

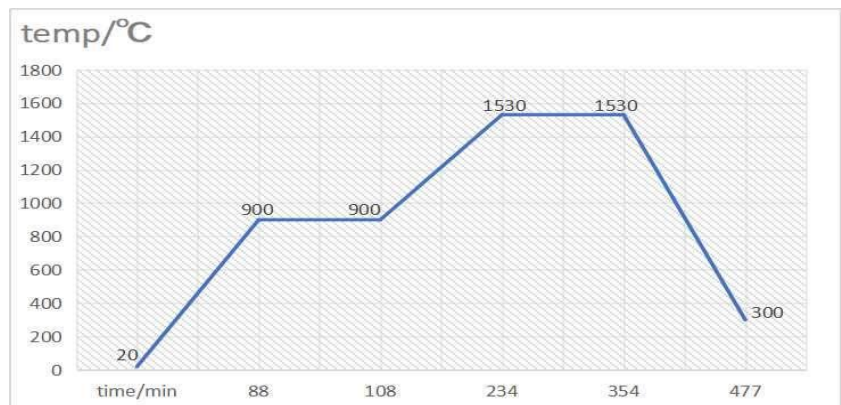
Aidite Zirconia Sintering Program

1.HT/ST/STC/SHT/SHTW/SHTC/SHTM Sintering Program:

Curve 1: Below 3 units bridge(7h):

start temp	phase 1 heating rate	phase 1 Maximum temp	Holding time	phase 2 Maximum temp	phase 2 Maximum temp	Holding time	cooling rate	cooling to
20°C	10°C/min	900°C	20min	5°C/min	1530°C	120min	10°C/min	300°C

phase	temp/°C	time/min
1	20	88
2	900	20
3	900	126
4	1530	120
5	1530	123
6	300	



Curve 2: From 4 to 6 units bridge(10h):

start temp	phase 1 heating rate	phase 1 Maximum temp	Holding time	phase 2 Maximum temp	phase 2 Maximum temp	Holding time	cooling rate	cooling to
20°C	5°C/min	900°C	30min	3°C/min	1530°C	120min	8°C/min	300°C

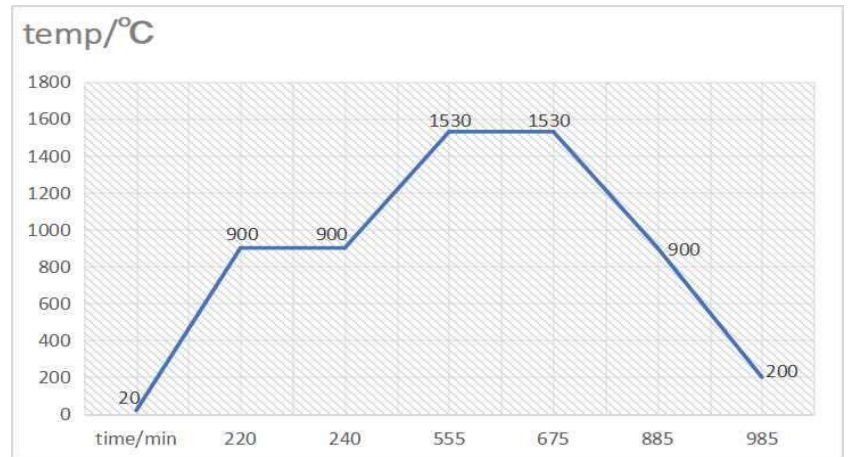
phase	temp/°C	time/min
1	20	176
2	900	30
3	900	210
4	1530	120
5	1530	154
6	300	



Curve 3: Above 7 units bridge (15h):

start temp	phase 1 heating rate	phase 1 Maximum temp	Holding time	phase 2 Maximum temp	phase 2 Maximum temp	Holding time	cooling rate	cooling to	cooling rate	cooling to
20°C	4°C/min	900°C	20min	2°C/min	1530°C	120min	3°C/min	900°C	7°C/min	200°C

phase	temp/°C	time/min
1	20	220
2	900	20
3	900	315
4	1530	120
5	1530	210
6	900	100
7	200	

