

## About SSPM

Since 2001, SSPM is an active contributor of solid dosage process and formulation equipment, tablet coating system, material handling system and other ancillary equipment under the brand name of “**SIGMA**”

The goal of SIGMA is to achieve a level of quality that is nearly perfect. We always thrive by our SIGMA rule to produce quality and efficiency and reducing errors and defects. By applying comprehensive approach such as *Define, Measure, Analyze, and Improve & Control* to achieve process improvement which enhance customer satisfaction.

SSPM has headquarter in Ahmedabad, INDIA and global presence with an extended sales network spread over 4 continents. The manufacturing facility is spread over an area of 40,000 Sq. Ft. and office area is over 10,000 Sq. Ft. with latest set of manufacturing equipment.

We have well-constructed Research & Development unit where our research associates conduct survey thorough market research in order to develop high end machines. Abiding by the business ethics and quality policies, we ensure that we always meet the stringent quality standard.

With our intensive research processes, we often find innovative solutions for developing and designing machines, plants as per industrial standard. We lay immense emphasis on quality and performance of our machines therefore we experiments and execute new technology in manufacturing our machines and systems. Our strenuous efforts towards this direction enable us to make clients satisfy and hence getting appreciation from customers spread across the globe.

SSPM is a **ISO 9001:2015 Certified Company** which follows **GMP Rules & Regulations** to ensure quality and SSPM has been a supplier of equipment which compliance all **cGMP norms and regulated by,**



## ***After Sales - Service***

Be at ease! We know the value of return on investments. We know how you truly rely on our equipment to get most of your productivity. SSPM always stands by your side when in need to guide and support our end user with following:

- Operator Training
- Process Optimization
- Machine Upgradation/Software upgradation
- Annual Maintenance Services
- Cleaning and Maintenance guidelines
- Documentation

We have Senior Service Engineers and process experts who are willing to serve customer worldwide. We are only one call away to help you out 24\*7, 365 days a year!

Further to this, if you are looking for any spares/man day visits/online support/technical assistance please drop down an e-mail with query and submit to us at [service@sspm.com](mailto:service@sspm.com)

High Shear Mixer Granulator  
By,  
SSPM Systems & Engineers Pvt. Ltd.

