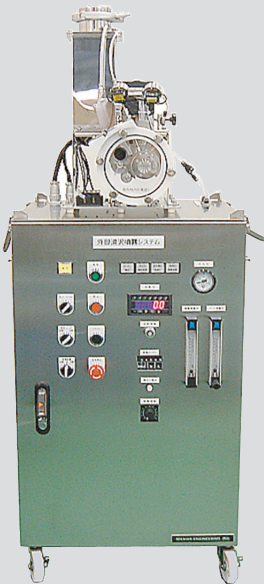


Micro powder sprayer

# External Lubricating Sprayer (PDSL)

Enables production of tablets containing no lubricant inside drugs



Type I



Type II



Type III

Performance is maximized  
through uniform spraying of  
dilute lubricant

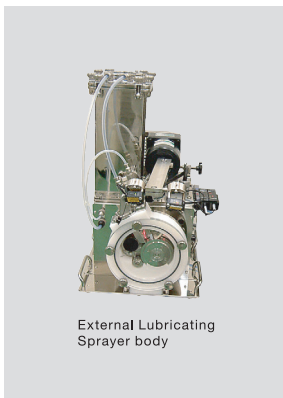
Fine capillary feed system  
enables accurate and stable  
feeding

Feed rate is controlled  
easily with rotor speed  
adjustment

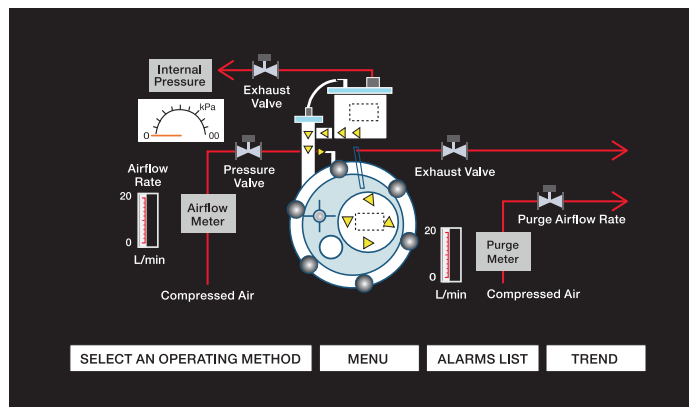
**This apparatus enables production of tablets free of internal moisturizer, by directly spraying the moisturizer to the upper and lower pestles and mortars to coat the powder contact surface with it.**

## Features

An accurate feed rate and high stability are required to feed the lubricator. This apparatus is capable of feeding a fine amount of lubricator in an accurate and stable manner through a fine-grooved charging rotor. A feed rate depends on the rotor rpm, providing high controllability.

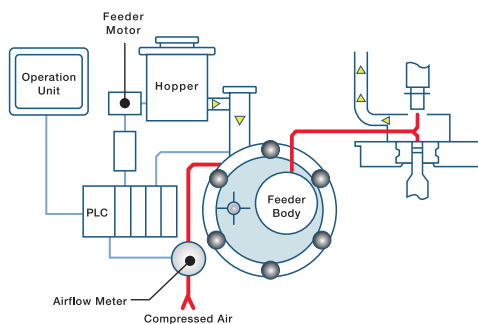


## Display image



## Effects of External Lubrication

- Reduced molding pressure
- Shorter disintegration time
- Suppressed difficulty in tablet-molding
- Increased tablet hardness
- Lower production costs
- Potential for new formulation methods



## Features of the spray unit

To mold tablets, it is required to mix a small amount of lubricator with the main ingredient and excipient beforehand in order to suppress the difficulty in tablet-molding, but it is known that it has a bad effect on hardness and disintegration of tablets. So, it is essential to the quality and characteristics of the products to minimize the amount of moisturizer adhered to the surface of the metal molds of tablet molding machine. Use of excessive moisturizer is not recommended from an economical viewpoint as well. By uniformly spraying the diluted moisturizer, this nozzle unit can equally apply it to the surface of the metal molds without overlapping to fully exhibit the performance of the moisturizer.

## Options

- Multifunctional mechanism by a touch screen.
- Production data collection system.
- Feed rate monitor.

## Lineup

Type	TYPE I	TYPE II	Type III
Feed system	Fine-grooved charging	Fine-grooved charging	Fine-grooved charging
Spray system	Air current	Air current	Air current
Rotor [rpm]	1 ~ 6	1 ~ 6	1 ~ 6
Feed rate [at g/h Mg-St spray]	8 ~ 120	8 ~ 120	8 ~ 120
Min. dispersed airflow rate [L/min n.t.p.]	12	12	12
Hopper capacity [ℓ]	5	5	5
Weighing Trend display [Spray quantity, Weigh]	-	w/digital scale	w/digital scale
Operating section	Push button system	Touch screen system	Touch screen system
Weighing Trend display [Recovery flow rate]	-	-	w/digital scale
Power source	AC100V 600VA	AC100V 600VA	AC100V 600VA
Min. compressed air feed [MPa]	0.6	0.6	0.6
Dimension W×D×H[mm]	Approx. 500 × 500 × 1,400	Approx. 800 × 575 × 1,300	Approx. 800 × 575 × 1,300
Weight [kg]	Approx. 100	Approx. 200	Approx. 220