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## A Review of Fault Detection Tool Used in Electro-Pneumatic Circuit of Mechatronic System

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**Abstract:** Modern Electro-pneumatic systems are widely used in Automation and Mechatronics system. Considering all this fault detection in Pneumatic and Electro-pneumatic system represent a key point in the long-term productivity of various different products manufactured with the help of Electro-pneumatic Automation system. This review paper aims to review fault detection tools used in modern Mechatronics system. With the help these tools Automation technocrat can easily troubleshoot a complex Mechatronics system using modern fault detection tool such as Sequential Function Chart (SFC).

**Keywords**: Pneumatic and Electro-pneumatic System Mechatronics, Applications of Mechatronics, Pneumatic Actuators, SFC.

## REFERENCES

- Philip Coanda, Mihai Avram, Daniel Comeaga, Bogdan Gramescu, Victor Constantin and Emil Nita.: A review of fault detection methods in smart pneumatic systems and identification of key failure indicators in: University "Politehnica", Bucharest, Romania
- [2] Pneumatic Equipment Market: Size, Share and Technology Report, https://www.bccresearch.com/marketresearch /instrumentation-and-sensors/pneumatic equipment-technologies-and-global-markets-report.html, last accessed 2021/09/11
- [3] "Mechatronics" By Prof. Pushparaj Mani Pathak Mechanical Engineering IIT Roorkee [Page no 242-348]
- [4] "Modular Manufacturing System" [Mechatronics kit] and system documents.

