

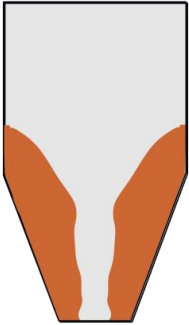
# FLOW PROMOTION



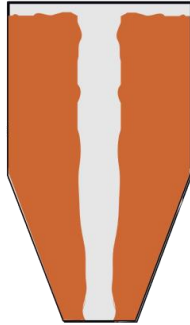
**Air Blasters**

## INTRODUCTION

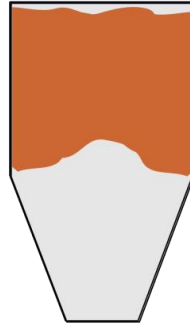
Air Blasters or some times mentioned as Air Cannons contribute a major role in the Flow Promotion of bulk material. These are widely used in industries such as Cement, Power, Mining and Mineral processing. These industries have complex bulk material handling systems consisting of conveyor belts, bins, transfer chutes, storage silos etc. Uninterrupted flow of the bulk material through these systems is key to productivity of the plant. Air Cannon systems have proved to be the best solution to ensure flow of bulk material in such conditions. Some common flow problems are illustrated below.



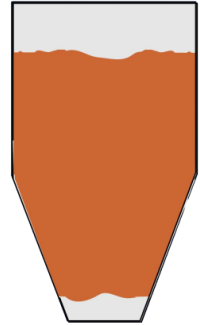
*Funnelling*



*Rat - Holing*



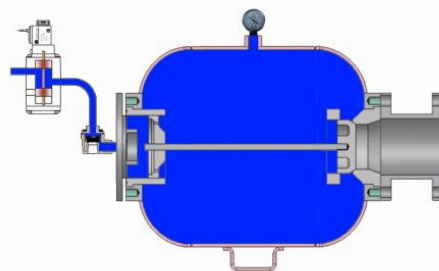
*Arching*



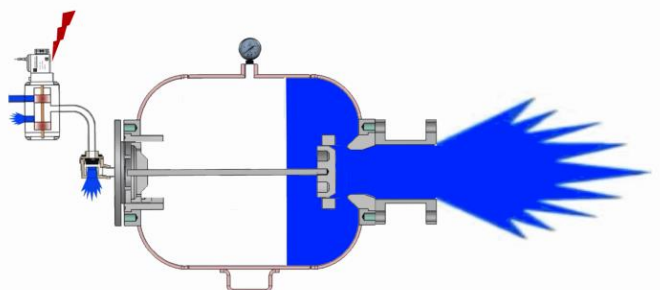
*Bridging*

The basic principle of Air Blasters is to inject compressed air stored inside a tank into the bulk material clinging to the vessel surface, in a fraction of a second. The sudden but controlled discharge of air causes the material particles to vibrate and break free from other particles and the vessel surface. The controlled discharge ensure that the impact force of the air is not transferred to the vessel and the supporting steel structures.

Various stages in the operation cycle of an air blaster is illustrated below. When the air blaster is charged, compressed air is filled into the tank until tank pressure is equal to the line pressure and the blaster will be ready to discharge.



By activating the solenoid valve, the air supply is shut off and the air line between the QRV and solenoid is emptied. This allows the QRV to quickly release the pressure holding the piston. The piston is instantly forced back by the pressure stored in the tank thereby releasing the pressurized air stored in the tank through the discharge pipe.



## FEATURES

**Bazooka** is Thejo's latest offering in Air Blasters featuring patented cutting-edge Dual Piston technology. **Bazooka** Air Blasters are designed to operate in the most punishing conditions and dislodge any material build-up and overcome all material caking, bridging and flow problems - even under the most adverse conditions

**Bazooka** air blasters feature

- Patented Dual-Piston technology
- Fast Fill Inlet Valve Design
- 100% indigenous technology
- High Impact Force – 30% more Blast Force
- Reliability and compatibility

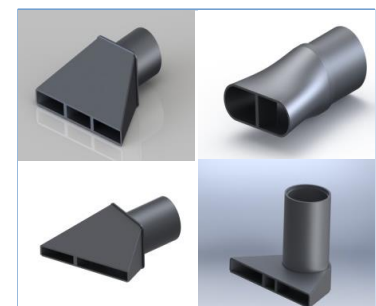
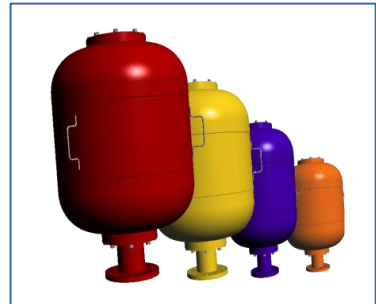
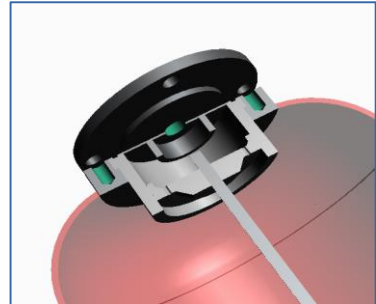
**Bazooka** Air Blasters feature a patented dual piston technology which helps in achieving improved impact force. The dual piston technology allows the discharge valve to be placed close to the tank outlet, which enable lightning quick discharge of the air in a fraction of a second.

**Bazooka** air blaster features a Fast Fill design which helps make refilling of the tank very quick compared to conventional air blaster designs. The discharge valve features an advanced Venturi Exhaust which increases the kinetic energy of the exhaust air thereby increasing the impact force.

The Dual Piston Valve design of **Bazooka** features a unique tank and valve body construction. This ensures optimized air flow inside the tank, helping in achieving a considerable increase in the impact force of **Bazooka**.

100% indigenous design and high level of localization in manufacturing enable Thejo to have excellent control of quality and faster delivery times.

**Bazooka** utilizes various nozzle designs to suit different applications. Flat, Angular, Fan jet and Flat angular nozzles are selected after detailed study of the application and impact force requirement. Various tank sizes ranging from 35L to 200L are available to suit various operating conditions.





# Flow Promotion Systems

## GForce®

## Bazooka®

- GForce Air Blasters
- Bazooka Air Blasters
- GForce Accessories
- Bazooka Accessories



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