



*Bin Blender Column*

*Mobile Blender for Bin and Drum*

*IBC/BIN Tumbler*

## BLENDING AND MIXING SOLUTIONS FOR BINS AND DRUMS



# Bin Blender Column

The Bin Blender Column combines all the Bin Lifting Column functions with tilting, tipping, and mixing capabilities. The Column features a simple design consisting of an external stainless steel AISI 304 structure and an internal galvanized carbon steel load-bearing structure with the attached supporting arm.

This type of AGR-LIFT series Column is mainly used in chemical, pharmaceutical, and food industries, specifically for powder handling operations requiring production flow optimization and preventing any "cross-pollution" cases. Upon request, it could be manufactured for installation in dusty environments and ATEX classified zones.

The lifting system consists of a "worm screw" that forms a single housing attached to the slide through a mounting flange. This system is adjusted using a limit switch box that sets the maximum and minimum limits for arm vertical movements according to specific application and process requirements.

The rotation system consists of a "wheel gear" driven by a direct-acting planetary gearmotor, ensuring optimal power and efficiency.

The Bin Blender Column's arm has a fork-type connection that holds the Bin at a 30° angle for better mixing. These forks are equipped with an automatic Bin locking/unlocking device (patented system).

All functions of the Lifting Column (vertical and horizontal movements, in addition to all customizable specifications) are managed automatically by the PLC installed on board.

The Bin Blender Column, like any other AGR-series Column, is designed and manufactured in compliance with cGMP guidelines and UNI EN ISO safety norms. It can be supplied with a protection system using infrared barriers or a stainless steel cage, where required.

The Blender Column can have two container connection types:

- Fork-type (automatic or manual using triangle handle bolts)
- Clamp-type

The Column can be customized to handle Bins of different types (with wheels, stackable, with removable trolley, etc.) and sizes.

## Automatic Bin Fixing System

the system activates automatically and provides a robust and secure connection for Bin



The Blender Column's vertical and rotational movements allow for effective Bin lifting, mixing, tilting, tipping, positioning, and discharging operations.



Removable trolley for Bin

## DOCKING STATION

The Pharma Bin Docking Station is an innovative material handling solution for safe and controlled unloading of Intermediate Bulk Containers (IBCs) in high-containment applications. Engineered to meet the strict requirements of the pharmaceutical and chemical industries, this discharge station ensures a seamless, dust-free, and accurate transfer of powders from Bins to downstream processes.

The Bins are positioned and installed on the Discharge Station using Bin Lifting or Blender Columns. The system for attaching/connecting the Bin to the Docking Station can be realized in several ways, depending on the level of containment required:

- with an inflatable OEB 3 gasket;
- with an active and passive valve system for an OEB 4 level of containment.

The system then works in combination with a vacuum transfer system to convey the material from the Pharma Bin to other equipment, ensuring continuous production flow.



The IBC Discharge Station is manufactured from stainless steel and designed to comply with cGMP, UNI EN ISO, and ATEX requirements. The system could be customized according to the specific production process requirements of each Customer.

## INSTALLATIONS & APPLICATIONS

The Blender Column can handle both Bin and Drum containers using a special adapter.



Blending and discharging System from Bin-to-Bin by Mill



Bin Blending Column for Mill loading



Fixed Bin Blender Column with Clamp Connection for Bin connection



Blender Column with Clamp Connection for Bins with removable trolley



Bin Blending Column for Mill loading



# Mobile Blender for Bin

The Mobile Mixer for Pharma Bin is designed for mixing and homogenizing dry powders. It is mainly used in the pharmaceutical and chemical industries, where there is the need to blend powders directly inside IBC containers, avoiding additional Mixer loading, unloading, and cleaning operations.

The Bin fixing and connection systems can be customized according to the specific requests of the Customer.

