

## **GINGER: A POWERFUL NATURAL INGREDIENT AND THE TECHNOLOGY BEHIND MODERN GINGER JUICE EXTRACTION**

*Ginger has been valued for centuries as both a food ingredient and a natural health aid. Today, it remains one of the world's most versatile agricultural products, finding applications in food processing, beverages, pharmaceuticals, cosmetics, and nutraceutical products.*



**Dr. Kofi Korsah**

### **The Many Uses of Ginger**

Fresh ginger are widely used to produce several products such as ginger juice and concentrates, ginger tea and herbal beverages, ginger beer and soft drinks, essential oils and extracts, pharmaceutical preparations and cosmetic and personal care products. Consumers appreciate ginger for its distinctive flavour and aroma, while manufacturers value it for its bioactive compounds.

### **Why Ginger Juice Extraction Matters**

Modern extraction technology allows processors to increase juice yield, improve production efficiency, improve hygiene and food safety and scale production for commercial markets. As demand for ginger-based products continues to grow, efficient processing equipment has become essential for profitable operations.

### **How Ginger Juice Extractors Work**

A modern ginger juice extractor typically follows four main stages:

- 1) **Feeding:** Cleaned ginger roots are fed into the machine through a hopper or feeding chute.
- 2) **Crushing and Grinding:** The ginger is mechanically crushed into a fine pulp. This process breaks down the plant tissue and releases the juice contained within the rhizomes.
- 3) **Pressing and Separation:** The pulp is subjected to pressure using specialized extraction mechanisms. The liquid juice is separated from the fibrous solids.
- 4) **Collection:** The extracted juice is collected through a discharge outlet while the spent ginger fibre is discharged separately for disposal or further utilization.

### **Supporting Agribusiness Through Local Manufacturing**

At KERSL Automation, we believe that African agribusinesses deserve reliable, locally supported processing equipment that helps transform agricultural products into higher-value goods. KERL Automation's ginger juice extractor machine is designed to provide efficient extraction, robust operation, and ease of maintenance for small and medium-scale processors. Whether you are producing ginger juice, ginger beverages, concentrates, or value-added products, the right extraction technology can significantly improve productivity and profitability. As demand for processed agricultural products grows across Ghana and Africa, investing in modern processing equipment is no longer a luxury—it is a strategic step toward building competitive agro-industries.



---

*Kofi Korsah is a retired electrical and nuclear engineer, and currently the CEO of KERSL Automation. Our focus areas are the design of agro-processing machines and training in industrial automation. Get in touch with us on 0507994655 (office), 0508197836, or whatsapp at +18656596497. You can also get in touch with us through our website at [www.kerslautomation.com](http://www.kerslautomation.com). We are located at Ranna Plaza on Spintex Road, almost opposite the Ecobank at Kotobabi #2 Junction and next to Kingdom Furniture.*