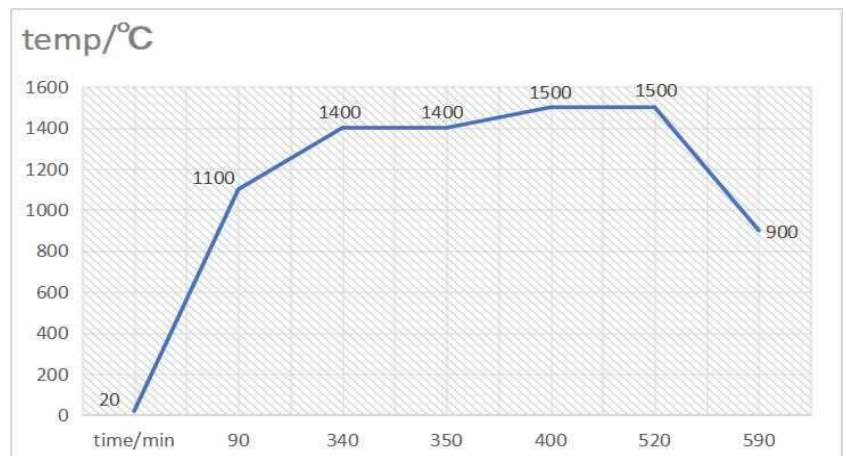


2.SHTPC Sintering Program:

Curve 1: Below 6 units bridge (10h):

start temp	phase 1 heating rate	phase 1 Maximum temp	phase 2 Maximum temp	phase 2 Maximum temp	Holding time	phase 3 Maximum temp	phase 3 Maximum temp	Holding time	cooling rate	cooling to
20°C	12°C/min	1100°C	1.2°C/min	1400°C	10min	2°C/min	1500°C	120min	9°C/min	900°C

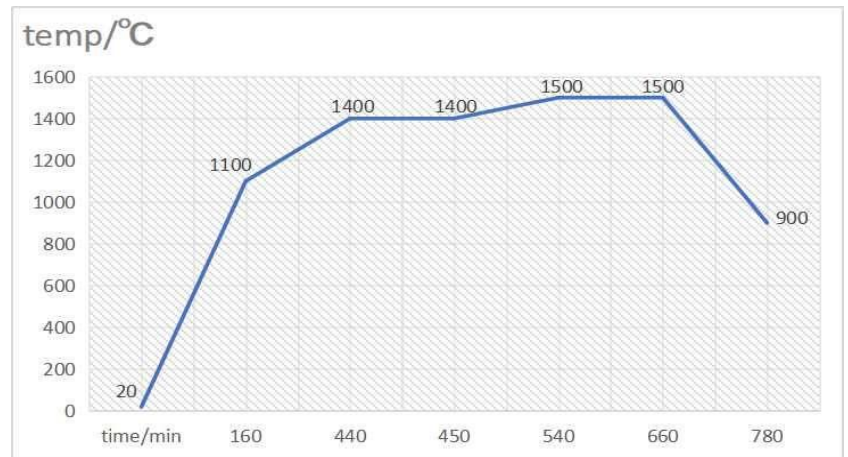
phase	temp/°C	time/min
1	20	90
2	1100	250
3	1400	10
4	1400	50
5	1500	120
6	1500	70
7	900	



Curve 2: Above 7 units bridge (13h):

start temp	phase 1 heating rate	phase 1 Maximum temp	phase 2 Maximum temp	phase 2 Maximum temp	Holding time	phase 3 Maximum temp	phase 3 Maximum temp	Holding time	cooling rate	cooling to
20°C	6.8°C/min	1100°C	1°C/min	1400°C	10min	1.1°C/min	1500°C	120min	5°C/min	900°C

phase	temp/°C	time/min
1	20	160
2	1100	280
3	1400	10
4	1400	90
5	1500	120
6	1500	120
7	900	