Clamp fixing system

Fork-type Fixing System



The Mobile Blender provides efficient mixing thanks to the 30° Bin inclination

AISI 304 stainless steel arm designed to blend Pharma Bins from 5 liters up to 300 liters, with a maximum capacity of 150 kg

An electric motor can rotate the Bin clockwise and counter-clockwise with speed ranging from 4 to 20 rpm



The Bin Mixer Blender operations are managed by a PLC, allowing the machine to control the safety sensors that detect and secure the working area (with an onboard safety cage or laser scanner) during the Bin mixing/rotation phase. The machine has a highly technological design and structure, allowing easy maintenance and cleaning.

If the Bin Blender is not installed in a working area dedicated exclusively to that machine, it can be equipped with an external structure with an electro-locking system to ensure safe mixing.



The Mobile Bin Blender is manufactured in full compliance with cGMP guidelines and UNI EN ISO safety norms. Upon request, it could be installed in ATEX classified zones and further customized according to the specific production process requirements of each Customer.

# Mobile Blender for Drums

The Mobile Drum Blender is designed for mixing and homogenizing dry powders. It is used in all pharmaceutical, chemical, food, plastics, and mineral handling processes where there is the need to mix powders uniformly and directly in drums, avoiding the loading, unloading, and cleaning of the mixer.



- The Mobile Mixer provides efficient blending thanks to the 30° Drum inclination with respect to the machine's rotation axis
- AISI 304 stainless steel arm designed to mix drums from 2 liters up to 200 liters, with a maximum capacity of 200 kg.
- An electric motor can rotate the Bin clockwise and counter-clockwise with speed ranging from 4 to 20 rpm.

The Drum Mixing System operations are managed by a PLC, allowing the machine to control the safety sensors that detect and secure the working area (with an onboard safety cage or laser scanner) during the Drum mixing/rotation phase. The machine has a highly technological design and structure, allowing easy maintenance and cleaning.



The Mobile Drum Blender is manufactured in full compliance with cGMP guidelines and UNI EN ISO safety norms. Upon request, it could be installed in ATEX classified zones and further customized according to the specific production process requirements of each Customer.



# IBC/Bin Tumbler

The Bin Tumbler Mixer is designed for mixing and homogenizing dry powders and is primarily used in the pharmaceutical and chemical industries in all those powder handling processes in which there is the need to blend powders homogeneously directly inside the Bin without additional mixer loading, unloading, and cleaning operations. The IBC Tumbler ensures efficient mixing thanks to its double 15° inclination with respect to the machine's rotation axis and the rotation of the Bin both clockwise and counterclockwise. The Tumble Blender has an electro-mechanical Bin locking system to ensure the horizontal platform position during the Bin loading/unloading and at the end of each processing cycle.

The IBC Bin Tumbler is operated by a PLC system, allowing the machine to control the safety sensors that detect and secure the working area (with an onboard safety cage or laser scanner) during the container mixing/rotation phase.

The Tumbler can be designed for through-the-wall installation to save space in the processing area, ensure stability, and comply with current GMP standards.

The wide range of AGIERRE Mixing Systems shows the great versatility of our products within the pharmaceutical industry for handling Pharma Bins or other containers of any size and shape with a maximum capacity of 2000 kg.



Automatic closing system with controlled force springs and pressure pads for Bins up to 2000 kg

Mixing and homogenization are guaranteed by the double inclination of 15°

The motor rotates the Bin both clockwise and counterclockwise at a variable speed from 4 rpm to 20 rpm.



The IBC Bin Blender Tumbler has a high-tech design structure that makes its cleaning and maintenance easier. The machine consists of the following elements:

- Supporting structure: made of carbon steel profiles fixed to the floor with anchor bolts.
- Lifting platform: composed of an AISI 304 arm connected to sliding guides moved by the screw-nut system driven by an electric motor.
- Outer casing: consisting of a stainless steel AISI 304 plate shaped to cover the Tumbler's supporting structure.
- Gear motor unit: comprising an electric motor coupled with a reduction gear for the Bin rotation function.
- Control panel.

