



Homosep Atom

[Source: PIB](#)

Homosep Atom, developed by the startup named **Solinas**, is India's **first septic tank/manhole cleaning robot**, is revolutionising sanitation efforts nationwide, replacing **manual scavenging** with a comprehensive robotic solution, bolstering the **Swachh Bharat Campaign**.

- It streamlines sewer cleaning with multifunctional capabilities, **curbing costs** and fostering **robotic sanitation** while **mitigating blockages** in congested areas.
 - Extending its reach to large complexes and individual residences, it has enhanced municipal waste management, prioritising worker safety and efficiency.
- **Solinas**, a **deep-tech startup** from IIT Madras, pioneers **miniature robots** for water-sewer pipelines, aided by the **Department of Science and Technology -Technology Business Incubator (DST-TBI)**, addressing contamination challenges, climate tech solutions, and **AI-based pipeline** diagnostics for sustainable water management.
- **DST's Technology Business Incubators (TBIs)** in academic, technical, and R&D institutions under the **NIDHI program** support innovative startups, encouraging youth to create knowledge-based enterprises, solve societal challenges, and contribute to national growth.



Read more: [Manual Scavenging](#)

PDF Refernece URL: <https://www.drishtias.com/printpdf/homosep-atom>

