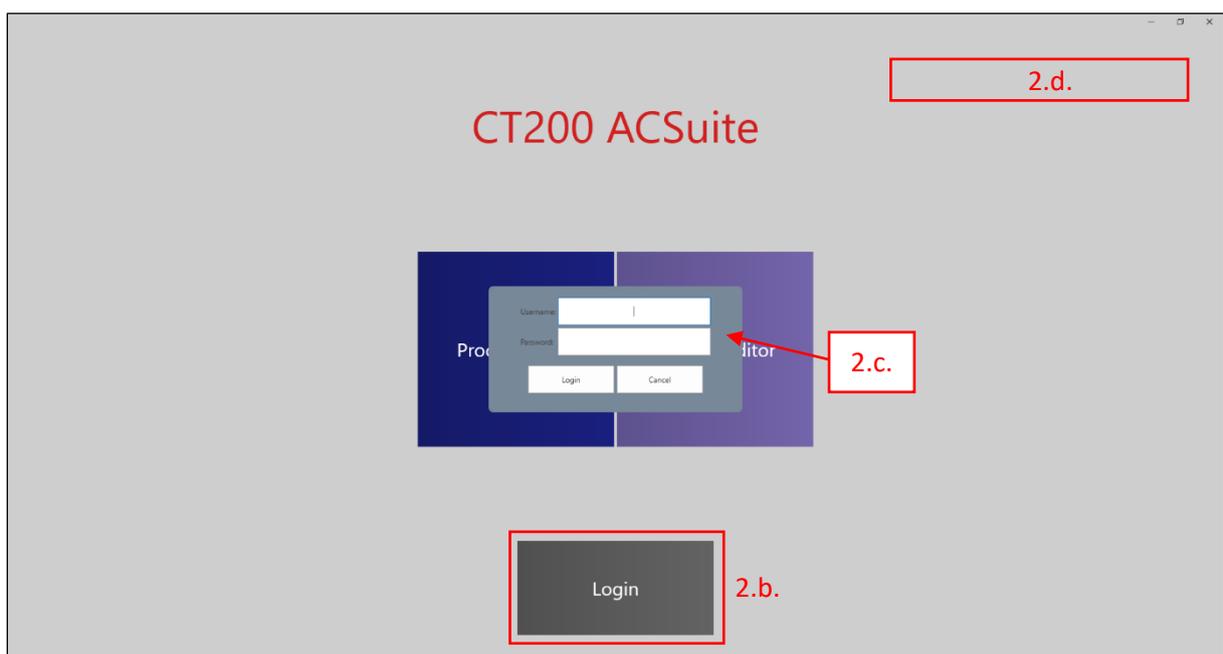# User Manual
CT200
Alliance-Concept

1. Login

1. Logon on the CAE - *CONTROL ACCESS SYSTEM* - on the zone computer.
2. Login on the CT200:
   a. Select *CT200 ACSuite* window.
   b. Click on "*Login*".
