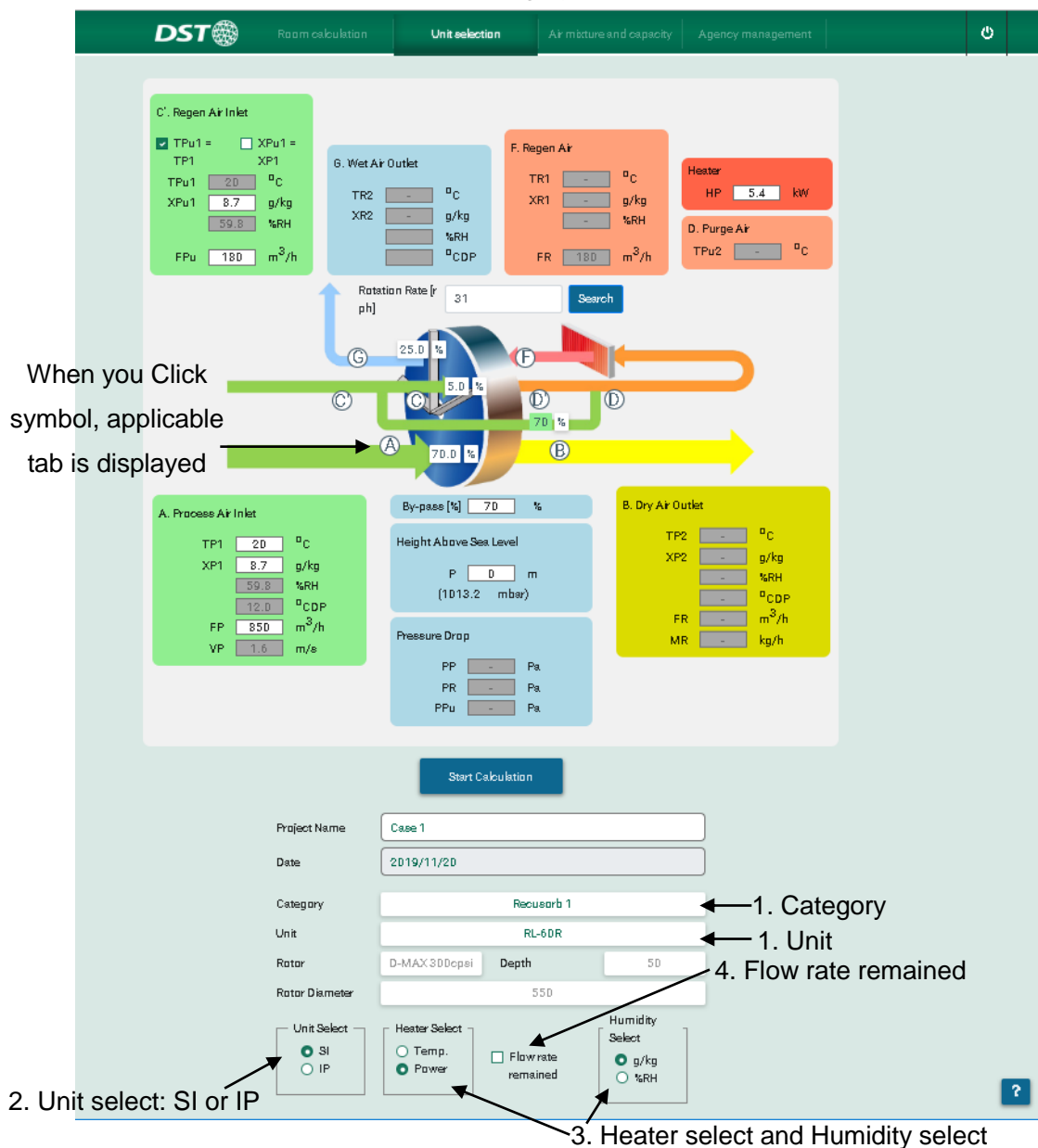


Manual of Unit selection

This program is supported by browser of Microsoft Edge and Google Chrome.

On this page you can get the unit performance, which is Dry Air Outlet, Wet Air Outlet and Pressure Drop.

