

I Application

The agitation systems with lifting column consist of an agitator unit with the corresponding support arm, and a lifting column incorporating the hydraulic lifting system. The systems are mounted on a support base.

The lifting column is designed to accommodate a standard INOXPA agitator or other standard agitators with a maximum flange size of Ø250 mm.

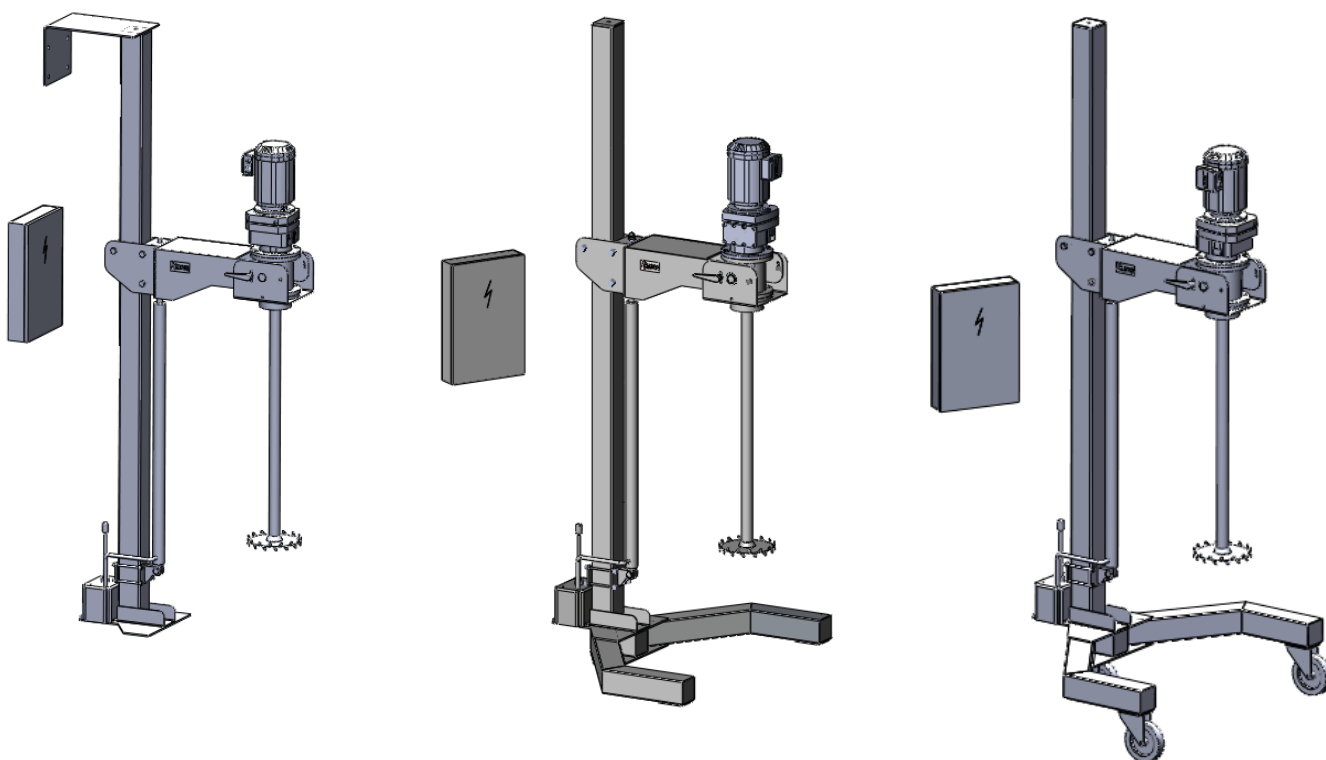
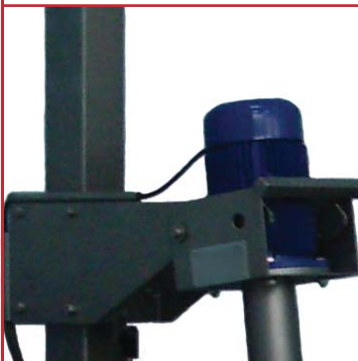
This system allows exchanging the agitator as a function of the required mixture, avoiding the need for a different agitator for every tank and therefore optimizing production costs.

All common agitator types can be used, e.g. Cowles, mixer, anchor, propeller, blade, etc.

I Principle of operation

Depending on the model, the tank is moved to the agitator unit to carry out the mixing or conversely, the agitator unit is moved to the tank.