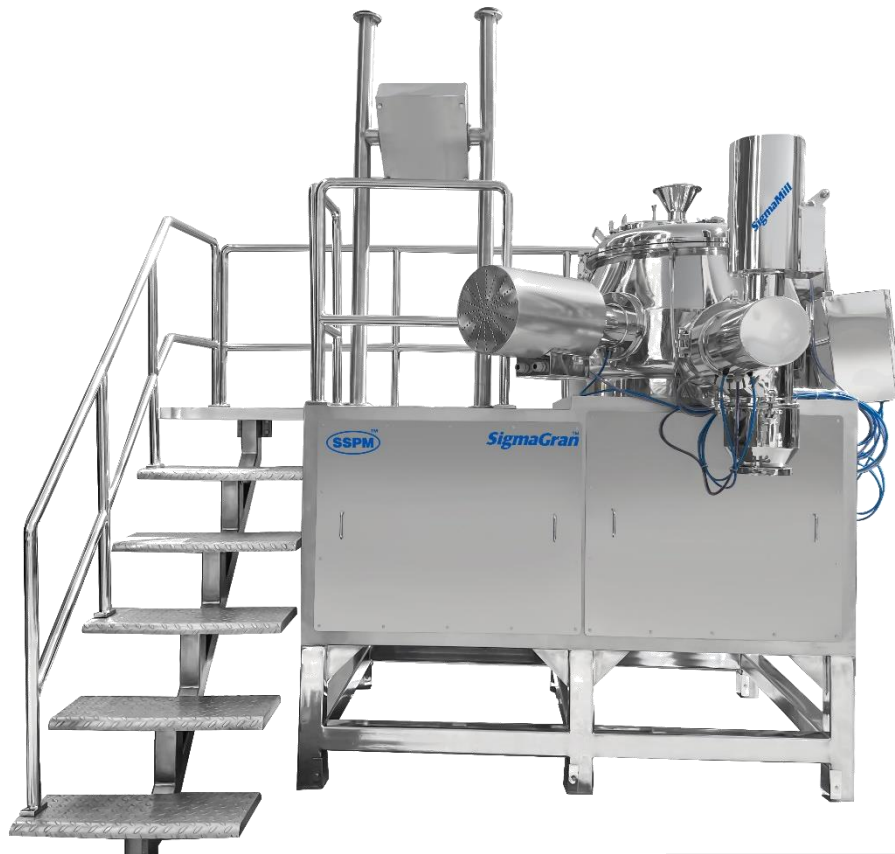
# **SigmaGran<sup>®</sup>**

*[Vacuum Rated Design]*

***Pilot / Production Scale***

***Rapid Mixer Granulator***

SigmaGran<sup>®</sup> is extremely effective in dry mixing of granules and make them suitable for the further processing. The component we have designed ensures faster and effortless mixing. SigmaGran<sup>®</sup> can be integrated with the SigmaForm via required accessories, which reduces process time and makes formulation process much easy, swift and tidy.



***For Production Scale***

[www.sspm.com](http://www.sspm.com)

“Mixing of Substances: Uniformly & Homogenously”



## **Lab Scale**

## **Rapid Mixer Granulator**



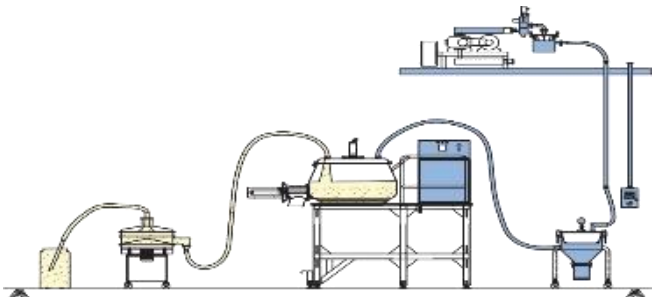
Purpose behind R & D and/or Lab scale Rapid Mixer Granulator is to be confident about the process parameters and after that you can easily scale up your batches. SSPM Lab Scale Rapid Mixer Granulator is equipped with all the features and parameters which pilot and production scale Granulator will have.


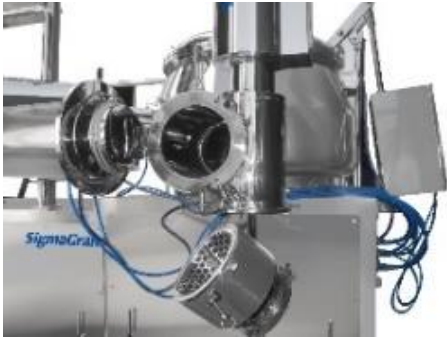
It is designed in a resourceful, convertible way and can be put on wheels if user wishes.

\* Interchangeable facilities can be integrated within the system to obtain greater span of batch capacities



**For Lab Scale**

KEY FEATURE	STRENGTHS
Cylindrical and conical shape of bowl	The geometry of bowl gives better product movement inside the bowl; hence, achieving desired mixing properties
4 Blades Impeller and U Shaped Chopper Blades	<ul style="list-style-type: none"> <li data-bbox="711 380 1490 499">❑ 4 Impeller blades ensures homogenous binder-powder mixing and due to tumbling effects no possibility of dead zones within bowl spots</li> <li data-bbox="711 659 1490 737">❑ Owing to U shape chopper design; lumps can be easily broken and desired particle size can be obtain</li> </ul> <div data-bbox="1170 464 1430 636" style="text-align: right;">  </div> <div data-bbox="1247 709 1430 890" style="text-align: right;">  </div>
Available with purging Facility	Air purging provide trouble free operation and less maintenance approach as it prevents powder/fine granules to leak into the mechanical assemblies of an equipment
Hassle free operation of top lid lifting, sliding by different methods	As room height and width concerns, SSPM will provide solutions of how lids can be opened and closed through different methods : <ul style="list-style-type: none"> <li data-bbox="711 1115 1110 1150">❑ Pneumatically operated top lid</li> <li data-bbox="711 1157 1073 1192">❑ Swivel type top lid opening</li> <li data-bbox="711 1199 1032 1234">❑ Counter weight method</li> </ul>
RMG Loading with inline sifting	This procedure makes formulation process much faster and cleaner way in a close loop system via SigmaTrans (Pneumatic Conveying System) <ul style="list-style-type: none"> <li data-bbox="711 1360 894 1396">❑ Economical</li> <li data-bbox="711 1402 1057 1438">❑ Less man power required</li> <li data-bbox="711 1444 1479 1522">❑ Satisfy auditors and regulatory bodis by attaining hygiene and safety protocols</li> </ul> <div data-bbox="760 1549 1409 1843" style="text-align: center;">  <p data-bbox="911 1843 1214 1873">RMG LOADING WITH INLINE SIFTING</p> </div>

