

NKSC-250PS High-Speed Spray Pump Cap Capping Machine



The Spray Pump Type Cap Capping Machine – Model NKSC-250PS, engineered by N.K Industries, is the ideal solution for automated spray cap application. As a trusted manufacturer, supplier, and exporter based in Ahmedabad, India, we bring cutting-edge machinery to your packaging line.

This compact and durable model uses a Pick and Place mechanism that ensures perfect positioning and pressing of spray caps on HDPE and other plastic bottles. Designed for industries that demand sterile and tamper-proof sealing — like pharma, cosmetics, personal care, and chemical sectors — this system minimizes human intervention and maximizes productivity.

Bottles are fed from upstream systems onto a stainless-steel conveyor. With the help of an infeed worm, bottles are spaced before entering a star wheel system. A vibratory cap feeder orients caps accurately and transfers them to a pick-up chute. The turret, equipped with press-fit heads, picks and secures the cap on each bottle using pneumatic pressing. After sealing, capped bottles are smoothly transferred downstream.

The machine's frame is built from SS 304 stainless steel, with a top plate cladded in AISI 304, ensuring structural integrity and hygiene. Key transmission elements are housed compactly to save floor space. The conveyor is made of food-grade slat belts, while Delrin star wheels ensure precise bottle handling and quick changeovers for different sizes. The integrated PLC and HMI system allows role-based operation, error tracking, and emergency override — making it a highly user-friendly and smart-capable solution.

Key Highlights

- Compact and GMP-compliant construction
- Contact parts crafted in AISI 304 stainless steel

- Centralized motor for synchronized movement of turret, conveyor, and star wheels
- Twin-cam setup for accurate cap pickup and placement
- Magnetic hysteresis clutch for consistent capping torque
- Fast changeover parts designed for various bottle types
- Cap alignment sensors and "No Bottle–No Cap" safety logic
- CE-certified electronics and safety interlock features
- Delta PLC and HMI (7") with multilingual, password-protected access

Technical Specifications

Model	NKSC-250PS
Capacity	Up to 60 bottles/min (based on cap/bottle type)
Bottle Diameter Range	20 mm – 60 mm
Bottle Height	Up to 130 mm
Spray Cap Tube Height	10 mm – 55 mm
Cap Feeder System	Vibratory Bowl Feeder
Conveyor Height	Adjustable: 800–850 mm
Power Supply	230 V, Single Phase, 50 Hz