The lifting system is actuated and the agitator is lifted, allowing the tank to be correctly positioned and centred. To prevent the agitator or the tank from moving during the mixing process, they are secured in position by means of a manual or pneumatic restraint system. The agitator is lowered and is introduced into the tank. The agitator is put into operation using the control panel. When the mixing is complete, the agitator is withdrawn from the tank and released from the restraint system.



I Materials

Parts not in contact with the product *AISI 304 (EN 14301)*
 Parts not in contact with the product *Matt finish*
 Hydraulic system *White epoxy painted*

I Design and features

Depending on the installation, the systems are classified into three types:

Name	Mobility	Fastening
Basic skid	Fixed	To the floor and wall
Skid with tubular base	Fixed	To the floor
Mobile skid	Mobile	3 caster wheels: 2 rigid casters with brake and 1 swivel caster

The dimensions and capacities of the tanks which can be used are as follows:

Name	Ø tanks	Capacity (litres)
Basic skid	400 to 1000	50 to 800
Skid with tubular base	400 to 1000	50 to 800
Mobile skid	400 to 1000	50 to 800

The general characteristics of the agitators with a maximum weight of 150 kg are indicated in the following table:

General characteristics	Maximum values
Direct motor power	4 kW
Geared motor power	4 kW
Agitator shaft diameter	Ø60 mm
Agitator shaft length	1500 mm
Diameter of Cowles type agitator or other	Ø350 mm

The standard control panel with IP-55 protection can be mounted on the wall or on the skid itself, according to the specifications of the agitator used.

The lifting system moves the agitator vertically up or down to facilitate its insertion into and extraction from the tank. It uses a hydraulic system with a 1000 mm stroke cylinder. The hydraulic pump, located in the rear part of the column, can be manually or electrically operated. It incorporates a hydraulic safety system. The lifting speed is 0.2 m/s. It is also available with an electrically driven mechanical lifting system.

All versions and options are CE certified. The unit always includes a retractable tubular protective cover for the agitator shaft and electric position and priority detectors.

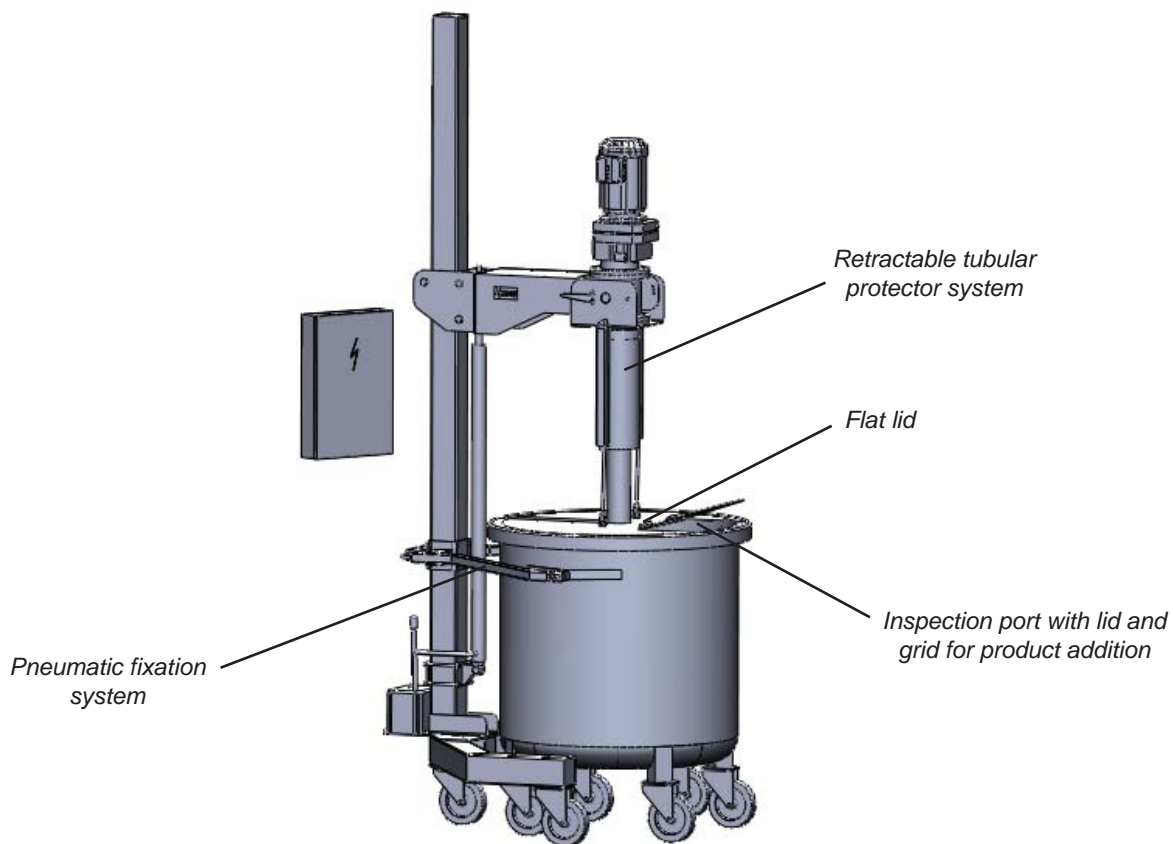
As standard, the lifting system is equipped with a joint that allows the agitator to be inclined, if necessary. The inclination is restricted to predetermined fixed points, where the shaft is locked in position to ensure safe operation of the agitator.



