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(57) Abstract

The present disclosure introduces an automated agar discarder and petri plate washer equipment 100, designed to streamline sterilization, disposal, and cleaning processes in microbiology laboratories. The system incorporates an autoclave unit 200 with autoclave racks 202, rotating rods 204, and knob mechanism 206 for uniform sterilization and automated plate transfer. The agar discarder unit 300 is equipped with robotic arms 302, agar discarder bucket 304, and tilting mechanism 306 for efficient and hygienic disposal of molten agar. The plate washing unit 400 features a washing chamber 402, rotor 404, float valve 406, inlet valve 408, outlet valve 410, and washing rack 412 to clean plates with precision using disinfectant solutions. By automating each stage, the invention minimizes contamination risks, reduces manual intervention, and ensures an efficient workflow, making it a reliable system for laboratory safety and productivity. Reference Fig 1

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