<p>Auto Discharge from RMG to FBD</p>	<ul style="list-style-type: none"> <li>❑ Ensures quick charging of sized particle granules into a dryer via a close loop system</li> <li>❑ Gives optimum results when placing both equipment in a single room</li> </ul> 
<p>Binder Charging via different methods</p> <ul style="list-style-type: none"> <li>❑ Through Lifter Attachment</li> <li>❑ Through Peristaltic Pump</li> </ul>	<p>Binder charging facility eliminates the manual charging technique as it takes longer time plus it will form more lumps when added manually</p>
<p>Automation and Control System</p>	<p>Control system via PLC and HMI</p>
<p>21 CFR PART 11 COMPLIANCE</p>	<p>Compliance with 21 CFR PART 11, ATEX , GMP              This system ensures higher safety, data retention and recipe management policy with full secure controls which satisfy auditor and regulatory bodies</p>
<p>Wet Milling Attachment</p>	<p>This additional attachment gives end user a relaxed solution by optimizing time during drying process because wet milling can gives uniform and definite sized granules</p> 

## ***Additional Key Features***

- END Point Detection can be precisely monitored & measured through different methods like time, ampere, and torque
- Spray Ball assembly with piping arrangement can be done for effective cleaning of bowl
- FLP LED light can be given for better process visualization
- Bowl can be provided with the Dual jacket glass wool insulation for the application, where maintaining and controlling process temperature is essential for the product
- Batch printing facility as per real time process data and user management policy with
- Cleaning and washing facility facilitate with the extra attachments for easy and effective cleaning
- Impeller lifting assembly can uplift the impeller assembly while cleaning procedure is going on which reduces man handling and prevents unnecessary accident
- There is two methods of loading material into the bowl, one is RMG loading with inline sifting (SigmaSift™) and other is, RMG loading with inline high speed sifting (SigmaHighSift) through Pneumatic Conveying System by SigmaTrans

## Technical Specifications

<b>SigmaGran®</b>								
<b>Model</b>	2.5	5	7.5	10	15	25	50	75
<b>Gross Vol.</b>	2.5 L	5 L	7.5 L	10 L	15 L	25 L	50 L	75 L
<b>Working Vol.</b>	2 L	4 L	6 L	8 L	12 L	20 L	40 L	60 L
<b>Optimum Batch Capacity @ 0.5 BD</b>	0.6 KG To 1 KG	1.2 KG To 2 KG	1.8 KG To 3 KG	2.5 KG To 4 KG	4 KG To 6 KG	6 KG To 10 KG	12 KG To 20 KG	18 KG To 30 KG
Output will be depended upon B.D of Product								

<b>SigmaGran®</b>									
<b>Model</b>	100	150	300	400	600	800	1000	1250	1500
<b>Gross Vol.</b>	100 L	150 L	300 L	400 L	600 L	800 L	1000 L	1250 L	1500 L
<b>Working Vol.</b>	80 L	120 L	240 L	320 L	480 L	640 L	800 L	1000 L	1200 L
<b>Optimum Batch Capacity @ 0.5 BD</b>	24 KG To 40 KG	36 KG To 60 KG	72 KG To 120 KG	96 KG To 160 KG	145 KG To 240 KG	195 KG To 320 KG	240 KG To 400 KG	300 KG To 500 KG	360 KG To 600 KG
Output will be depended upon B.D of Product									

### Compliance:





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**Thank You!**



***Plot 175-176, GIDC, Phase II, Vatva, Ahmedabad 382445,  
Gujarat, India.***



***[www.sspm.com](http://www.sspm.com)***



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