   c. Enter your credentials.
   d. Control that you are properly connected by checking the top right corner of the main page of *CT200 ACSuite*.
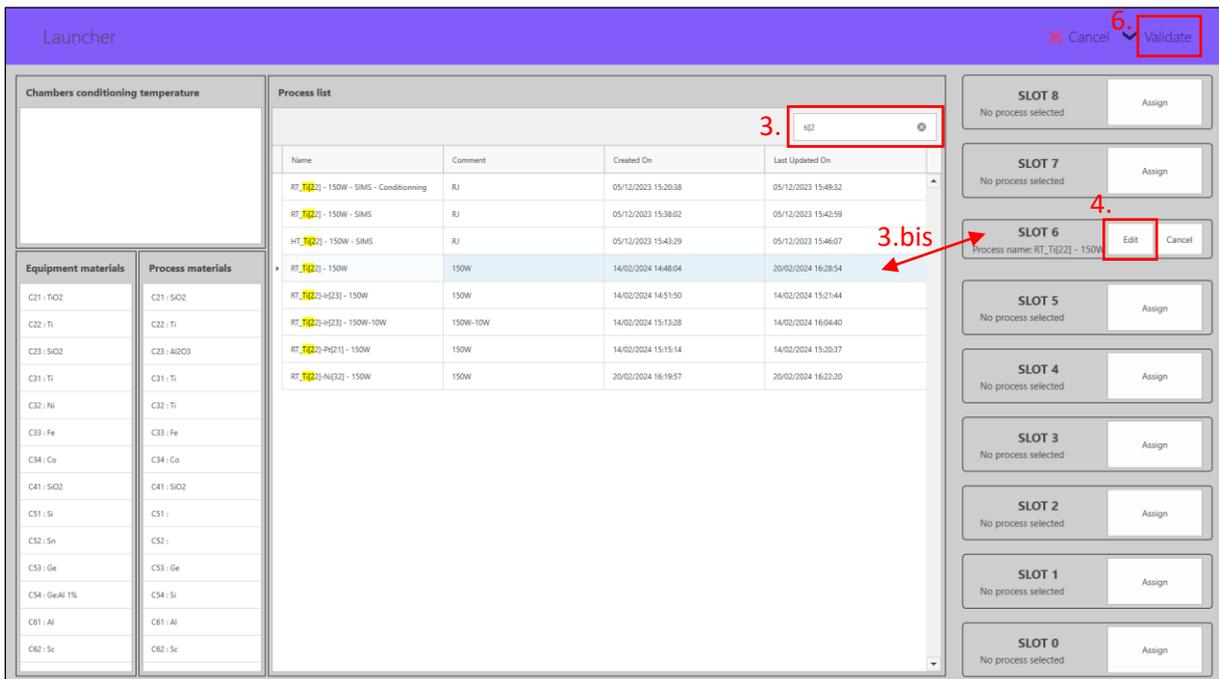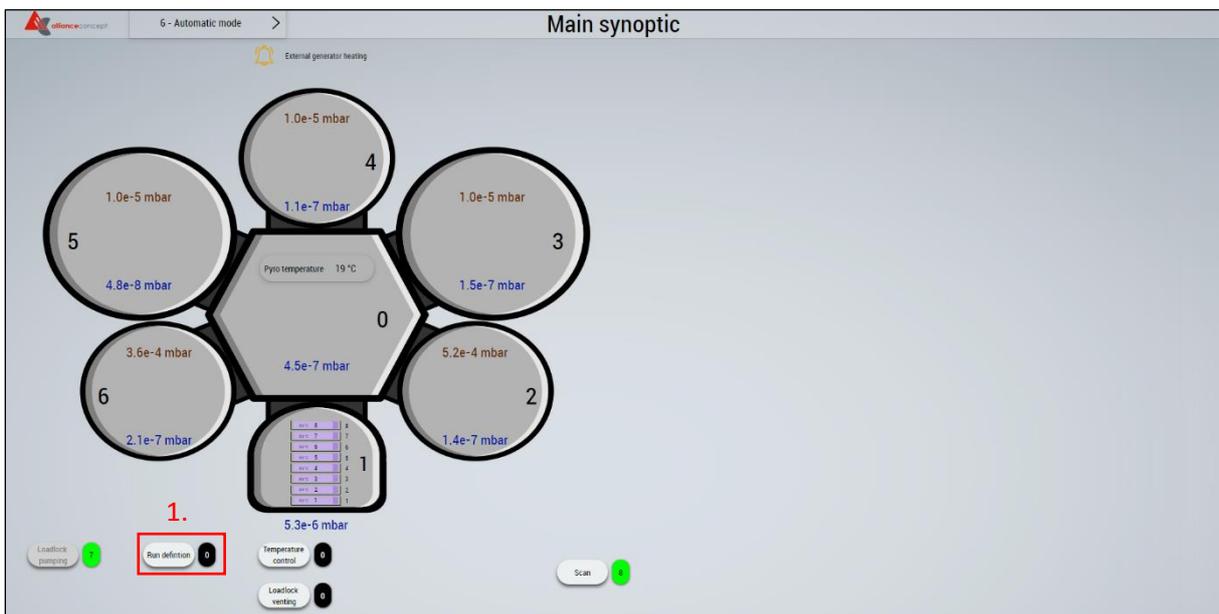
2. Loading

