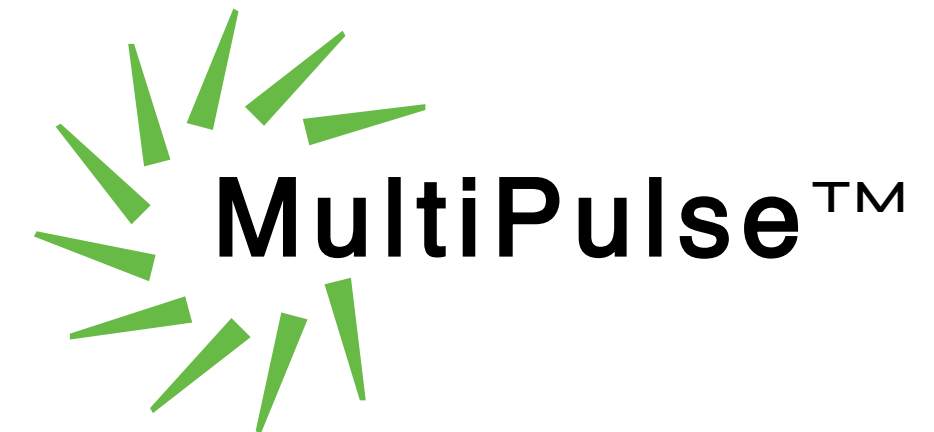


## The MultiPulse™ solution – Unstoppable advantages

- Powerful complete de-clogging solution (3500 psi / 240 bar)
- Safe and reliable - Field proven
- Compact and efficient - Fewer devices, smaller space requirement
- Versatile - For use on any type structure and all bulk materials
- Energy-saving - Fewer devices with higher efficiency require much less energy
- User-friendly control, easily customizable operation
- Low maintenance
- Quick ROI



## Product Specifications

| MultiPulse Device Model                         | SF-4   | SF-6    |
|-------------------------------------------------|--------|---------|
| Device diameter (mm)                            | 94     | 142     |
| Length (mm)                                     | 810    | 845     |
| Weight (not including mounting socket) (kg)     | 20     | 48      |
| Working pressure (min, psi)                     | 250    | 300     |
| Working pressure (max, psi)                     | 3000   | 3500    |
| Firing frequency (pulse/min)                    | 20     | 16      |
| Pulse energy (at 3000 psi) (Joule/pulse)        | 66,000 | 105,000 |
| Gas volume per discharge (at 3000 psi) (Liters) | 200    | 300     |
| Maximum effective distance (m)                  | 3      | 6       |
| Minimum required air supply (Liters/min)        | 70     | 100     |
| Minimum number of buffer tanks per SFD unit     | 1      | 1       |

Contact:  
Flow Industries, Ltd  
E-Mail: [info@flow-industries.com](mailto:info@flow-industries.com)  
phone +1 (484) 893-0085  
[www.flow-industries.com](http://www.flow-industries.com)  
Flow Industries, Ltd, 2025. All rights reserved.

Keeping bulk material  
flow processes  
**unstoppable!**

[www.flow-industries.com](http://www.flow-industries.com)

Operators of bulk material storage and flow processes know that bulk material clogging is a common and serious problem. Now it's one problem you can cross off your list of worries.

#### MultiPulse™ - Finally an effective solution to clogging

When your bulk materials storage or flow processes get stopped-up or clogged it can at best hold up, and at worst totally shut down operations. You need a solution you can rely on to prevent that from happening. MultiPulse™ offers a complete solution to flow problems in any part of the production or storage process. Compact and extremely powerful, field proven to be absolutely safe and reliable, MultiPulse™ quickly overcomes the toughest clogging.

Developed in cooperation with leading companies in the cement and chemical industries, MultiPulse™ systems have proved to be effective solutions in bulk material handling, even with the most moisture sensitive materials, as well as in high temperature processes.

#### 50 times more powerful than existing solutions

MultiPulse™ is a unique and patented high-pressure impulse system. Using compressed air of up to 3500 psi (240 bar), it creates a powerful shock wave followed by a high velocity air stream that is aimed directly into the aggregate material in the bulk storage or process vessel. The combined effect of shock wave + air stream makes MultiPulse™ up to 50 times more powerful than current industry standard air cannons whose working pressure is only up to 100 psi (7 bar).

Furthermore, MultiPulse™ can be activated as frequently as every few seconds to provide a continuous and powerful repeat action that effectively solves even the most difficult clogging problems.

#### Lower maintenance, greater control and quick ROI

With a typical operating ratio of one MultiPulse™ Device (MPD) to every 4-6 air cannons, space is far less of an issue while maintenance and energy consumption are dramatically reduced. Offering operators peace of mind that material flow is continuous, the MultiPulse™ system is also designed to enhance control with lo-cal or remote control options, readily available information on device operation, and simple modification of operating parameters for immediate response to changing production conditions. Keeping operations flowing also means a healthy bottom line with rapid return on investment.

#### Safe, reliable and eco-friendly

MultiPulse™ systems have been in operation under the most demanding conditions for several years and have proved to be extremely safe and reliable, with minimal maintenance. The system only uses compressed air and is totally mechanical, which makes it both energy-saving and environment friendly.



#### The MultiPulse™ family

To meet the range of industry needs, MultiPulse™ is available in two sizes each with two configurations - for regular applications (e.g., silos, feed-bins, bunkers, hoppers etc.) and for high temperature applications (e.g., preheater towers and clinker coolers).

#### The MultiPulse™ system includes:

- MultiPulse Device (MPD)
  - Controller
  - High pressure air compressor\*
  - 1-2 high pressure air cylinders\*
- \*(may be sourced separately)

### Nesher Cement Case Study – 150 ton Gypsum Feed-bin

A modern 5 mta capacity cement plant. [www.nesher.co.il](http://www.nesher.co.il)

#### Before MultiPulse™

- 6 air-cannons per bin
- Flow stoppages 2-5 times per shift
- Mixture of synthetic and natural gypsum
- Erratic feeding process
- Frequent cement production stoppages



■ Cement Production ■ Gypsum Feed

#### After MultiPulse™

- 1 Silo-Flow Device per bin
- No stoppages since Silo-Flow installation
- 100% synthetic gypsum (much cheaper)
- Smooth gypsum feeding process
- No cement production stoppage



■ Required Gypsum Level ■ Mill Power

## MultiPulse system configuration

