

DAFTAR PUSTAKA

- [1] F. R. Halim, Suwandi, and A. Suhendi, “Rancang Bangun *Syringe pump* menggunakan Motor Stepper Berbasis Arduino,” *e-Proceeding Eng.*, vol. 3, no. 2, pp. 2078–2085, 2016.
- [2] L. E. Putri, Muhammad Ridha Mak’ruf, and Abd. Kholiq, “*Syringe pump With Nearly empty* Based Microcontroller Atmega328,” *J. Electron. Electromed. Eng. Med. Informatics*, vol. 1, no. 2, pp. 25–30, 2019, doi: 10.35882/jeeemi.v1i2.5.
- [3] F. Marwita and B. Y. Wibisono, “Rancang Bangun Alat Pompa Syringe Berbasis Mikrokontroller Atmega 8535,” *Sinusoida*, no. 2, 2022, [Online]. Available: <https://ejournal.istn.ac.id/index.php/sinusoida/article/view/1463> <https://ejournal.istn.ac.id/index.php/sinusoida/article/download/1463/964>
- [4] T. Zuchri Siregar *et al.*, “ANALISA RANGKAIAN PENDETEKSI PUTARAN MOTOR PADA ALAT SYRINGE PUMP MERKTERUMO TYPE TE-331 oleh,” vol. 28, no. 3, pp. 561–566, 2020.
- [5] I. Oktariawan, Martinus, and Sugiyanto, “Pembuatan Sistem Otomasi Dispenser Menggunakan Mikrokontroler Arduino Mega 2560,” *J. FEMA*, vol. 1, no. 2, pp. 18–24, 2013.

- [6] Atmel, “Arduino Mega 2560 Datasheet,” *Power*, pp. 1–7, 2015, [Online]. Available: <http://www.robotshop.com/content/PDF/ArduinoMega2560Datasheet.pdf>
- [7] J. Desember, E. Setyaningsih, and D. Prastyianto, “Penggunaan Sensor Photodioda sebagai Sistem Deteksi Api pada Wahana Terbang Vertical Take-Off Landing (VTOL),” *J. Tek. Elektro*, vol. 9, no. 2, pp. 53–59, 2017.
- [8] T. Pramuji, I. saputro, L. Retno Hidayati, and J. Teknik Elektro Politeknik Negeri Semarang Jl Sudarto, “Rancang Bangun CNC (Computer Numerical Control) Untuk Pembuatan PCB Berbasis Arduino,” *Orbith*, vol. 19, no. 1, pp. 43–49, 2023.
- [9] S. Atmajaya, A. fitri Saiful rahman, and A. asni B, “Perancangan Control System Pengisian Fluida Otomatis Menggunakan Sensor Ultrasonic Sebagai Level Air & Sensor Flow Indikasi Aliran Air Berbasis IoT,” *J. Tek. Elektro Uniba (JTE UNIBA)*, vol. 4, no. 1, pp. 18–22, 2019, doi: 10.36277/jteuniba.v4i1.49.
- [10] M. S. Available, “Slide Potentiometer Model PSxx Slide Potentiometer Model PSxx Mechanical,” vol. 1, no. 714, pp. 1–6, 2020.
- [11] J. Suriawati, R. Anggraini, S. R. Rachmawati, and Y. Adriana, “Sterility Test of Syringes As A Pharmaceutical Preparation That Obtained From Pasar Pramuka,” *SANITAS J. Teknol. dan Seni*

Kesehat., vol. 12, no. 2, pp. 186–198, 2021, doi: 10.36525/sanitas.2021.17.

- [12] TDK Corporation, “Piezoelectronic *Buzzers* Pin terminal/Lead Without oscillator circuit,” no. May, pp. 1–9, 2011, [Online]. Available: https://www.mouser.com/datasheet/2/400/ef532_ps-13444.pdf
- [13] M. R. Perdana and S. Rahmah, “Analisis Pemeliharaan *Syringe pump* Di.Lab Terpadu Universitas Sari Mutiara Indonesia,” *J. Mutiara Elektromedik*, vol. 5, no. 1, pp. 1–6, 2021, doi: 10.51544/elektromedik.v5i1.3247.
- [14] N. F. Hikmah, I. Sapuan, and Triwiyanto, “Rancang Bangun *Syringe pump* Berbasis Mikrokontroler ATmega 8535 Dilengkapi Detektor Oklusi,” *J. Phys. Appl.*, vol. 1, no. 3, pp. 74–91, 2013.
- [15] A. Laia and Y. Yulizham, “Analisis Kalibrasi *Syringe pump*,” *J. Mutiara Elektromedik*, vol. 6, no. 1, pp. 25–32, 2022, doi: 10.51544/elektromedik.v6i1.3262.
- [16] N. L. Velikanov, V. A. Naumov, and S. I. Koryagin, “Characteristics of Plunger Pumps,” *Russ. Eng. Res.*, vol. 38, no. 6, pp. 428–430, 2018, doi: 10.3103/S1068798X18060175.

