

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511095478 A

(19) INDIA

(22) Date of filing of Application :04/10/2025

(43) Publication Date : 05/12/2025

(54) Title of the invention : A DEVICE FOR AUTOMATED SORTING OF BALL BEARINGS BY SIZE

(51) International classification	:A61M0005168000, H04W0064000000, B32B0043000000, B25J0009160000, B65H0005020000	(71) Name of Applicant : 1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India
(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)RAKESH KUMAR SINGH
(33) Name of priority country	:NA	2)ANURAG PAL
(86) International Application No	:	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention relates to a device for automated sorting of ball bearings by size, comprising a hopper (1), conveyor mechanism (2), sensor unit (3), microcontroller system (4), actuator-controlled gates (5), and collection bins (6). Bearings are fed into the hopper (1), transported via the conveyor (2), and measured by the sensor unit (3). The microcontroller system (4) processes the data and actuates gates (5) to direct bearings into corresponding bins (6). The device ensures precision, high throughput, and reliable classification in industrial applications.

No. of Pages : 13 No. of Claims : 6