1. On the home page of the HMi, click on "*Loadlock venting*".
2. Used the dedicated tool for the unloading of the shuttle from the cassette to support located on the table right next to the CT200.
3. Replace the dummy wafer by your own wafer.
4. Move <u>carefully</u> the shuttle back into the cassette with the dedicated tool.
5. **Double check if the shuttle is well centered.**
6. **Double check if your wafer is still at the center of the shuttle**.
7. Click on "*Loadlock pumping*"
   Note: The system will automatically scan the content of the cassette as soon as the loadlock switches to secondary pumping.
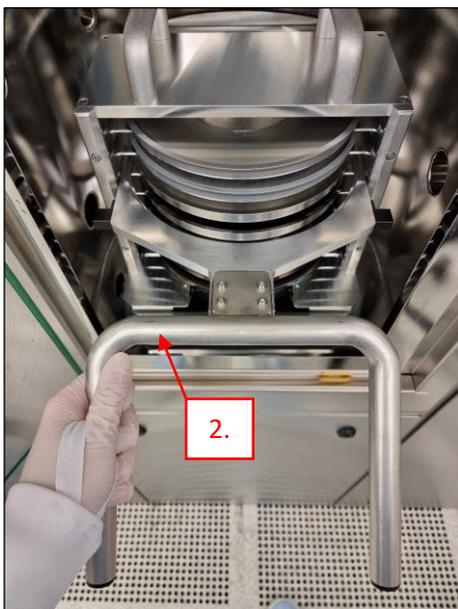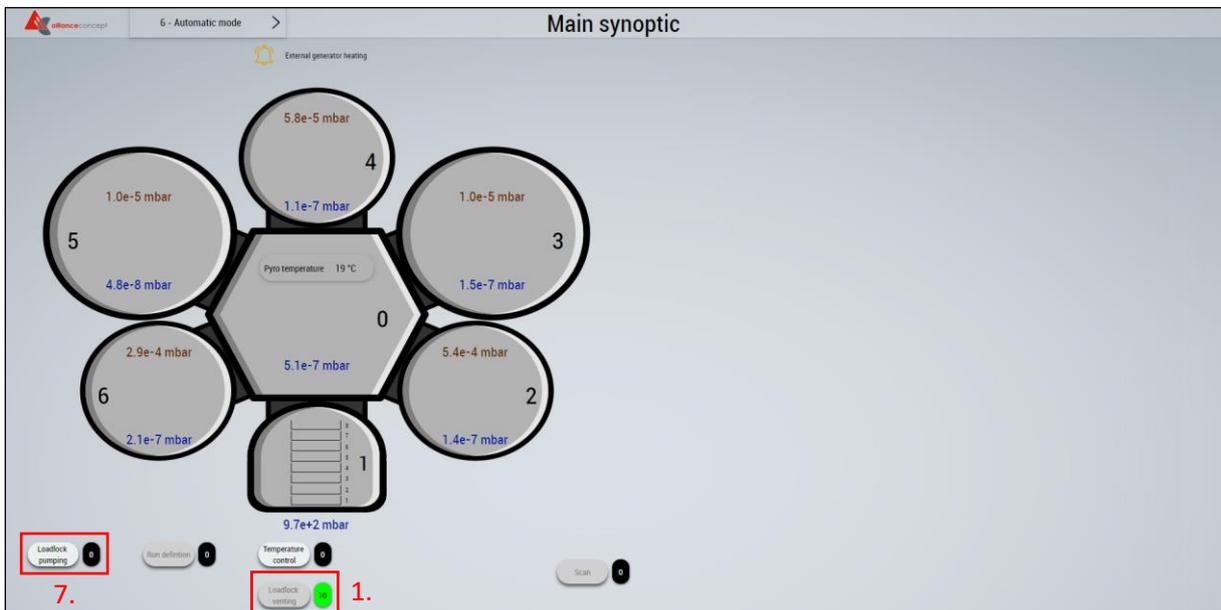
3. Recipe selection/edition & Process start

1. On the home page of the HMi, click on "*Run Definition*".
2. Wait for the *Launcher* starting.
3. Look for the desired recipe and assign it to proper shuttle(s).
4. Click on "*Edit*" to change parameters of the recipe.
   Note: Parameters loaded by default are the ones visible through the Process Editor (In read only)
5. Repeat the previous operation for all shuttles in use.
6. Click on "*Validate*" to start the batch execution.

Launcher : Process detail

Name : RF_1-[22] - 150W
Comment : 150W

Equipment materials

C21 : TiO2
C22 : Ti
C23 : SiO2
C31 : Ti
C32 : Ni
C33 : Fe
C34 : Co
C41 : SiO2
C51 : Si
C52 : Sn
C53 : Ge
C54 : GeAl 1%
C61 : Al
C62 : Sc
C63 : TiN

Process materials

C21 : SiO2 (012)
C22 : Ti (016)
C23 : Al2O3 (002)
C31 : Ti (016)
C32 : Ti (019)
C33 : Fe (004)
C34 : Co (003)
C41 : SiO2 (013)
C51 :
C52 :
C53 : Ge (005)
C54 : Si (011)
C61 : Al (001)
C62 : Sc (010)
C63 : TiN (017)

Steps

Rank ▲	Chamber	Type	Comment
1	2	Processing in chamber 2	Ti[22] - 150W

Launcher : Processing step

Step ID: 7781   See all process containing this step
Step shared with other process:
Comment: Ti[22] - 150W
Chamber selection: 2
Servovalve regulation mode: Pressure
Pressure before treatment: 5E-6 (mbar)
Pressure after treatment: 5E-6 (mbar)

Power

PS2 :		NU
C21 :	SiO2	FLT
C22 :	Ti	DC21
C23 :	Al2O3	FLT

DC Magix Generator (DC21)
Mode: Power
Pulsed Mode: Off

Ignition — Stab time before ignition 10 (s)
Prepulv Ramp — Duration 60 (s)
Prepulv — Prepulv time 30 (s)
Adaptation — Stab Ramp 0 (s); Stab time 0 (s)
Pulverisation — SH shutter opening delay 2 (s); Pulverisation time 120 (s) Editable; Min: 0; Max: 7 200
Idle Ramp — Duration 60 (s)