- [17] B. Besar and L. Dan, “Jounal Homepage : PEMBUATAN ALAT INJECTION PUMP BERBASIS OTOMASI DI MAKING OF INJECTION PUMP BASED ON AUTOMATION IN,” vol. 41, no. 1, pp. 26–31, 2019.
- [18] I. Virgala, M. Kelemen, A. Gmiterko, and T. Lipták, “Control of Stepper Motor by Microcontroller,” *J. Autom. Control*, vol. 3, no. 3, pp. 131–134, 2015, doi: 10.12691/automation-3-3-19.
- [19] A. Gumantan and I. Mahfud, “Pengembangan Alat Tes Pengukuran Kelincahan Menggunakan Sensor Infrared,” *Jendela Olahraga*, vol. 5, no. 2, pp. 52–61, 2020, doi: 10.26877/jo.v5i2.6165.
- [20] E. Batista, N. Almeida, E. Filipe, and A. Costa, “Calibration and use of syringe pumps,” no. October, p. 02007, 2013, doi: 10.1051/metrology/201302007.
- [21] F. Pooke, M. Payne, L. Holder-Pearson, D. Heaton, J. Campbell, and J. G. Chase, “Low-cost, low-power, clockwork syringe pump,” *HardwareX*, vol. 16, no. September 2022, p. e00469, 2023, doi: 10.1016/j.ohx.2023.e00469.
- [22] E. D. Kurniawan, A. Adam, M. I. Salik, and P. L. Gareso, “Programmable Syringe Pump for Selective Micro Droplet Deposition,” *J. Elektron. dan Telekomun.*, vol. 19, no. 2, p. 75, 2019, doi: 10.14203/jet.v19.75-82.

- [23] Atmel, "Arduino Mega 2560 Datasheet," *Power*, pp. 1–7, 2015, [Online]. Available: <http://www.robotshop.com/content/PDF/ArduinoMega2560Datasheet.pdf>
- [24] S. Rajasekwaran, S. V Aishwarya, S. Gowthami, R. Suguna, V. Vasunthera, and S. Sathes, "Iot Based Low Cost Syringe Pump for Telemedicine and Health Care," *Int. Res. J. Mod. Eng. Technol. Sci.*, vol. 04, no. 06, pp. 2582–5208, 2022.
- [25] M. Bawafie, M. Harip, C. Zawiyah, C. Hasan, and MA Nordin, "A Review of Internet of Things (Iot)For the Design of Smart Syringe Pump in Biomedical Application," *Sci. J. Innov. Soc. Sci. Res.* , vol. 2, no. 1, pp. 1–12, 2022
- [26] A. Supriyanto, R. Anggriani, SW Suciyati, A. Surtono, Junaidi, and S. Hadi, "A Control System on the Syringe Pump Based on Arduino for Electrospinning Application," *J. Phys. Sci.* , vol. 32, no. 1, pp. 1–12, 2021, doi: 10.21315/JPS2021.32.1.1.
- [27] H. Igarashi, Y. Obata, Y. Nakajima, T. Katoh, K. Morita, and S. Sato, "Syringe pump displacement alters line internal pressure and flow," *Can. J. Anesth.* , vol. 52, no. 7, pp. 685–691, 2005, doi: 10.1007/BF03016554.

- [28] MR Islam, R. Zahid Rusho, and SM Rabiul Islam, “Design and implementation of low cost smart syringe pump for telemedicine and healthcare,” *1st Int. Conf. Robot. Electr. Signal Process. Tech. ICREST 2019* , pp. 440–444, 2019, doi: 10.1109/ICREST.2019.8644373.
- [29] B. Mallick and C. Mohanta, “Development of a Syringe Infusion Pump,” *J. Control Syst. its Recent Dev.* , vol. 6, no. 3, pp. 19–32, 2023, [Online]. Available: <https://doi.org/10.5281/zenodo.10401078>
- [30] MA Khan, S. Tehami, and O. Mazhar, “Designing of microcontroller based Syringe Pump with variable and low delivery rates for the administration of small volumes,” *2015 IEEE 21st Int. Symp. Dec. Technol. Electrons. Packag. SIITME 2015* , pp. 135–138, 2015, doi: 10.1109/SIITME.2015.7342311.
- [31] Y. Zhou *et al.* , “Standing air bubble-based micro-hydraulic capacitors for flow stabilization in syringe pump-driven systems,” *Micromachines* , vol. 11, no. 4, p. 11, 2020, doi: 10.3390/MI11040396.