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Welcome to the Presentation On “Omni Processor”

Presented by: Jignesh Shah



Ankur Scientific Energy Technologies Pvt. Ltd.

About Ankur Scientific



Founded in 1986 by Dr. B. C. Jain, a gold medalist from BITS, Pilani, Double M.S., Ph. D, & M.B.A. from M.I.T. (Cambridge), an internationally acclaimed technocrat.



Indigenously Developed and Patented Technologies that meet all emission and safety norms.



1000+ systems installed in **35+** countries worldwide.



Working with various Governments globally, NGOs, agencies of the UN, EU, World Bank, Internationally reputed Universities, the Gates Foundation, various industrial and investor groups and private industry.



Recipient of numerous National and International Awards.

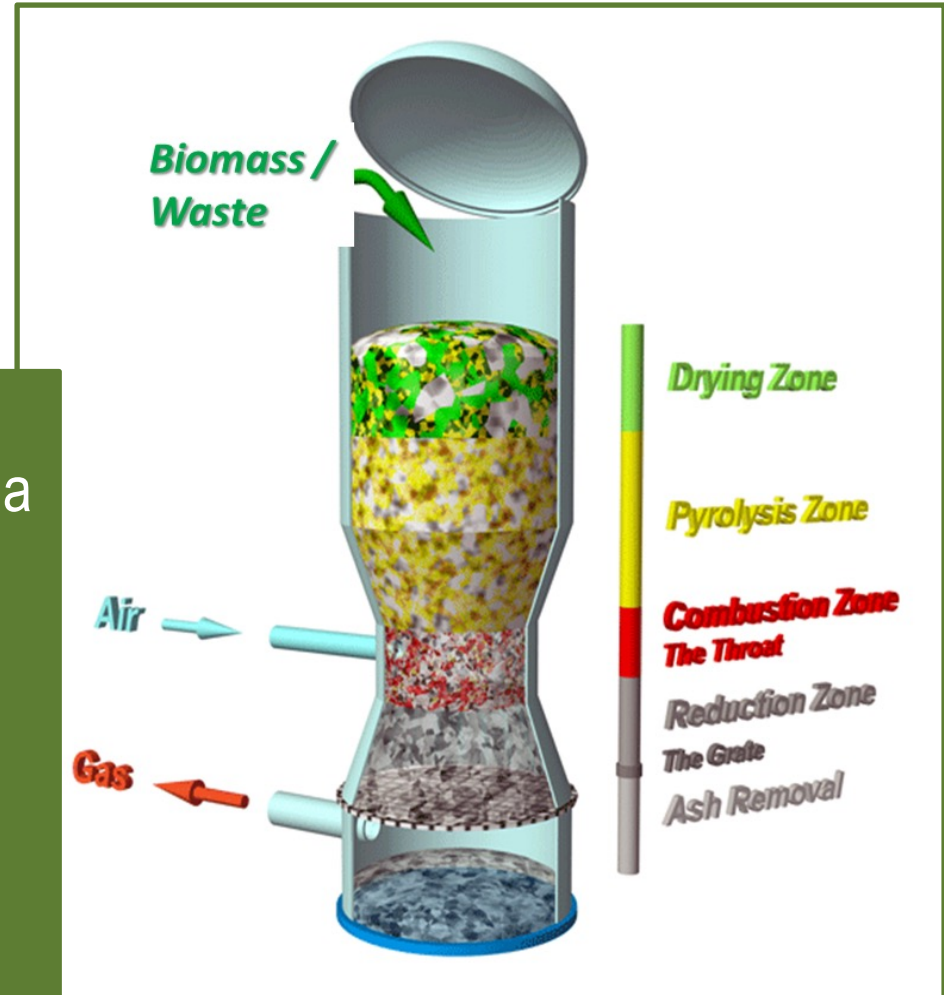


ISO 9001, ISO 14001 and ISO 45001 certified. All equipment is CE certified.