	Ignition		Prepulverisation		Pulverisation			Idle	
Servovalve	5E-2	(mbar)	5E-3	(mbar)	5E-3	(mbar)	Editable	5E-3	(mbar)
SH Rotation speed	20.0	(rpm)	20.0	(rpm)	20.0	(rpm)		20.0	(rpm)
Gas (1) Ar (200 sccm)	50	(sccm)	50	(sccm)	50	(sccm)	Editable	50	(sccm)
Gas (2) O2 (20 sccm)	0	(sccm)	0	(sccm)	0	(sccm)	Editable	0	(sccm)
Gas (3) O2 (5 sccm)	0	(sccm)	0	(sccm)	0	(sccm)	Editable	0	(sccm)
Gas (4) N2 (20 sccm)	0	(sccm)	0	(sccm)	0	(sccm)	Editable	0	(sccm)
Injection valve VGC21									
Injection valve VGC22									
Injection valve VGC23									
Injection valve VGC24	✓		✓		✓			✓	
Setpoint C22 (Ti)	100	(W)	150	(W)	150	(W)	Editable	100	(W) Hold
Shutter opening C22	✓				✓				
Shutter opening PS2					✓				

4. Process end & Unloading

1. To shorten the ongoing deposition, click on "*Skip depot*".
2. To stop the run, click on "*Stop run*" and then call CMi staff.
3. To validate the end of a run that ended correctly, click on "*Validate End Run*".
   Note - Shuttle ID:
   - *In green: Process finished*
   - *In orange: Process ongoing*
   - *In red: Process failure*
4. *If the temperature of (at least one of) the shuttle(s) is higher than the maximum temperature preventing operator injuries, the button "Loadlock venting" will remained disabled. Please press "Temperature control" to initiate the cooling down of shuttle(s) and make the unloading of wafers safe.*
5. To vent the loadlock, click on "*Loadlock venting*".
6. Use the dedicated tool as detailed in the section *2. Loading* of this manual to unload the shuttle(s) and pick up your wafers.
   Note: Do not forget to place back the dummies onto the shuttles before putting them back in the cassette.
7. **Click on "*Loadlock pumping*".**
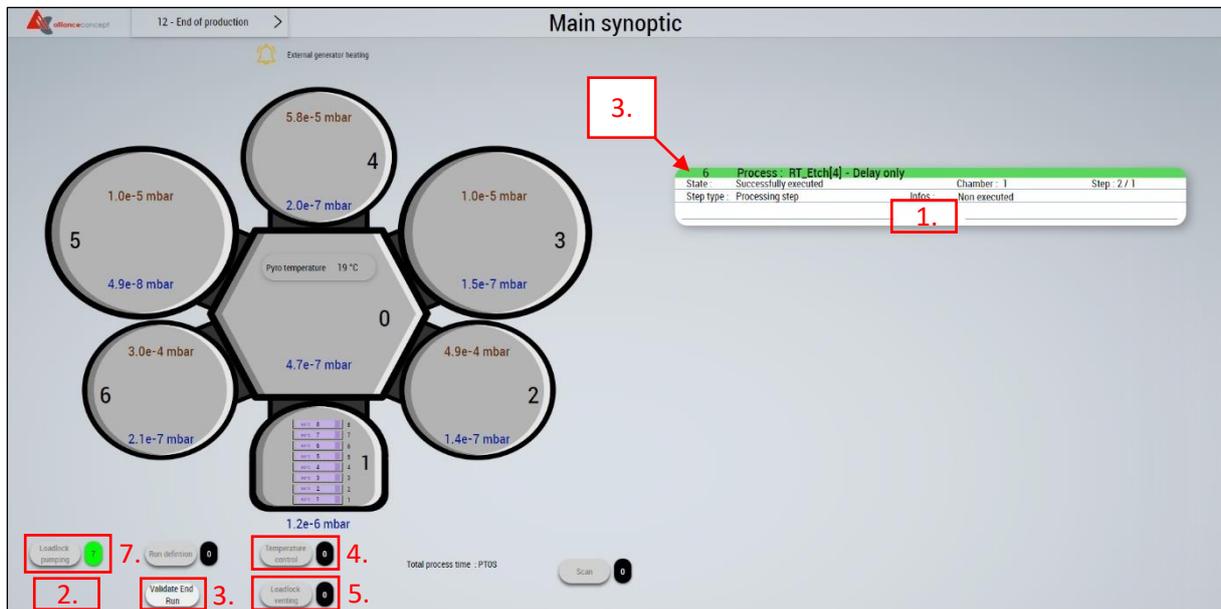
5. Logout

1. Logout from the CAE - *CONTROL ACCESS SYSTEM* - on the zone computer.