1. Input Project Name and select the category and unit.



The screenshot shows the DST software interface for unit selection. The top navigation bar includes 'Room calculation', 'Unit selection' (active), 'Air mixture and capacity', and 'Agency management'. The main area displays a schematic diagram of a rotary dehumidifier with various air streams labeled A through F. Annotations point to specific input fields:

- Annotation 1:** Points to the 'Category' dropdown menu, which is set to 'Recusarb 1'.
- Annotation 2:** Points to the 'Unit Select' section, where 'SI' (International System) is selected over 'IP' (Imperial).
- Annotation 3:** Points to the 'Heater Select' section, where 'Power' is selected over 'Temp.'.
- Annotation 4:** Points to the 'Humidity Select' section, where 'g/kg' is selected over '%RH'.
- Annotation 5:** Points to the 'Flow rate remained' checkbox, which is checked.

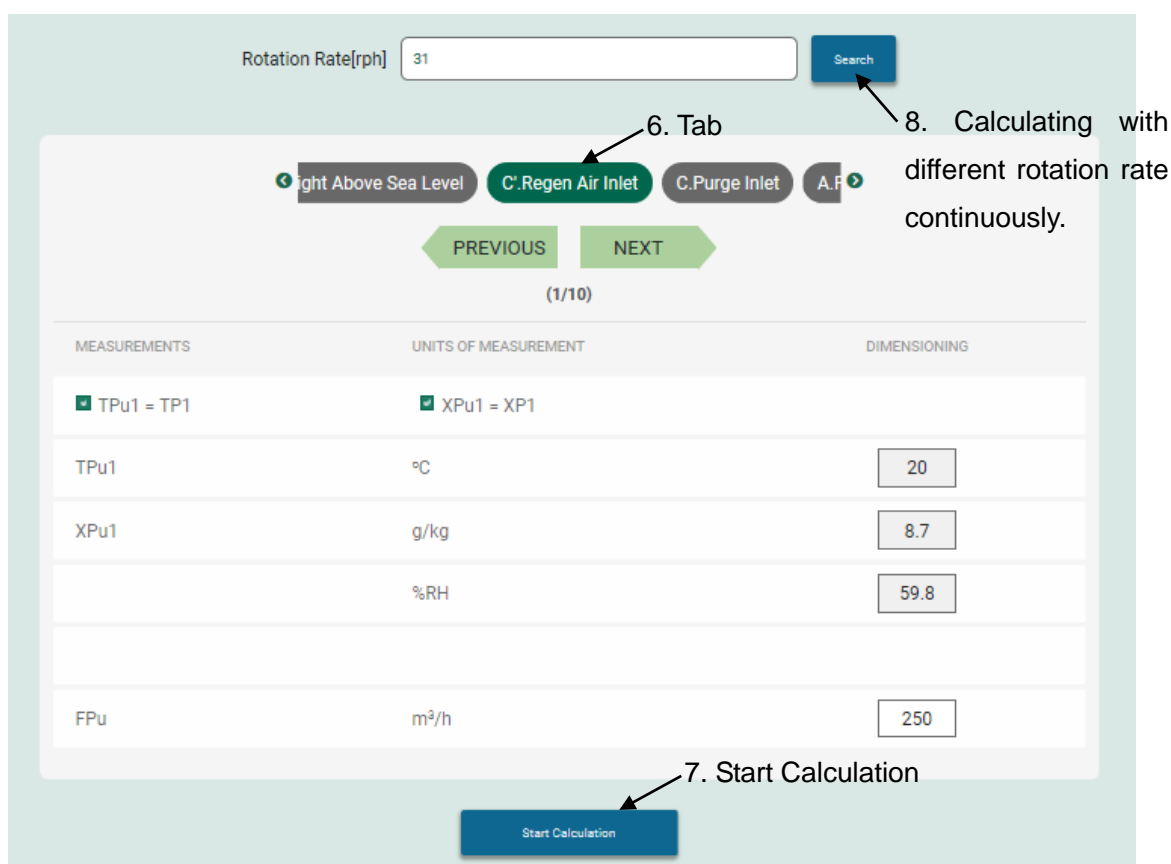
Other visible fields include 'Project Name' (Case 1), 'Date' (2019/11/20), 'Unit' (RL-6DR), 'Rotor' (D-MAX 300cps), 'Depth' (50), and 'Rotor Diameter' (550). The bottom section contains a 'Start Calculation' button and a 'Help' icon.

2. Select Europe SI (default) or US IP units at "Unit select".
3. Choose between regen temperature or regen power (default) at "Heater select", and between g/kg (default) or %RH at "Humidity select"
4. When you check the "Flow rate remained" box, even if you change unit, Process Air Inlet flow rate (FP) is same value.
5. If installation is on high level, write in on "Height Above Sea Level"

- Input the Inlet condition of Process Air Inlet, Regen Air Inlet and Heater power or temperature. By default the program choose regen inlet at the same as process inlet, to change that uncheck the box for it.

