



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*.

CT200 ACSuite	2.d.
Proc Login Carcel	
Login 2.b.	



2. Loading

EPFL

- 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.









EPFL

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).
- 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.



						× Cancel	Validate
Chambers conditioning	temperature	Process list			3. 102 0	SLOT 8 No process selected	Assign
		Name RT <mark>T(2</mark> 2) - 150W - SIMS - Conditionning	Comment	Created On 05/12/2023 15:20:38	Last Updated On 05/12/2023 15:49:32	SLOT 7 No process selected	Assign
		RT_ TH2 2] - 150W - SIMS HT_ TH2 2] - 150W - SIMS	RJ RJ	05/12/2023 15:38:02	05/12/2023 15:42:59 05/12/2023 15:46:07 3.bis	SLOT 6 Process name: RT_TI[22] - 150W	Edit Cancel
Equipment materials	Process materials	RT_TT[22] - 150W RT_TT[22]-H[23] - 150W RT_TT[22]-H[23] - 150W	150W 150W 150W-10W	14/02/2024 14:48:04 14/02/2024 14:51:50 14/02/2024 15:13:28	20/02/2024 16:28:54 14/02/2024 15:21:44 14/02/2024 16:06:40	SLOT 5 No process selected	Assign
C23 : SiO2 C31 : Ti	C23 : Al2O3	RT_ <mark>TH2</mark> 2]-Pt[21] - 150W RT_ <mark>TH2</mark> 2]-Nt[32] - 150W	150W 150W	14/02/2024 15:15:14 20/02/2024 16:19:57	14/02/2024 15:20:37 20/02/2024 16:22:20	SLOT 4 No process selected	Assign
C32 : Ni C33 : Fe	C32 : Ti C33 : Fe					SLOT 3	Assign
C34 : Co C41 : SiO2	C34 : Co C41 : SIO2					SLOT 2	Arrian
C52 : Sn C53 : Ge	C52 : C53 : Ge					No process selected	raangu
C54 : Ge:Al 1% C61 : Al	C54 : Si C61 : Al					No process selected	Assign
C62 : Sc	C62 : Se					SLOT 0 No process selected	Assign





<	Launch	er : Pi	rocess d	etail					/ 🗉
Name :	RF_T(22) - 150W								
Comment :	150W								
Equipm	nent materials	Proces	ss materials		Steps				
C21 : TIO	2	C21 :	SiO2 (012)	•	Rank +	Chamber	Туре	Comment	
C22 : Ti		C22 :	Ti (016)	•	• 1	2	Processing in chamber 2	Ti[22] - 150W	-
C23 : SIO	2	C23 :	AL2CIB (002)	•			₹		
C31 : Ti		C31 :	Ti (016)	•					
C32 : Ni		C32:	Ti (019)	•					
C33 : Fe		C33 :	Fe (004)	•					
C34 : Co		C34 :	Co (903)	•					
C41:50	2	C41 :	SiO2 (013)	-					
C51 : Si		C51:		·					
C52 : Sn		C52 :		·					
C53 : Ge		C53 :	Ge (005)	·					
CS4: Geo	AJ 1%	C541	Si (011)	·					
COLLA		(61)	Al (001)						
C62:50		(62)	3c (010)	-					
cast inv		cd5:	tin pr(7)	_					
									-

< Launc	her : F	roces	sing step														
Step ID:	7781		See all process containing this step	Ignition		Prepulv Ran	np	Prep	ulv		Adaptation		·	Pulverisation		Idle Ramp	
Step shared with other process:											0	(s)	·	Pulverisation time			
Comment:		w		Stab time before ignitio	n	Duration		Prep	ulv time		Stab time		SH shutter opening delay	120 (s)	Min: 0 Editable	Duration	
Chamber selection:				10	(5)	60	(s)		30 (s)	0	(5)	2	(1)	Max: 7 200	60	(s)
Servovalve regulation mode:	Pressure								Ignitic	on		Prepulveri	sation	Pulverisatio	n	Idle	
Pressure before treatment:	5E-6	(mbar)		Servovalve					5E-2	(mbar)		5E-3	(mbar)	5E-3 (mbar)	Editable	5E-3	(mbar)
Pressure after treatment:	5E-6	(mbar)		SH Rotatio	n speed				20.0	(rpm)		20.0	(rpm)	20,0 0	rpm)	20,0	(rpm)
	Po	wer		Gas (1) Ar	(200 sccm)				50	(sccm)		50	(sccm)	50 (sccm)	Editable	50	(sccm)
PS2:			NU -	Gas (2) O2	(20 sccm)				0	(sccm)		0	(sccm)	0 (sccm)	Editable	0	(sccm)
C21:	SiO2		FLT •	Gas (3) O2	(5 sccm)				0	(sccm)		0	(sccm)	0 (sccm)	Editable	0	(sccm)
C23 :	AI20	13	FLT *	Gas (4) N2	(20 sccm)				0	(sccm)		o	(sccm)	0 (sccm)	Editable	o	(sccm)
DC Magix Gon	arator			Injection v	alve VGC21]]
(DC21)	erator			Injection v	alve VGC22]]
Mode: Power				Injection v	alve VGC23]]
Pulsed Mode:				Injection v	alve VGC24				\checkmark	'		\checkmark		\checkmark		\checkmark	
				Setpoint C	22 (Ti)				100	(W)		150	(W)	150 (W)	Editable	100	(W)
				Shutter op	ening C22				~	']	\checkmark]
				Shutter op	ening PS2]	\checkmark]



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".
- 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.