

# “Quality Control Measures: With reference to ATC Beverages Pvt Ltd.”

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## Article Info

Volume 82

Page Number: 7291 - 7297

Publication Issue:

January-February 2020

## Abstract

Food and beverages industries have been rapidly growing in Indian market at present, definitely consumer is king of the market so, it is very important to maintain quality in food and beverage industry, as a matter of fact consumers aware about the products and its quality, boom of the product build upon the aspect of the product. Once a year, Number of beverages get recollect due to polluted with antigen, adulteration and fears of plastic corruption, use of illegal chemicals, and other safety concerns. To defense the kind of the beverages supplied to the merchandise, the producer must ensure consent of the product's ingredients, preparation and packaging processes at every stage. Every company is been trying to avoid quality issues but it is not possible by all the companies to control such kind of issues. Beverages industry is having lot of competition in India due to local producers. ATC Beverages is one of the manufacturing company. They are following structured policies and procedures to control the errors in production. We conduct on-site inquiry, analysis, and lab tests to make sure that process of manufacturing, storing and shipping in accordance with specifications, and the safety standards of destination market. The present study focused on quality control measures of ATC Beverages. Main problem in food and beverage industry are not being quality to overcome this problem employees should be trained about this quality. In order to control quality issues, employees of ATC beverages are well trained about quality control process.

## Article History

Article Received: 18 May 2019

Revised: 14 July 2019

Accepted: 22 December 2019

Publication: 03 February 2020

**Keywords:** Quality control, Beverages, Operations.

## I. INTRODUCTION

Quality Control is known as QC and focuses on determining a mistake or errors. Quality assurance is a transform by which enterprises analyze the cross-check of all factors involved in preparation. QA as a part of quality board which focuses on accomplish quality demand, QC ensures approaching, arrangement, procedure and know-how, are arranged in the project are being pursued correctly. Supervision is one of the main segments of quality control, where solid product is visually inspected for the conclusion of a service which is being considered. Quality control of a firm seeks to ensure the quality of the product which is

maintained or improved with zero errors. Survey of a firm requires dynamic environment in the manufacturing area supported by both administration and workers aim for the perfection. It involves testing of samples and determining its quality based on standards followed by the company, the quality control used in a firm is highly dependent on the product or industry and several techniques are used for measuring quality.

## II. LITERATURE REVIEW

**G.B. Kouzmanov and A.V. Savov (2009)** focused their study on consumer's security and food quality as they were important in developing the economies

and food supply chain management. The main intention behind the study is to meet the demand of the consumer's towards safe food and beverages, the quality standards desired by the European consumer's and regulators. The companies should have to develop standardized procedures for the production and selling process in order to achieve the requirements of the regulators and consumers. According to law, Farmer's and food processing companies are having the greatest responsibility towards food and safety assurance. Therefore, the international ideal followed by good producers and dealers are being depicted in this paper.

**Nancy Ornelas-Soto (2014)** the new methods of refined techniques has been described in this paper, for the QC of food products. This paper also shows that unethical competition can be avoided by achieving food authentication. This paper depicts different strategies that are adopted by food companies to increase their position in the market. For the classifications of food sampling based on quality aspect Spectroscopy techniques with chemo metric analysis is being used. Thus this paper shows that, there are numerous types of analytical methods for controlling quality of food, for the practical review of methods and for the confirmation of food originality.

**LilianaTopliceanu (2014)** focused majorly on better training strategies involve in food safety and quality control in order to solve the problems of consumer's health. This also presents the research analysis within the project of food and drinks weaving the satisfaction degree of the employees. Thus study presents the research results obtained which highlights the demand on modern competences.

**MusranMunizu (2013)** concentrated on testing and analyzing the impact of TQM process and applications, which also included strategic leadership planning, analysis, people administration and customer focal point information and operation management to product quality performance. Study

refers practices which can help organization to identify a change in the dynamic environment, respond productivity through continuous improvement activity in operation functions to achieve the best performance.

**S. Birleatl (2012)** says that biotechnological process plays a vital technological act for manufacturing steps in the beverage and food zone to provide high quality commodity along with efficiency. Thus ,the operating system sensors provide useful devices for controlling and monitoring food and beverage processes, especially evaporation. Major component of this paper concerns with operation meant for soft sensing by unreal visual structure and combination rule additionally contributions means of process control.

**G.Bsadjotchamba, (2016)** Study conducted to know the local beverages assurance awareness of manufacturer and vendor in Ouagadougou region. The purpose was to determine familiarity and character of the manufactures and vendors of local drink and ice on sanitation practices. In the time of completion and trading process to define the level of ability on foodstuff security and sanitation methods of manufacturers and vendors of inhabitant drink and hailstone from different department stores. In open bazaars, local drink producers or sellers didn't attend food sanitation training and security programs; they insisted that every beverage producers and sellers need to undergo regular basic hygiene coaching.

