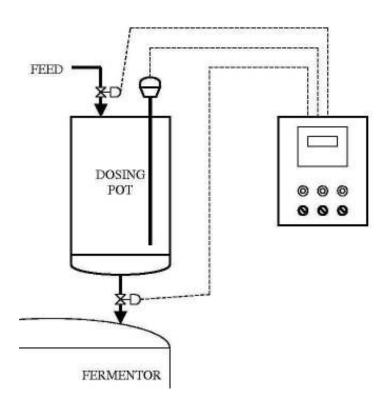


6, Vaidehi Residency, MIT College Road, Rambaug Colony, Kothrud, Pune – 411 038, India Tel./Fax: 91-20-25460214 E-mail: info@napro.co.in URL: http://www.napro.co.in

AUTO FEED DOSING KIT FOR FERMENTORS



We manufacture the automatic feed dosing system for fermentors, an apparatus designed to solve all the problems related to dosing & measurement of feed quantities of different additives to fermentors.

The main problems associated with commercially available standard dosing systems are incompatibility with steam for in-situ steam sterilisation, & inability to measure flow in pulses (shots), constraints unique to the fermentation process.

For instance, equipments such as peristaltic pumps are accurate & suitable for addition in shots but incompatible with live steam for in-situ sterilisation, whereas on-line steam-sterilizable flow meters (such as electromagnetic flow meters) are not suitable for measurement of pulsed flow.

Our automatic dosing system works on the principle of filling & draining of a dosing pot, & thus closely resembles the conventional manually operated system.

Automation of the system is taken care of by a PLC, which is pre-programmed for sterilisation, dosing & data logging. The PLC has a serial communication port for downloading data onto a PC-based SCADA software or a serial printer. The system can be designed for predetermined flow rates (for e.g. substrate, precursor, etc.) or for system triggered additions (such as acid/alkali & antifoam). Accuracy of flow measurement is better than +/-0.5%.

Salient features of our product are as follows:-

- 1. Suitable for a wide range of fermentor sizes
- 2. Suitable for virtually any fermentation process application
- 3. Can be hooked up to existing process control system
- 4. cGMP-compliant version available
- 5. No loss of sterility even during long fermentation batches
- 6. User friendly
- 7. Easy to operate, clean, & store
- 8. Light-weight & compact
- 9. Fits on existing pipe work; does not require any supporting arrangement
- 10. Silent operation
- 11. Low power consumption; works on single phase power
- 12. Low maintenance downtime & cost

Manufactured in India by:-

NAVIN PROCESS SYSTEMS

6, Vaidehi Residency, MIT College Road, Rambaug Colony, Kothrud, Pune – 411 038, India Tel./Fax: 91-20-25460214 E-mail: info@napro.co.in URL: http://www.napro.co.in