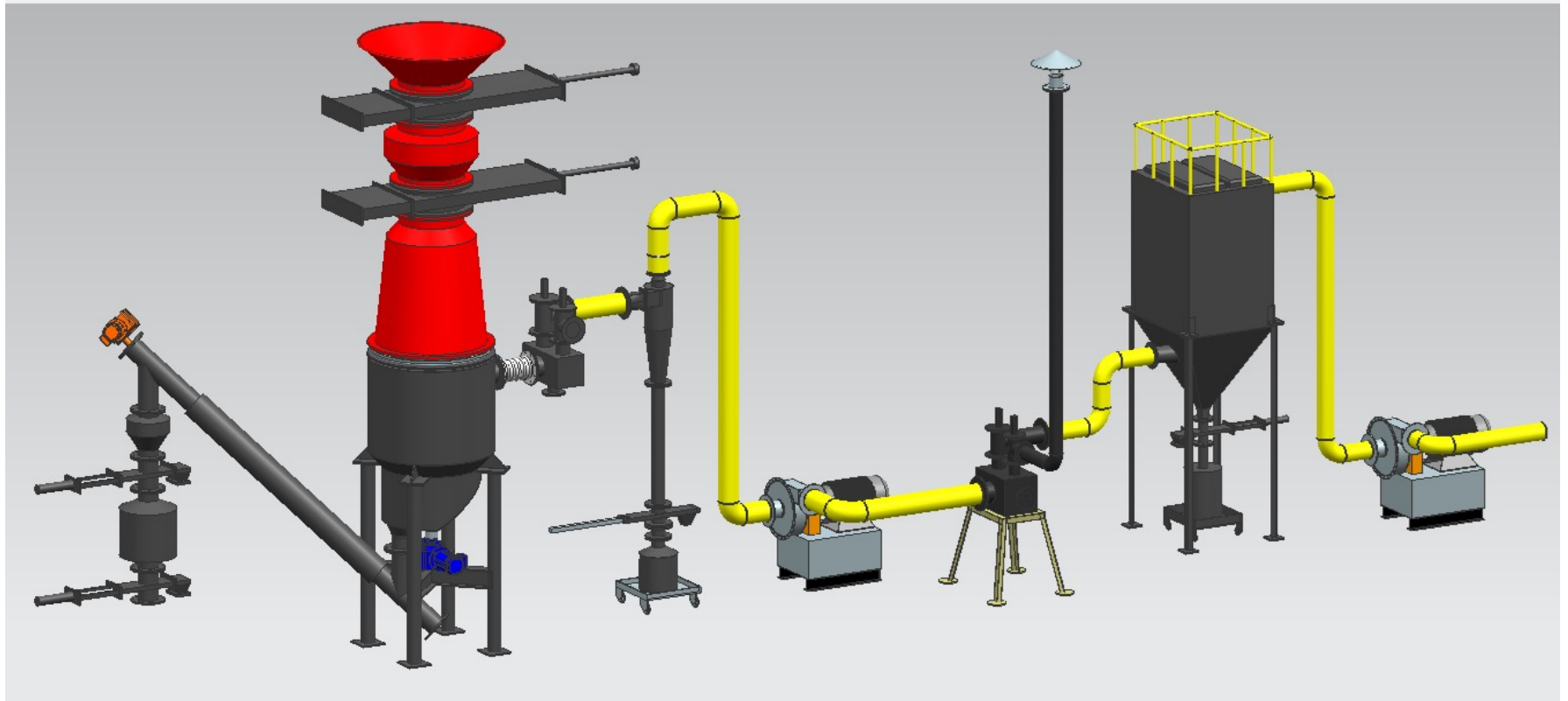
What is Gasification?

Gasification is conversion of various biomasses / wastes to a combustible (something that can be burnt) gas called Producer Gas.

This gas can then be burnt in Engine Gensets to produce electricity or can be used for process heat applications.



Gasification for Solid Waste



What is Omni Processor?

- Omni Processor (OP) is a brand name for “Online Sludge Treatment system”.
- Ankur Scientific Energy Technologies Pvt Ltd is a world leader in Gasifier technology having presence in more than 47 countries.
- The company is a commercial licensee of the Gates Foundation’s patented Omni Processor technology.
- Omni Processor is a decentralized sludge treatment plant that quickly reduces the sludge volume by 97% upon its arrival at the Fecal Sludge Treatment Plant (FSTP)
- During treatment of the sludge, the Omni Processor automatically converts entrapped water in the sludge into purified water or drinking grade water.
- The Omni Processor occupies only 40% of the space associated with the drying bed in conventional sewage/septage treatment plants.
- The company has installed its first OP plant for Vadodara Municipal Corporation in one of the Sewage Treatment Plants of Vadodara city.
- The second OP plant is under execution in Bangladesh for a project funded by ADB.