**Yong Seo Park (2016)** stated that to evaluate physiochemical framework, along with antioxidant and essential properties during various analysis while preparing ' Hayward ' kiwi product smoothie-type drink. The quality of the refined product was correlated with raw fruit, which was wealthy in polyphenols and had immune stimulatory action in it. It is admitted that kiwi fruit acquire huge antioxidant and can also prevent heart disorder, thus the goal of the current paper was to safeguard the antioxidant condition of refined kiwi fruit product.

### III. OBJECTIVE OF THE WORK

To study quality control measures of ATC beverages Pvt ltd.

### IV. RESEARCH METHODOLOGY

The method of data collection for the research is primary as well as secondary methods. This study is a survey conducted in ATC beverages pvt ltd. Interview method and Questionnaire on quality control is used to collect the data.

### V. THEORITICAL FRAMEWORK

ATC Beverages pvt Ltd main goal is quality and to ensure that the way consistently deliver error free products to customers, to meet their requirement in terms of safety, efficacy and quality. Maintaining quality as a collective responsibility and encourage continual improvement in effective implementing of quality management system. The main aim is to supply high quality products which ensure decrease in customer's complaint.

Beverage and food industry is moving over lot of modification and building its way to varied divisions hence beverage and food industry has to face a lot of objections which drive this industry to change its strategy and its actions. Utmost of companies' don't have quality control system to overcome this problem, all employees in a company should have knowledge on quality control system process works, so employees should be trained about the process. Processing factors contains slicing, washing, packing, irradiation and pasteurization.

As observed, they conduct number of tests to deliver authentic data about commodity element and assurance characteristics. In order to check the quality, every one hour one bottle will be taken as

sample to test BRIX, CO<sub>2</sub> gas volume, beverage-degassing, PH meter, titrable acidity, bursting strength tester, magnetic stirrer, and control drink test. In advance to production, borderline purification trait tasks perform to rinse domestic waterworks, instruments and machinery. This quality check performed for both hygiene purposes and product quality, which gives green signal to production process.

Company checks every bottle in 360 degree, which means correct level of filling and its label. It is monitored by a specific system all along the manufacturing process to find defective products and it taken over. ATC Beverages pvt Ltd uses Total quality management, which affect the authority of element at every stage of the firm, including purchaser, supplier, production, etc. It assure that every member of organization involve in manufacturing process, which means each and every staff member understands their work/task, to improve the overall increasing productivity. Company has been following customer satisfaction feedback, every bottle has its unique code, in case of any fault, then that cryptograph can be enrolled into the company directory to ascertain where it formed. The overall aim is to minimize the cost of production of packaging. It uses both Quality Assurance (QA) and Quality Control (QC) and all over its manufacturing process. QC mainly targets on the construction line itself, although QA core on its integrated application process and associated activity. It assures that all representatives of work force secure coaching proceeding to their business, in case employee can operate motor precisely. Machinery is under regular upkeep, which requires immensely experienced engineer's to fix obstacle and helps the company to maintain high outputs.

*A. The following tables and chart gives knowledge about the Quality Control Process.*