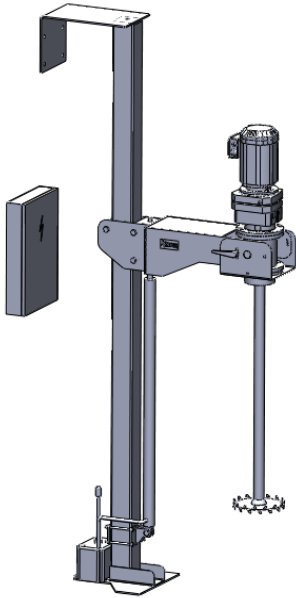
I Options

A series of accessories have been designed to facilitate working with this system and enhance its safety:

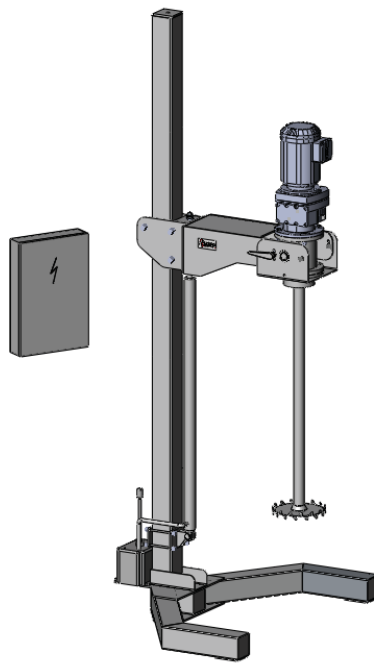
- A manually operated pneumatic restraint system for the tanks. This system can be replaced by one based on straps and hooks.
- A flat lid for the tank incorporating a lifting and lowering system by means of manually operated pneumatic pistons. The agitator will not work when the lid is open or when the position sensors detect that the tank is in the wrong position. To facilitate the manual addition of products, the lid incorporates a port with a cover and a grid, which allows adding the product but prevents putting a hand through it. It also features a retractable tubular protective cover for the agitator shaft.



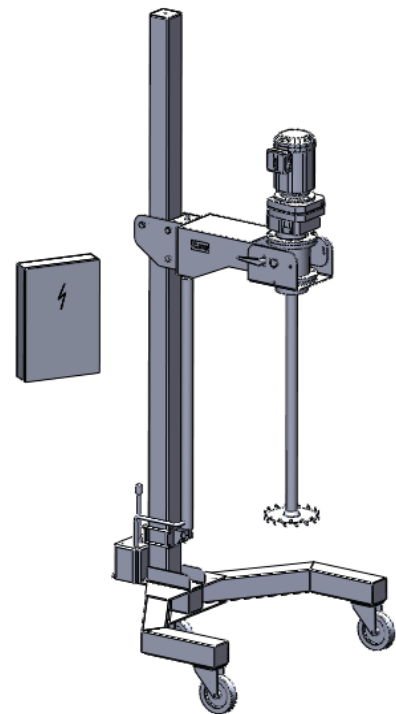
I General dimensions



Basic skid



Skid with tubular base



Mobile skid

Name	Width (mm)	Depth (mm)	Height (mm)	Height with lifted agitator (mm)	Weight (kg)
Basic skid	500	1350	3000	3500	290
Skid with tubular base	1500	1350	3150	3650	320
Mobile skid	1500	1350	3350	3850	380

The maximum weight of the complete agitator assembly that can be supported by the column is 150 kg.



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