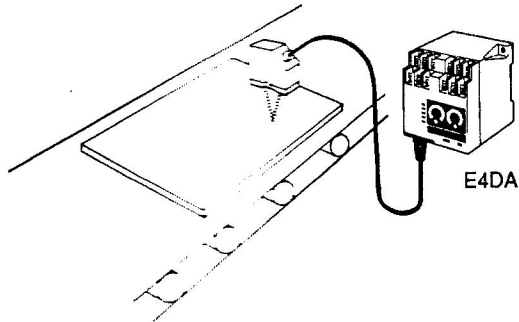


Transportation and others

16 Glass Thickness Measurement

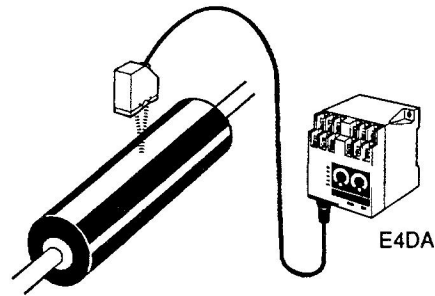
The measurement of the thickness of glass (and other transparent objects) can be performed without difficulty.



Ultrasonic Variation Sensor E4DA

17 Rubber Roller Bias Detection

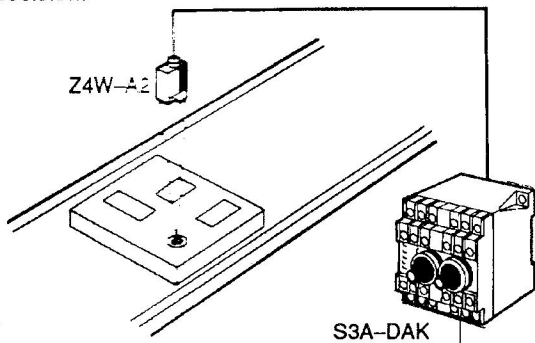
Black rubber can accurately be detected.



Ultrasonic Variation Sensor E4DA

18 One-Piece Product Inspection

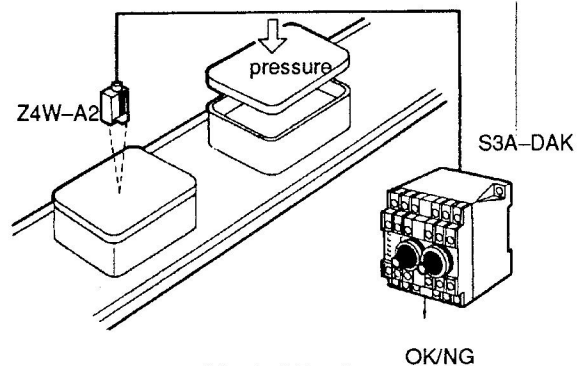
The condition of the screw taps can be detected and the analog output sent to the controller for OK/NG decision.



Detection Subject: Screw Taps
Laser Variation Sensor Z4W-A2
Linear Sensor Controller S3A-DAK
OK/NG Signal

19 Pressure Process Judgement

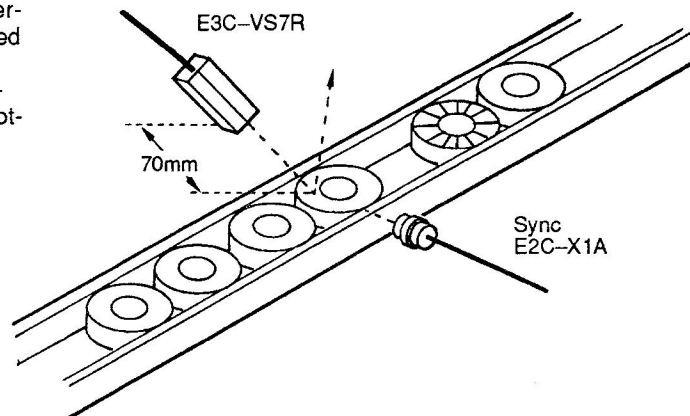
After pressure has been applied, the height is measured and the OK/NG decision is made.



Detection Subject: Molded Product
Laser Variation Sensor Z4W-A2
Linear Sensor Controller S3A-DAK
OK/NG

20 Nut (Top/Bottom) Judgement

Nut top/bottom detection, as they come from the feeder, has been automated. The process uses the difference in the amount of light reflected from the polished top surface of the nut in comparison to the bottom which is dull and still has tooling marks. On the bottom surface reflected light is detected and the top/bottom decision made.



Detection Subject: Nuts (steel, silver colored)
Photoelectric Switch E3C-VS7R
Amp Unit E3C-A
Proximity Switch E2C-X1A (sync)
Amp Unit E2C-AK4A