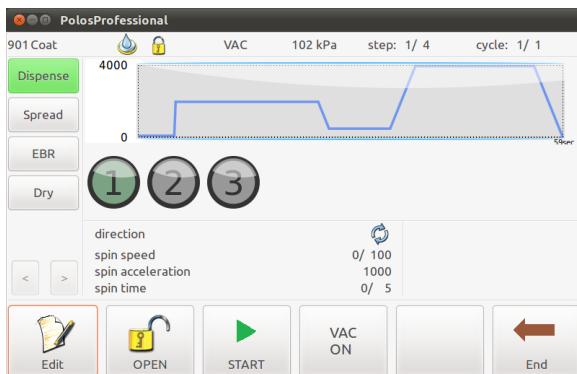
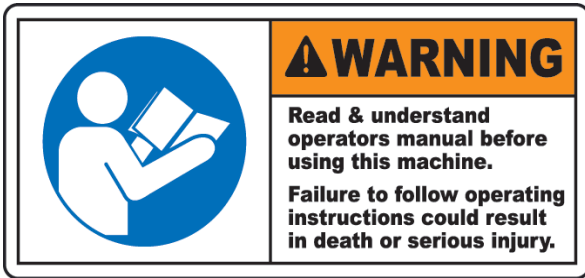


System operation



Before starting:

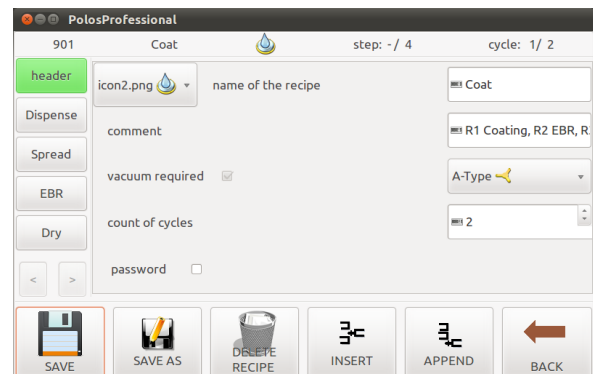
- Inspect the system to assure that no damages or failures are present.
- Make sure all required facilities are connected and active.



Quick Start:

1. Select desired recipe from home screen clicking on its icon
2. Release lid lock click on “**OPEN**” button
3. Place a wafer or substrate on the chuck (Substrate should be exactly in the middle)
4. When using the vacuum chuck: Press “**VAC**” key to activate the vacuum
5. Close the lid
6. Press “**START**” button to start the first step of the chosen recipe
7. The spin processor will start selected process; wait till the last step has finished and the chuck stops turning
8. Release lid lock clicking on “**OPEN**” button and open the lid
9. Press “**VAC**” to release the vacuum
10. Substrate can be removed from the chuck

Process recipes	
Recipe #	Description
1	
2	
3	
4	
5	
Service recipes	
Recipe #	Description
901	Coat demo
902	Develop demo
905	Device test



Quick Recipe creation:

1. In home screen click on “**NEW**” button to create a new recipe
2. Adjust recipe related parameters as listed in header (Recipe name, chuck, icon, etc). Those settings will apply to all steps of the recipe.
3. Select a step to adjust step related parameters (Time, Speed, Active output, etc)
4. Adjust parameters toggling between following tabs click on relative selection bar:
 - Spin page
 - Dispense page
5. Insert or append additional step(s) as required
6. Click on “**SAVE**” button to save modification
7. Click on “**BACK**” to leave the edit screen and return to home screen

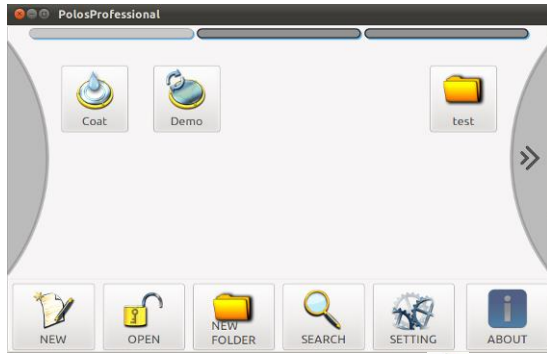


When create a recipe ensure that:

- valve activation will **not** create dangerous situation **mixing chemical**
- dispensed liquid flow will **not overflow** drain system
- **final** step will **rinse** substrate and chamber

(Further details can be obtained from the operating manual)

Home screen:



Select a recipe touching relative icon on main screen will open it in run mode.

Open a folder touching its icon on main screen.

Switch pages

Use the sliders on the top of the screen or the buttons on left and right sides of the screen to switch between different pages (if available).

Move a recipe or folder holding relative icon until selected. Touch on destination position for placing.

Create new recipe touching button will open the edit mode.

Release the lid lock touching the unlock button in order to release it and allow to open the lid. Lid lock will be automatically reactivated after 5 seconds.

Create new folder touching button, Insert folder name in prompted field (maximum of 10 alphanumerical characters, with neither spaces nor special characters).

Access Search function touching , for easier managing.

