

## *NKAW-120R Automatic Rotary Ampoule Washing Machine*



Welcome to N.K Industries, a leading manufacturer, supplier, and exporter of advanced Automatic Rotary Ampoule Washing Machines for pharmaceutical and injectable formulation plants.

Our Rotary Ampoule Washing Machines are designed to provide a technologically advanced solution for washing the internal and external surfaces of ampoules in a continuous rotary motion. With a high production output ranging from 120 to 300 ampoules per minute, our machines efficiently clean ampoules in the size range of 1ml to 10ml.

Ampoules are securely held by grippers that invert their position, allowing servo/cam driven nozzles to move vertically and thoroughly wash the ampoules from the inside. The machine features six washing stations, covered in a dome, providing three types of internal water washes: recycled water wash, purified water wash, and WFI wash. Additionally, it offers three air washes to ensure comprehensive cleaning. For external surface cleaning, it has one water and air wash, all controlled by a PLC system.

The compact design of our machines ensures clear visibility of the washing activity, allowing for easy monitoring and maintenance.

Experience efficiency, precision, and reliability with N.K Industries' Automatic Rotary Ampoule Washing Machines. Our machines are designed to meet the stringent requirements of the pharmaceutical industry, ensuring the highest quality standards are met for your valuable products.

Contact us today to explore how our Automatic Rotary Ampoule Washing Machines can elevate your pharmaceutical manufacturing processes and meet your specific needs. Trust N.K Industries for innovative and reliable machinery solutions.

## Salient Features:

- **CGMP and Compact Model:** Designed according to Current Good Manufacturing Practices and in a compact form factor for efficient use of space.
- **Continuous Motion Type Rotary Machine:** Operates using continuous motion and features a variable speed system for flexibility.
- **Change Parts of Delrin Material:** Change parts are made of black colored delrin material for durability and smooth operation.
- **SS 316L Media Contact Parts:** All parts that come in contact with media are made of SS 316L stainless steel for excellent corrosion resistance and hygiene.
- **Water Heater for Recycled Water:** Equipped with a water heater for the recycled water tank, with temperature control and interlock features.
- **Three Types of Water Washes:** Offers recycled water wash, purified water wash, and WFI (Water for Injection) wash, followed by sterile compressed air.
- **Code-7 Type Air & Water Filters:** Includes Code-7 type air and water filters for efficient filtration.
- **Pressure & Temperature Transmitters:** Utilizes pressure transmitters for air and water, and temperature transmitters for monitoring recycled water, purified water, and WFI, with interlocks for safety.
- **Aseptic Diaphragm Type Valves:** Employs aseptic diaphragm type valves for air and water media to maintain sterility.
- **Polycarbonate Guard:** Features a polycarbonate guard to cover the machine at the rear and sideways for safety and protection.
- **Easy Dismantling and Cleaning:** The machine is designed for easy dismantling and cleaning, facilitating maintenance.
- **Delrin Grippers:** Delrin-made special grippers ensure proper holding of ampoules, even at high water pressure.
- **Vapour Exhaust System:** A vapour exhaust system is included (duct at customer's scope) for efficient ventilation.

## Technical Specification:

Model No.	NKAW-120R
Speed	120 Ampoule / Minute (Depend on size of Ampoule)
Dimension	2130 mm (L) X 1650 mm (W) X 1500 mm (H)
Direction	Left to Right
Ampoule Size	1 to 10 ml
Contact Parts	Stainless Steel 316L
Electrical Input	440 V, 3 Phase, 50 Hz
Type of Washing	Continuous Rotary Motion
Number of Wash	· Internal – 3 with Water & 3 with Air
	· External – 1 with water & 1 with Air
Working Height	900 to 950mm adjustable