You can input the value not only textboxes around the flow chart, but also tabs.

- Click “Start Calculation” button, same function on the one at the flow chart and the one below the tabs.



Rotation Rate[rph] 31 Search

6. Tab

8. Calculating with different rotation rate continuously.

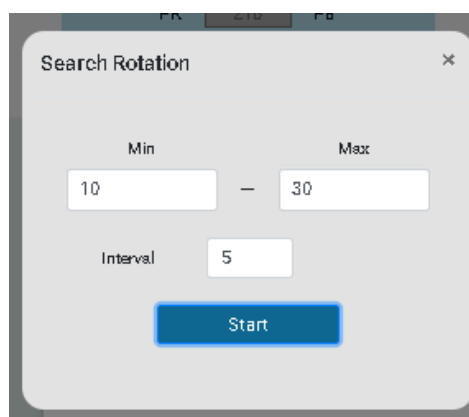
PREVIOUS NEXT (1/10)

MEASUREMENTS	UNITS OF MEASUREMENT	DIMENSIONING
<input checked="" type="checkbox"/> TPu1 = TP1	<input checked="" type="checkbox"/> XPu1 = XP1	
TPu1	°C	20
XPu1	g/kg	8.7
	%RH	59.8
FPU	m³/h	250

7. Start Calculation

Start Calculation

- If you want to calculate with different rotation rate continuously, click “Search” button. Please input rotation range and interval to Search Rotation pop-up screen. The result from “Search” function is shown on the table like this;



Search Rotation

Min 10 — Max 30

Interval 5

Start

<input type="checkbox"/>	Category	Unit	B_TP2(°C)	B_XP2(g/kg)	B_MR(kg/h)	Rotation(rph)	Diameter(mm)	Depth(mm)
<input type="checkbox"/>	Recusorb 1	RL-60R	30.2	4.476	3.68	10	550	50
<input type="checkbox"/>	Recusorb 1	RL-60R	30.8	4.342	3.82	15	550	50
<input type="checkbox"/>	Recusorb 1	RL-60R	31.1	4.356	3.8	20	550	50
<input type="checkbox"/>	Recusorb 1	RL-60R	31.1	4.413	3.74	25	550	50
<input type="checkbox"/>	Recusorb 1	RL-60R	31.2	4.492	3.66	30	550	50

9. If you want to save, please check the checkboxes and click the “SAVE” button. When you click “SAVE” button, the result exports to csv file and database table.

<input type="checkbox"/>	Category	Unit	B_TP2(°C)	B_XP2(g/kg)	B_MR(kg/h)	Rotation(rph)	Diameter(mm)	Depth(mm)	A_TP1(°C)
<input type="checkbox"/>	Recusorb 1	RL-60LR	31.9	4.146	5.34	31	550	50	20.0
<input checked="" type="checkbox"/>	Recusorb 1	RLZ-82	37.5	2.714	25.25	12	770	200	20.0
<input type="checkbox"/>	Recusorb 1	RLZ-81 Ice	31.4	4.553	22.26	25	770	100	20.0

Check the box you want to save. Multiple choice allowed.

10. If you want to print, select the result. Selecting result becomes green and click the “PREVIEW AND PRINT” button.

Caution: you can print the result which becomes green, not checking one.

