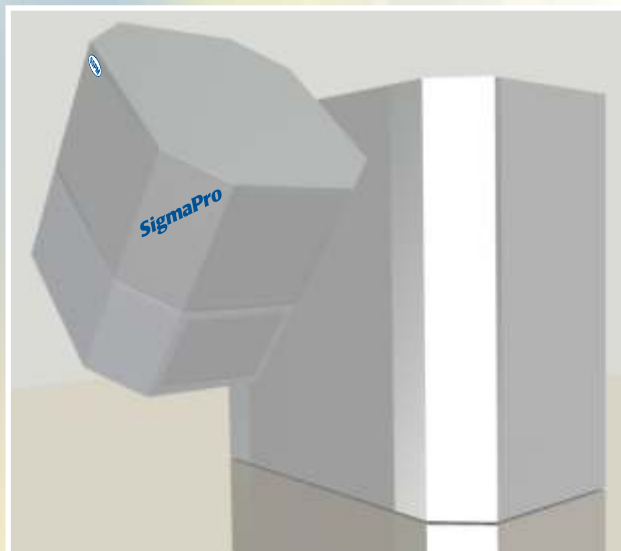


Sigma Pro



SSPM Systems & Engineers is an Indian Multinational company specializing in the design, development, engineering, manufacturing, & validation of Pharmaceutical solid dosage processing equipment offers end to end process solution to pharmaceutical industry by providing wide range of equipment suits to End User's batch size & process requirements

SSPM admits the responsibility to develop the new optimized process solution to pharmaceutical solid dosage form by adding one more jewel universally identified as "SigmaPro" Single Bowl Processor

Introduction

"SigmaPro" offers ultimate quality, flexibility and repeatability in pharmaceutical production with its ability to handle aqueous, & non-aqueous based granulation, & effervescent manufacturing in a single bowl.

"SigmaPro" engineered in a modular fashion to accept the challenge of industry application demand, Modular design facilitates user to configure the application with future upgrades From raw material loading [Through "SigmaTrans" Pneumatic Conveying System] to discharge of finished product - the entire process is contained in a single bowl This ensure product which are

sensitive to external environment are well protected with in enclosed bowl. And also offers a personal safety through exposure of product processing hazardous if any.

"SigmaPro" is capable of handling all in one granulation in the one processing bowl, "SigmaPro" is available in stand alone plug n play version and through the wall construction as well, In through the wall construction only processing bowl is located inside the manufacturing area consuming lesser floor space, vertical opening of lid eliminates clearance area behind the bowl, reduces floor area result into relatively lesser cleaning requirement.

The "SigmaPro" is the single bowl processor that combines a swinging bowl, low temperature jacket heating and microwave drying in an efficient and safe way. The use of swinging bowl during the drying process ensures fast and even drying of granules. The swinging bowl increases the available contact surface between the granules and caldwell, resulting in faster drying. Further to this "SigmaPro" uses vacuum drying technology with several options which enables the user to select appropriate combination best suits to product behavior. The solvent recovery system is an integrated option to ensure highest environmental standards

Color touch screen base operator terminal with user friendly in-house engineering development makes equipment user friendly. Operator interface with in built recipe management feature that stores formulation process data base. Highly instrumented technology monitors and control accurate wet granulation end point and consistent drying as well. Touch Screen having inbuilt facility of real time alarm management system and instrument calibration scheduler.



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Advantages

- The “SigmaPro” Single Bowl Processor is the fundamental choice for wet mixing, drying, & granulating.
- This unique feature of combined technology will reduce manufacturing space
- Total enclosed process; hence reduce chances of product contamination to a large extent
- Reduces environmental risk by usage of solvent recovery system
- Low temperature drying technology reduces usage of expensive utility
- Fully automated process ensures more accuracy and repeatability for complex processes
- Online video monitoring system ensures historical review and forward integration plan ensures better process optimization
- Comparing Swinging Bowl Technology v/s Stationary Bowl Technology
- Swinging bowl during vacuum drying improves drying efficiency and increases granules property of low-binder solution
- Swinging bowl technology increases drying process by movement of more efficient kinetic energy transfer and lesser mechanical thrust on processing powders ensures improved particle size distribution leads to better flowability and bulk density
- This technology provides a better process results for weak and/or low-binding solution without destroying granule property.

Validation

- We believe, Equipment validation is an essential area of concern for Pharmaceutical manufacturing today and SSPM accept their responsibility to cater the industry need, As a standard policy we supply Design Qualification, Installation Qualification, Test Certificates of contact parts and non-contact surface, Calibration certificates of instrumentation and controls, Operation Qualification. “SSPM” can also work with end user to prepare customized protocol to suit their process specific needs.



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