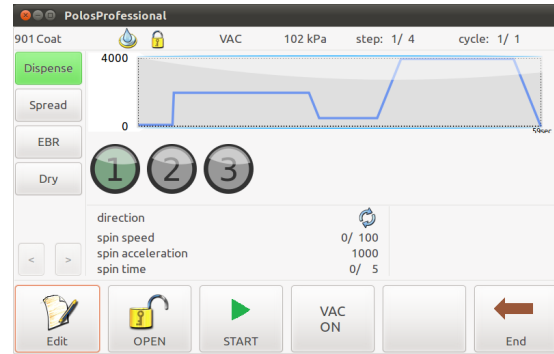
Access Setting screen touching , for adjustment of system parameters.

Access About screen touching to have unit information and contact details.

Recipe Parameters:

Parameter	Range (Maximum value could be limited per factory requirement)	Notes
Header		
Name	Text	(alphanumeric character only)
Icon	Selectable	
Comment	Text	Optional
Chuck	Selectable	
Password		Optional
N. of cycle	1-999	Optional

Run mode:



Start a recipe touching . Unit will start and command button will be replaced by

following .

Touching to Edit selected recipe.

Abort a recipe touching stop button.

Suspend a recipe touching the pause button, Will be possible then to continue or abort the recipe.

Touching EndOfCycle button, the recipe will continue as programmed until it reaches end of last step, recipe will then terminated instead of running next cycle.

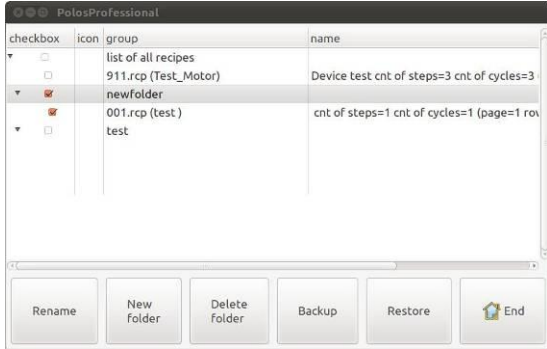
Select different step touching relative button , active step is highlighted in green. It is possible to scroll between steps by touching button.

In case of error will appear, touching on it allow to access Log file and get more information on unit status and error cause.

Spin		
Time	0.0-9999.0 sec	Spin time, excluding ramp up and ramp down time
Direction	CW - CCW - PDL	Clockwise, Counterclockwise, Puddle
Speed	0-12000 rpm	Only available for clockwise and counterclockwise mode
Acceleration	0-30000rpm/sec	Only available for clockwise and counterclockwise mode
Amplitude	0°-359° degree	Performed movement in CW and CCW direction. Only available for puddle mode
Period	0-2000 ms	Repetition period for each movement. Only available for puddle mode
Dispense		
Output	1, 2, 3	Press the number of the relay you want to activate or deactivate
Dispense time	0-9999 sec	Time for output activation, Not selectable by user, automatically calculated based on spin time and set delays
Delay before	0-10000 sec	Set a delay before activating the output after step start
Delay after	0-10000 sec	Set a delay after activating the output before step finish

(Further details can be obtained from the operating manual)

Search:



To **Rename** a recipe or a folder, touch relative checkbox and touch **Rename** button

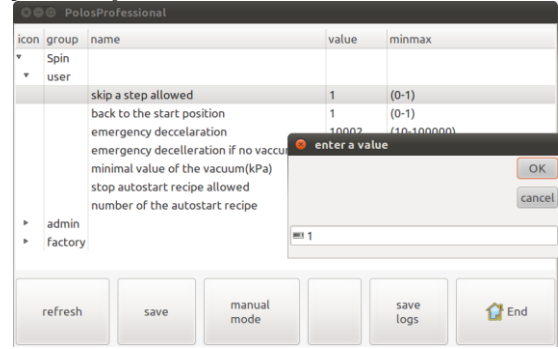
Is possible to **Backup** selected recipe(s) to a USB stick, insert a stick on port provided and touch **Backup** button.

To **Restore** a previously created backup, insert a stick on the USB port and touch **Restore** button, a screen will be prompted to select the set of recipe to be restored

! WARNING!

Do not stop nor power of the unit confirmation message appears; otherwise selected data may be lost and system filenames corrupted.

System parameters:



Parameter	Default	Min	Max	Notes
User				
vacuum_ok	48	10	100	minimal value of the vacuum (kPa)
Admin				
time_let_lid_unlocked	5	0	5	time to let the lid unlocked
lid_unlocked_latency	2	1	3	latency for the lid-unlocked sensor

! WARNING!

Restart the unit after any parameter change in order to allow loading of new value at unit start-up.

Facility requirements:

Medium	Connection	Condition
Power	IEC60320-C14	100-120 or 200-240VAC (autoselected)
Purge gas	ID4/OD6mm	20-50kPa, 2-5lpm
Vacuum	ID6/OD8mm	-70kPa
Drain	1" MNPT	Optional (≥ 5lpm by gravity)
Exhaust	1" MNPT	Optional (≥ 1m ³ /h)
CDA	ID6/OD8mm	Optional (3-4bar)

Contact:

SPS-Europe B.V.
Midden Engweg 41
NL-3882 TS Putten
THE NETHERLANDS
Tel. +31 341 360 590
Fax +31 341 360 589
info@sps-europe.com

(Further details can be obtained from the operating manual)