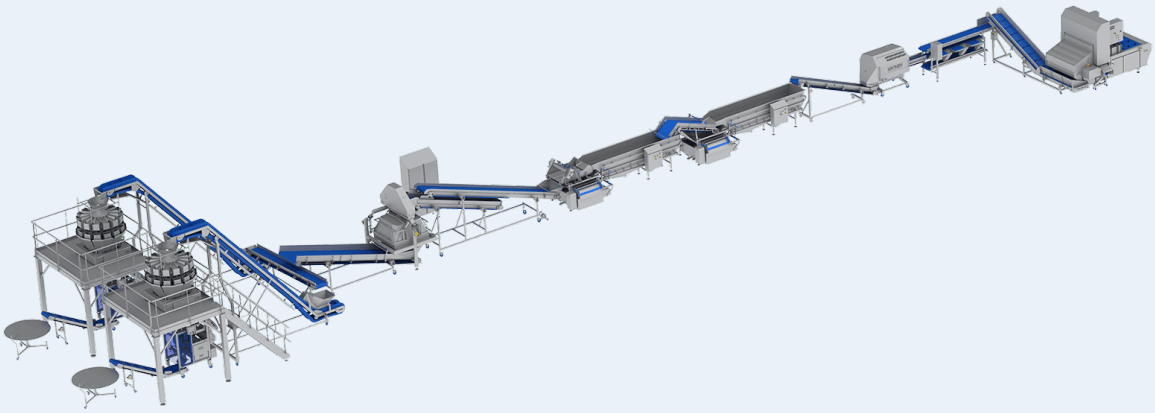
KRONEN
THE CROWN FOR FRESHNESS

Disinfection, Preparing, Cutting, Washing, Drying, Conveying, Packaging

Processing and packaging line for lettuce and vegetables

An automated complete system for coring, cutting, washing, drying, weighing and packaging lettuce and vegetables for maximum efficiency, gentle processing and high product quality – also available as a SMART version

up to 2,500 kg/h Max. capacity



Your benefits

- High automation level for maximum efficiency in production and high capacities
- Integrated high-quality machines, including the GS 20, HEWA 5000 PLUS and K850
- Designed for gentle processing and high product quality – flexible use for various products
- Efficient weighing and packaging with the integrated packaging line by GKS Packaging
- Simple operation and a low personnel requirement
- Available as SMART version: communication of the machines for a constant production flow

Product groups

Portrait

For coring, cutting, washing, drying and packing up to 2,500 kg per hour

The automatic processing and packaging line integrates a range of KRONEN machines with a solution from the KRONEN partner **GKS Packaging** . The line is used for complete processing from the raw material to the bagged end product.

The raw products are processed whole. The system can be used for processing salad leaves, e.g. iceberg lettuce, frisée, endive and radicchio, or vegetables such as red and white cabbage (generally round cabbage varieties) and peppers. The respective capacity depends on the product and the packaging size.

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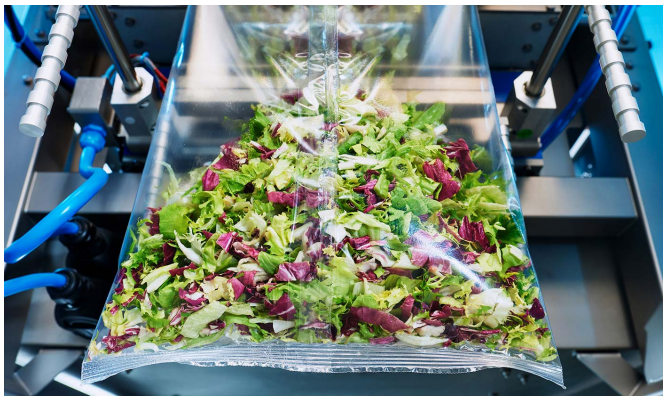
The following machines or solutions are integrated:

- **Preparation:** **Multicorer (4B/2B)** for coring, with waste belts and optionally with a quick lock for the cutting cassette
- **Conveying:** **PLUS inclined conveyor belt** with cleats
- **Preparation:** Trimming table for 6 people
- **Cutting:** **GS 20 belt cutting machine** , optionally with a large choice of different knifes
- **Conveying:** **PLUS inclined conveyor belt**
- **Pre-washing:** **HEWA** 5000 HELICAL washing machine with dipping belt outfeed
- **Washing:** **HEWA** 5000 HELICAL washing machine with vibration outfeed, optionally including a measuring and dosing system, insect removal drum and fine particle removal
- **Drying:** **K850 drying system**
- **Further transport:** **PLUS inclined conveyor belt**
- **Weighing and packaging:** Two GKS packaging solutions each with
  - Slope conveyor
  - Platform with multiple-head scales
  - **FLEX L packaging machine**: Optionally, the packaging machine can be equipped with a connection for gas flushing for MAP packaging of the products as well as a printer for, for example, lot number, bar code, and best-before date.
  - Outfeed belt, optionally with a metal detector
  - Rotary table for buffering

If a second product is fed into the HEWA washing machine via a second cutting machine or a second belt, for example different salads, the products are mixed simultaneously by the HELICAL washing system during the washing process.



The line is ideal for packaging bags up to 350 mm wide. For packaging in bags up to 500 mm wide, a **FLEX XL** can alternatively be offered instead of the FLEX L.

Please note: The videos below show alternative processing lines.

Benefits

Continuous and gentle processing of high capacities

The production line handles lettuce and leafy vegetables in a continuous process and therefore requires only a small number of personnel. The communication between the SMART-version machines and the visual displays for the machine operators facilitates a reliable, constant and uninterrupted production flow. This in turn ensures high processing capacities and maximum efficiency and quality in production.

Automatic, hygienic and flexible processing

The KRONEN cutting, washing and drying machines are also designed for frequent product or recipe changes during a production shift. The belt cutting machines guarantee quick knife replacement. The washing machines fully empty in a very short time. The drums of the large centrifuges are blown dry during emptying. The hygienic design of the KRONEN machines allows all areas to be easily accessed and makes the machines easy to clean. User-friendly operation and the safety of operating personnel are guaranteed.

Complete solutions from a single source

KRONEN is a reliable partner, even when it comes to implementing automated processing lines. With a high level of planning and consulting expertise, the company implements the right solution for every customer requirement. KRONEN offers complete lines from a single source and integrates suitable machines from partners as required.

Made-to-measure solutions

KRONEN CITROCIDE®: Optimal hygiene and food safety during the washing process – without chlorine

The new hygienization system is an innovative alternative to chlorine-based disinfection. It is suitable for hygienically washing fruit, vegetables and salad leaves. The washing system combines the KRONEN washing machines with the CITROCIDE® system, which automatically doses a highly-effective washing additive into the wash water. The system minimizes microbial contamination on the products and in the wash water by efficiently neutralizing microorganisms.
This also enables the safe recycling of wash water and prevents cross-contamination. No DBPs (Disinfection By-Products) harmful to human health or the environment remain in the wash water. The system can also be retrofitted into existing KRONEN washing machines.

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