



SPARGING SYSTEMS - SLAMJET® SERIES



# The Sparging Factor - Improving the separation efficiency of flotation columns.

Sparging is the controlled generation of gas bubbles into the flotation column recovering the target particle by one of three methods

**Attachment** - the target particle attaches to the gas bubble and is floated to recovery

**Entrainment** - unwanted particles floated to recovery in the froth phase

**Entrapment** - other unwanted particles trapped and aggregated by the target particles and floated to recovery

CPT sparging systems are designed to maximize attachment while minimizing both entrainment and entrapment.

**CPT sparging systems are designed to:**

- Generate the right number of bubbles
- Generate bubbles of the right size
- Distribute the bubbles evenly across the column

**CPT sparging systems present the largest available bubble surface area to the target particle for the greatest probability of attachment for improved recoveries.**



SLJ 25/40 SERIES

## THE SLAMJET® SPARGER

SlamJet® spargers are proven in thousands of flotation applications. Designed for and used with CPT flotation columns, they are easily retro-fitted to improve the performance of other flotation columns.

## IT'S THE INDUSTRY STANDARD

Key reasons why **Mineral Process Operators** worldwide choose the CPT SlamJet® sparging systems:

### Low Maintenance

Simple design, wear resistant, long operating life

### In-Situ Removal

Doesn't require draining the flotation column or system shut-down

### Automatic Shut-Off

Slams shut on supply gas failure preventing the process fluid from backing up the gas line

### Single Large Bore Orifice

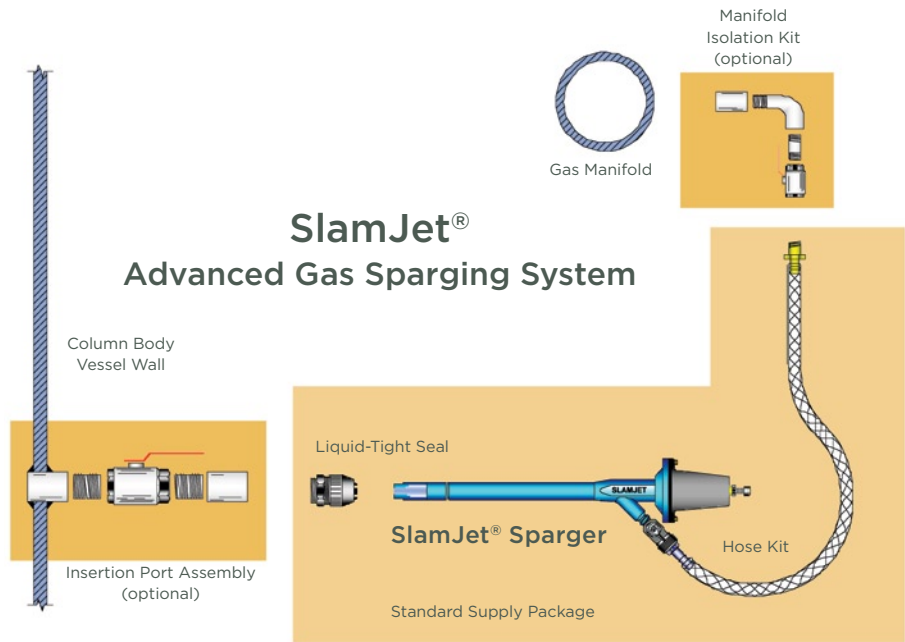
Virtually eliminates plugging or fouling

# SLAMJET® SPARGER STANDARD SUPPLY PACKAGE

- SlamJet® Sparger
- Liquid Tight Seal
- Hose Kit

An Insertion Port Assembly and Manifold Isolation Kit are optionally available for new flotation column installations.

Insertion port assemblies enable the SlamJet® sparger to be quickly and easily removed on-line for maintenance or replacement without draining the flotation column or shutting down the process.



## Standard SlamJet® Specifications

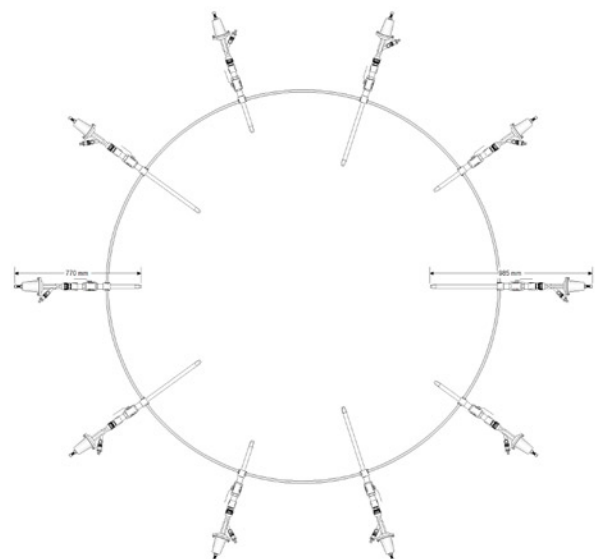
Maximum pressure:	700 kPag
Operating pressure range:	415 to 550 kPag
Sparger Tube material:	316 Stainless Steel
Nozzle housing material:	2205 Stainless Steel
Nozzle:	Ceramic alumina or tungsten carbide
Regulator diaphragm:	Nylon reinforced neoprene

## Standard SlamJet® Gas Flow Rates

SlamJet® Model Series:	Flow rate at 550 kPag
SLJ - 25:	21 m <sup>3</sup> /h
SLJ - 40:	50 m <sup>3</sup> /h
SLJ - 60:	103 m <sup>3</sup> /h
SLJ - 75:	198 m <sup>3</sup> /h

\* other flow rates available

## Insertion Pattern





Canadian Process Technologies Inc.  
Unit - 1  
7168 Honeyman Street  
Delta, British Columbia  
Canada V4G 1G1  
Tel: (604) 952-2300  
Fax: (604) 952-2312



[www.cpti.ca](http://www.cpti.ca)



CPT Brasil Ltda  
Afonso Pena Avenue  
3111 - 15th Floor, Rooms 1507/1500  
Funcionarios-CEP 30130-008  
Belo Horizonte MG, Brasil  
Tel: +55-31-3281-9108  
Fax: +55-31-3227-6677