

NexBot Robotics 841-004 Vibratory Parts Feeder 400mm Bowl

NexBot
Robotics

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Overview

The NexBot Robotics 841-004 Parts Feeder is an advanced vibratory feeding system designed to consistently orient and present small components for robotic handling in automated production lines. This feeder is engineered to increase efficiency and reduce manual labor in high-volume manufacturing environments, ensuring a steady and correctly positioned supply of parts for pick-and-place, assembly, and inspection tasks. The core of the 841-004 is its robust electromagnetic drive, which provides smooth, adjustable vibrations to move parts along a custom-tooled track within its 400 mm diameter bowl. The vibration frequency and amplitude are precisely controllable, allowing operators to fine-tune the feeder's performance for a wide range of part sizes, geometries, and materials. This adaptability minimizes jamming and ensures a consistent feed rate, which can reach up to 200 parts per minute depending on component complexity. Constructed with a durable cast iron base and a stainless steel bowl, this parts feeder is built to withstand continuous operation in demanding industrial settings. Its design facilitates easy integration into new or existing robotic workcells. Standard control is managed via simple discrete I/O signals from a PLC or robot controller, making setup straightforward. The feeder operates on standard 110/220VAC power, simplifying facility requirements. Key applications for the 841-004 feeder include electronics assembly, medical device manufacturing, automotive component production, and consumer goods packaging. By automating the tedious and error-prone task of part orientation, this feeder allows robotic arms to achieve their maximum potential throughput, leading to significant gains in productivity and product quality. Maintenance is minimal, typically limited to periodic cleaning of the bowl and track to ensure unimpeded part flow.

Technical Specifications

Parameter	Value	Unit
Weight	45.5	kg
Material	Stainless Steel 304 Bowl, Cast Iron Base	
Voltage	110/220VAC, 50/60Hz	
IP Rating	IP54	
Country of Origin	US	
Dimensions	550 x 550 x 600 mm	

Safety Notice: This product must be installed and operated by qualified personnel in accordance with applicable safety standards (ISO 10218, IEC 61508).