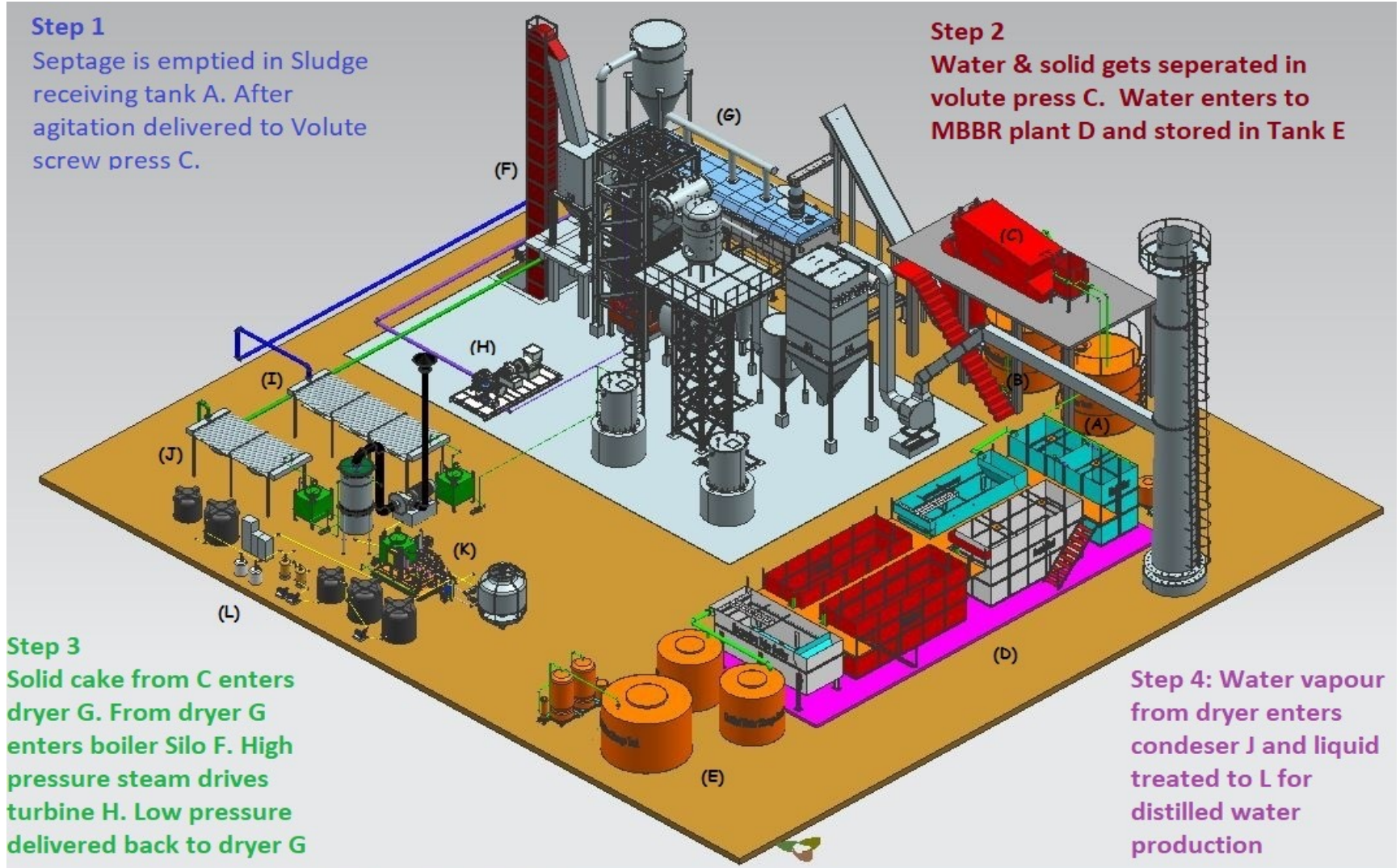
3D Drawing of Omni Processor

Step 1

Septage is emptied in Sludge receiving tank A. After agitation delivered to Volute screw press C.