☐

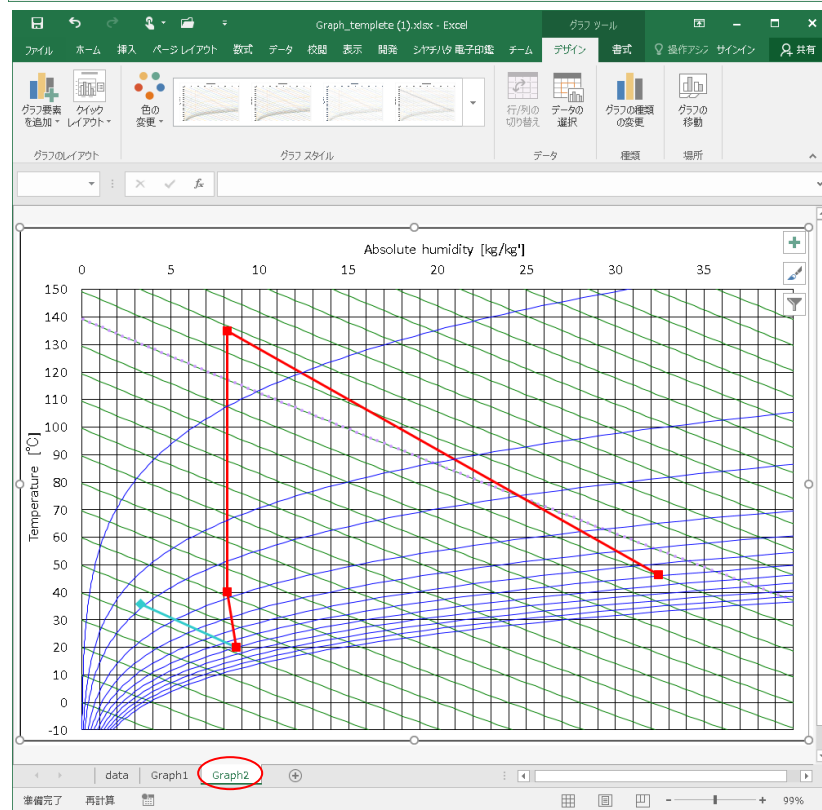
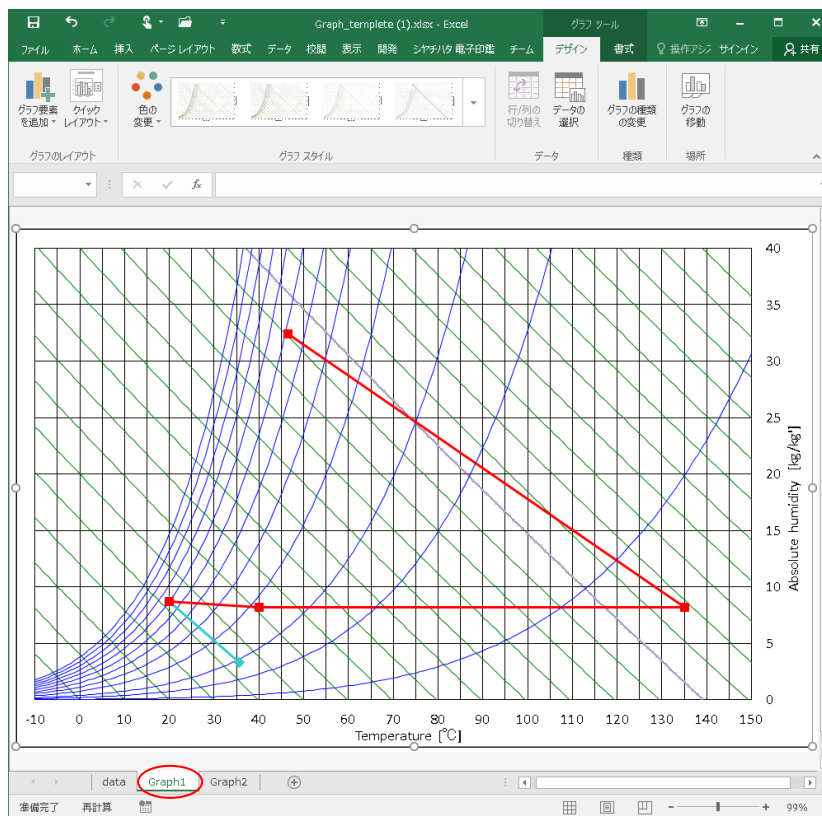
<input type="checkbox"/>	Category	Unit	B_TP2(°C)	B_XP2(g/kg)	B_MR(kg/h)	Rotation(rph)	Diameter(mm)	Depth(mm)	A_TP1(°C)
<input checked="" type="checkbox"/>	Recusorb 1	RL-60R	31.0	4.613	4.26	31	550	50	20.0
<input type="checkbox"/>	Recusorb 1	RL-61L	35.7	3.308	11.59	25	550	100	20.0
<input type="checkbox"/>	Recusorb 1	RLZ-82	37.5	2.714	25.25	12	770	200	20.0

Not print →

Print →

11. If you want to see psychrometric chart, select the result. Selecting result becomes green and click “EXPORT EXCEL” button. You can open or save the excel sheet of two pattern psychrometric charts below.

Caution: you can see psychrometric chart which becomes green, not checking one.



12. If you want to see the previous result, click the project from database table.

Project name	Date
Case 1	24/10/2019
Case 2	14/11/2019