its way around.

The warnings and rumors were indeed true. According to the FDA (The America's Food and Drug Administration), toothpaste could contain a poisonous chemical that's labeled as residual diethylene glycol (DEG). DEG is used as ingredient in anti-freeze and is used as a solvent..

A Gas Chromatography Mass Spectrometry (GC-MS) procedure was created to accurately identify the levels of Residual Diethylene Glycol in toothpaste brands. Each brand of toothpaste will contain several of the following ingredients: an abrasive, sudser, unique flavors, fluorides, a humectant, whitening agent, preservatives, and water.



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Key points in the quality control process for the packaging and marking of toothpaste

Lab Testing

- It's critical for toothpaste inspection that actual product is pulled from the line and sent to verified testing services who can verify the chemical composition of the product.

Packing Requirements

- Toothpaste has to be packaged in containers that have no defects and does not contaminate the toothpaste during shelf life
- The toothpaste containers will be packed into an individual box or some form of another protective material.

Labeling Requirements

Each toothpaste container **MUST** be marked with the following information:

- The product name for the toothpaste as well as the registered trademark if any
- A list of any ingredients that are currently present in the batch of toothpaste
- Volume and weight of the product
- A lot and batch number in code or in number form
- Name and current address of the toothpaste manufacturer
- If the toothpaste contains fluoride, the title "FLUORIDE TOOTHPASTE" must be marked in letters with a height of 3 mm
- The manufacturing date and expiry date of the product
- Safe handling and storage conditions
- Country of origin
- Instructions / Directions on the proper use of the product

**TOOTHPASTE
INSPECTION**





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