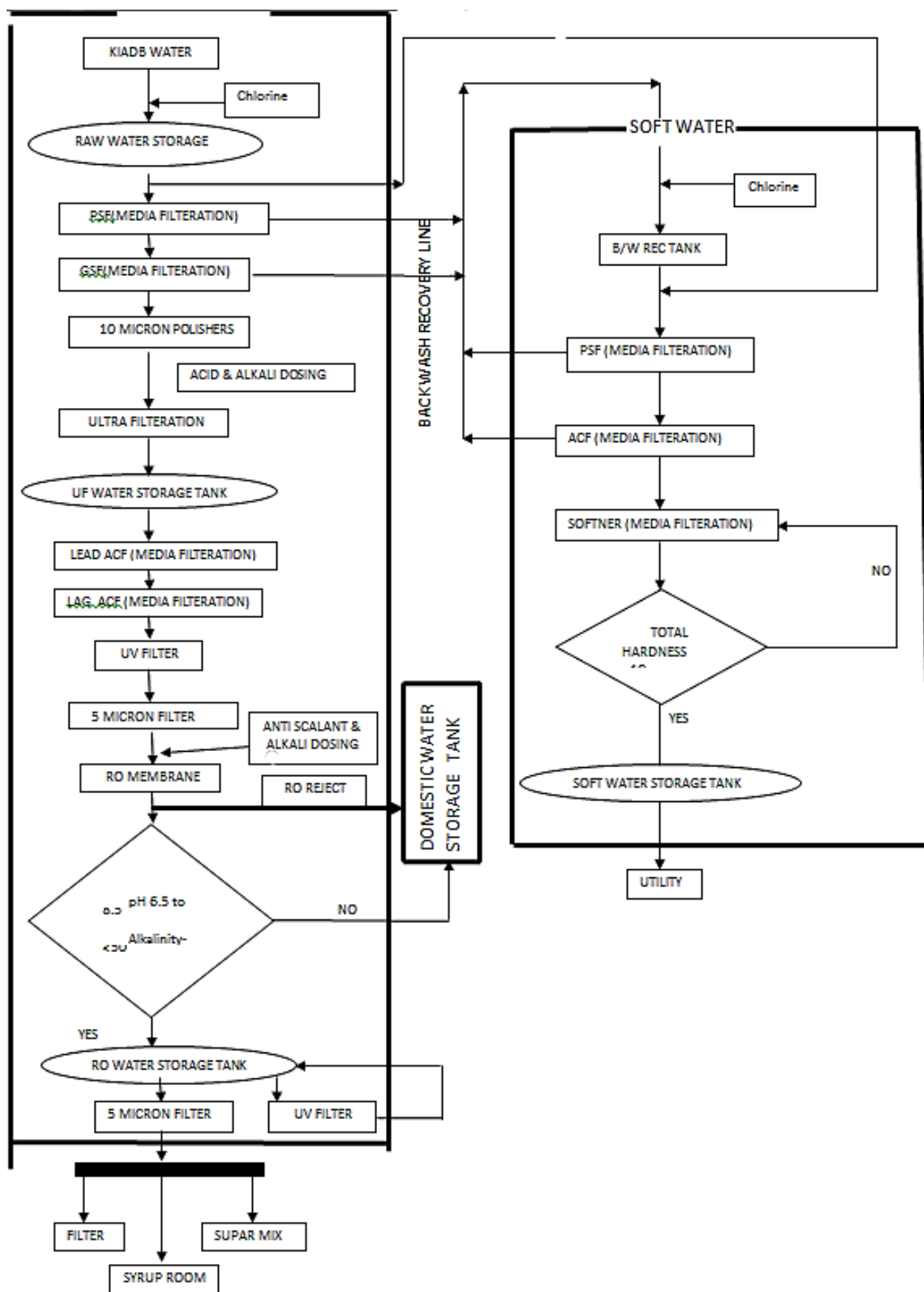
Source water checks	PARAMETERS	FREQUENCY
	Total Alkalinity	Startup& every 4 hours
	Iron	Startup & daily
	Manganese	Startup & weekly
	Aluminium	Startup & weekly

	PH	Startup & every 4 hours
	Total Hardness	Startup & every 4 hours
	Turbidity	Startup & weekly
	TDS	Startup & every 4 hours
	SDI	Startup & weekly
	Free Chlorine	Startup & every 2 hours
<b>After ACF</b>	<b>PARAMETERS</b>	<b>FREQUENCY</b>
	Iron	Startup & every 8 hours
	Manganese	Startup & weekly
	PH	Startup & every 4 hours
	TDS	Startup & every 4 hours
	SDI	Startup & daily
	Total chlorine	Startup & every 2 hours
	Filtration 0.45 micron	Startup & weekly
<b>Before RO 5 Micron</b>	<b>PARAMETERS</b>	<b>FREQUENCY</b>
	Turbidity	Startup & daily
	Verify ORP Meter	Startup & daily
<b>After RO 5 Micron</b>	<b>PARAMETERS</b>	<b>FREQUENCY</b>
	Total Alkalinity	Startup & every 4 hours
	Iron	Startup & every 8 hours
	Manganese	Startup & weekly
	PH	Startup & every 4 hours
	Total Hardness	Startup & every 4 hours
	Turbidity	Startup & daily
	TDS	Startup & every 4 hours
	AOT	Startup & every 4 hours

## VI. FINDINGS AND CONCLUSION

The study noticed that each product is characterized by a set of intrinsic parameters consisting of antimicrobial substances, nutrient content, pH, biological structures, O/R potential and moisture content. ATC Beverages follow some methods for preservation of foods; they are low temp storage, high temperature treatment, dehydration, freeze-drying, lowering aw-IMF, chemical treatment (preservatives) and ionizing radiation. The

component of food all around the universe is based on significant aspect such as nutritional and chemical content (proportion of protein, antioxidants, fiber, greasy acids, sugar etc.) counting microbial control. An analysis which is made on some of the most used techniques for controlling the kind of food commodity has been shown in this study. It is fair that synthetic inquiry shows an significant role in this element and choice of the applicable diagnostic form should be considered as a main condition in quality control .



**PROCESS FLOW CHART(WATER TREATMENT PLANT)**



Company should maintain sufficient inventory of their product during the summer season to the manufacturing plant. Company has strongly committed employees in order to produce quality products, quality as a collective responsibility and it encourages continuous improvement in quality management for effective implementation in quality system of the company.

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