

# Spargers

For Liquid and Gas Contact Applications



## A complete range of porous materials for gas/liquid contact applications across a variety of industries.

The key to efficient gas transfer is to generate a high volume of fine bubbles. A 1mm (0.04") bubble has 6 times the gas/liquid contact than that of a 6mm (0.24") bubble. Bubble size is essential to optimise mass transfer and reduce gas consumption and energy costs.

Elements are available in Sinterflo® sintered porous stainless steel or Vyon® sintered porous polyethylene or Polypropylene.

Stainless steel spargers are supplied in stainless 316/316L and higher alloys such as Inconel® and Hastelloy® for very aggressive applications. Being manufactured from such resistant materials, these spargers are cleanable and if necessary can be heat or steam sterilised.

The elements are designed and manufactured from uniform, fine, controlled pore size media to achieve excellent performance in the distribution of a large number of small gas bubbles for a higher interfacial area.

## Typical Applications

Intrusive and non-intrusive tangential pipeline spargers:

- Treatment of wastewater
- Volatile stripping
- Steam injection

Tank spargers:

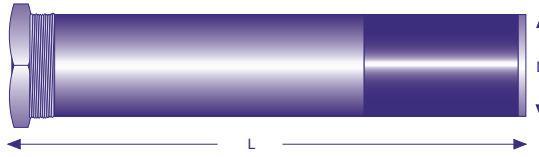
- Fermentation
- Agitation
- Bioremediation
- Oxygen stripping
- De-watering
- Dissolved air flotation processes used by major oil companies

## Features and Benefits

- Rugged, fixed pore media
- Bubble size can be controlled by a wide range of available media pore sizes
- Temperature and corrosion resistant materials of construction
- High quality, all-welded, robust construction
- Higher diffusion rates from smaller sparging elements
- Cleanable
- Sparger diameter and connector designed to meet application requirements.

### Ordering Information

Whilst having the ability to design and supply a full sparger range, in order to reduce lead times and lower minimum order quantities, we have a standard customisable range of spargers to accommodate lower volumes.



Product Code: 1 2 3 4 5

| 1: Micron |           | 2: Diameter |      | 3: Porous Length |     | 4: Fitting Type |                      | 5: Impingement |    |      |
|-----------|-----------|-------------|------|------------------|-----|-----------------|----------------------|----------------|----|------|
| 2         | Standard  | A           | 1/2" | 1                | 1"  | H1              | NPT Hex Nipple       | 1/4"           | 0  | None |
| 10        | Steam     | B           | 1"   | 2                | 2"  | H2              | NPT Hex Nipple       | 3/8"           | 1  | 1"   |
| 40        | Agitation | C           | 2"   | 4                | 4"  | H3              | NPT Hex Nipple       | 1/2"           | 6  | 6"   |
|           |           |             |      | 6                | 6"  | H4              | NPT Hex Nipple       | 3/4"           | 12 | 12"  |
|           |           |             |      | 12               | 12" | H5              | NPT Hex Nipple       | 1"             |    |      |
|           |           |             |      |                  |     | H6              | NPT Hex Nipple       | 1 1/2"         |    |      |
|           |           |             |      |                  |     | H7              | NPT Hex Nipple       | 2"             |    |      |
|           |           |             |      |                  |     | R1              | NPT Reducing Bushing | 1/4 - 1/8"     |    |      |
|           |           |             |      |                  |     | R2              | NPT Reducing Bushing | 3/8 - 1/4"     |    |      |
|           |           |             |      |                  |     | R3              | NPT Reducing Bushing | 1/2 - 1/4"     |    |      |
|           |           |             |      |                  |     | R4              | NPT Reducing Bushing | 3/4 - 1/2"     |    |      |
|           |           |             |      |                  |     | R5              | NPT Reducing Bushing | 1 - 3/4"       |    |      |
|           |           |             |      |                  |     | R6              | NPT Reducing Bushing | 1 1/2 - 1"     |    |      |
|           |           |             |      |                  |     | R7              | NPT Reducing Bushing | 2 - 1 1/2"     |    |      |
|           |           |             |      |                  |     | I               | Impingement Only     |                |    |      |