Step 2

Water & solid gets separated in volute press C. Water enters to MBBR plant D and stored in Tank E



Step 3

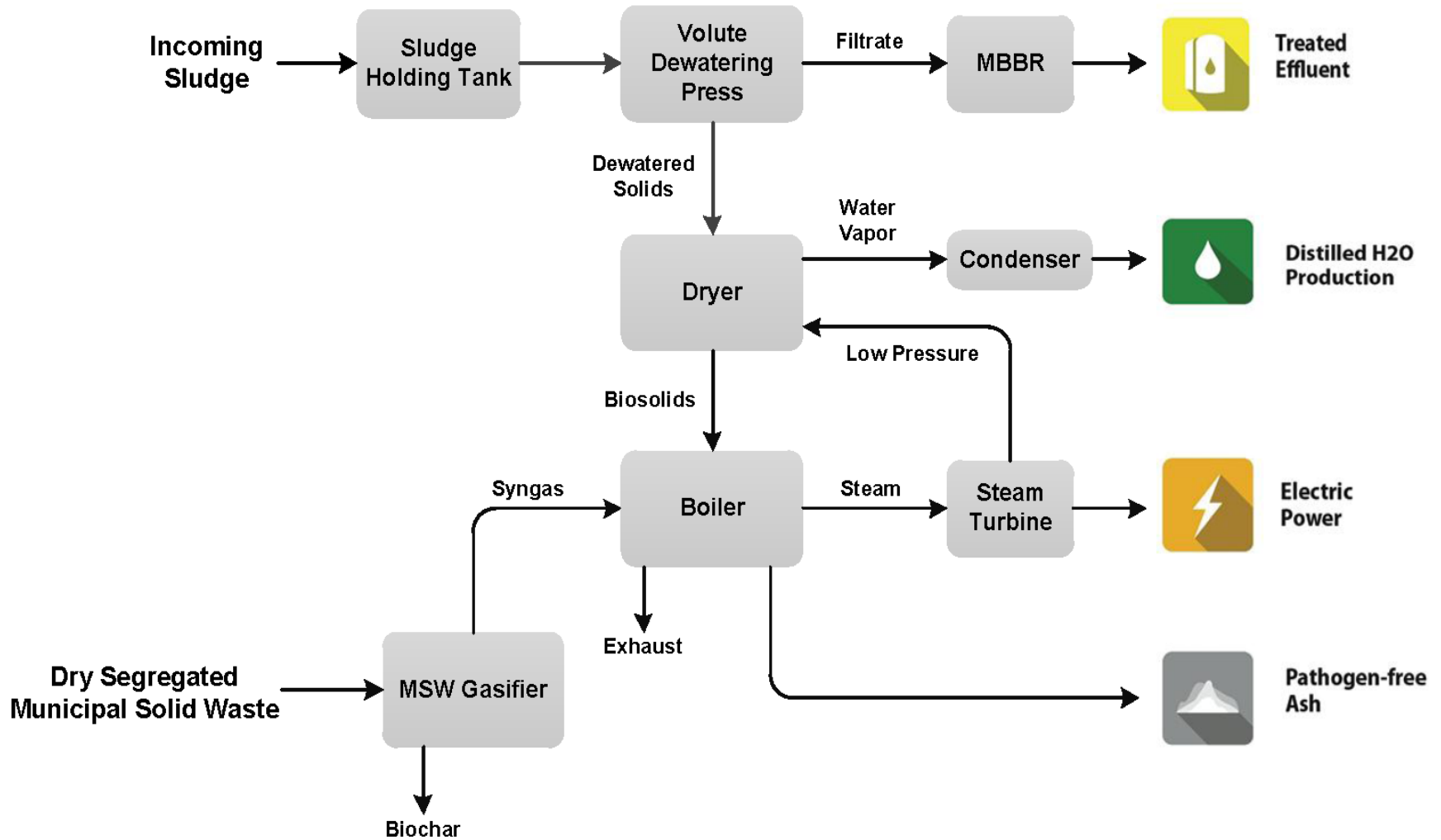
Solid cake from C enters dryer G. From dryer G enters boiler Silo F. High pressure steam drives turbine H. Low pressure delivered back to dryer G

Step 4: Water vapour from dryer enters condenser J and liquid treated to L for distilled water production

Benefits of Omni Processor

- Online treatment of faecal sludge or septage
- Energy Neutral system
- Water Neutral system
- Incoming sludge gets reduced to 97% by weight just in 6-8 hrs.
- Low foot print
- Decentralized system
- Modular and Scalable in future
- Equipped with high process safety & alarms
- Automatic operation
- All air emissions as per European guideline or as per country specific guideline
- 100% pathogen free output
- Produces surplus energy and distilled water which adds commercial value
- Can be integrated with Solid Waste Gasification so as to treat liquid and solid waste at common facility

Integration of Solid Waste and Liquid Sludge



Thank You



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