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(57) Abstract :

The invention discloses a device for automated cleaning of internal pipe surfaces, comprising a motorized cleaning head (101), adjustable brushes (102), high-pressure jets (103), sensor unit (104), and control module (105). The device ensures efficient removal of deposits, adapts to varying pipe geometries, and provides real-time monitoring for industries requiring high standards of cleanliness, safety, and operational efficiency. The modular structure allows easy replacement of cleaning units, making the system versatile and eco-friendly across multiple applications.

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