

## Pharmenta® SIPTube® Valve Use #5: CIP/SIP Anytime Gas Sparger

### As a Gas Sparger

Using the Pharmenta SIPTube® valve as a gas sparger you can assure full aeration capacity during critical periods by recleaning and resterilizing sparger element pores in place as needed. Changeable sparger element lets you optimize for specific needs.

### One Valve, Multiple Uses

The Pharmenta SIPTube® valve can replace five traditional devices, but with a huge improvement over each: the ability to reclean and resterilize anytime – even during production and even if the process is heat sensitive.

The result: eliminate deadspace, clogging, growback and other contamination and capacity nightmares.

#### SIPTube® Valve Uses:

1. Driptube
2. Addition port
3. Headspace feed
4. Fed-batch withdrawl/return
5. Gas sparger

### Patented Innovation

Tip-Seal™ technology eliminates deadspace by positioning the valve seal on the shaft tip at the process interface instead of outside the vessel.

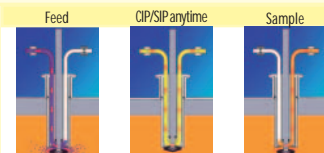
Clean-Thru/Steam-Thru™ design means the entire valve passage forms a deep loop – from inlet to tip-seal to outlet – that can be recleaned and resterilized anytime.

Optional insulation protects heat sensitive processes during steam sterilization.

Weld-in or retrofit to existing ports as small as 1 inch sensor ports.

Designs are available to work in any orientation.

To learn more call **800-765-7838** or visit [www.pharmenta.com](http://www.pharmenta.com).



Clean-Thru/Steam-Thru™ design enables complete valve passage CIP/SIP anytime, ending stagnation, residue build-up, blockages and growback.



**Pharmenta®**  
from NL Technologies, Ltd.

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