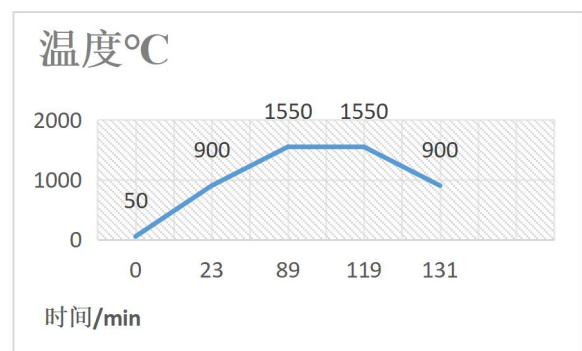


3.SHTPW Sintering Program:

Curve 1: Below 3 units bridge.(210min, thickness ≤ 15.0mm)(Remark:AGT-L Fast burning furnace)

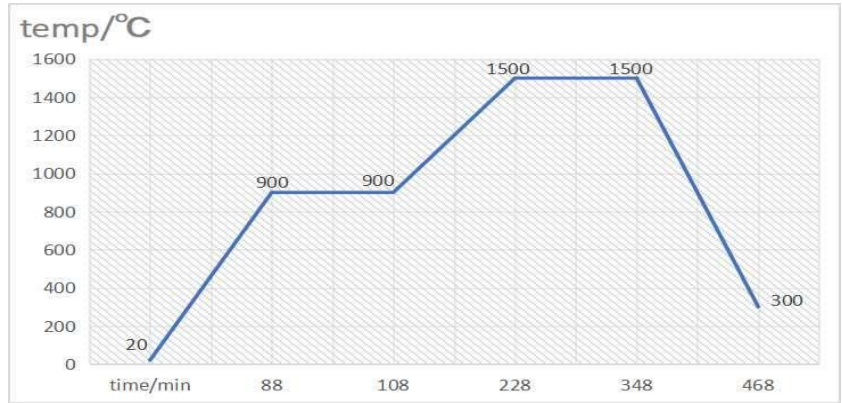
Start temp	Heating time in the first stage	Max.temp. In the first stage	Heating time in the second stage	Max.temp. In the second stage	Heating time in the third stage	Max.temp. In the third stage	Holdin g time	Coolin g time	Coolin g to	Final temp
Room temp	18min	900°C	15min	1200°C	120min	1550°C	45min	12min	900°C	300°C

phase	temp/°C	time/min
1	20	18
2	900	15
3	1200	120
4	1550	45
5	1550	12
6	900	-121
Total time	210min	



20°C	10°C/min	900°C	20min	5°C/min	1500°C	120min	10°C/min	300°C
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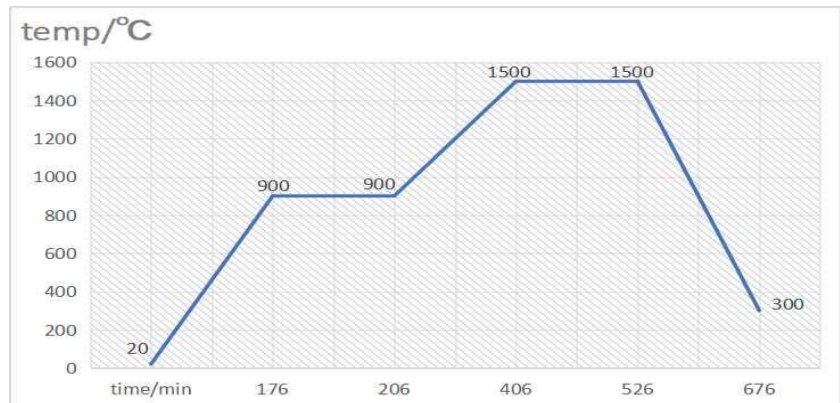
phase	temp/°C	time/min
1	20	88
2	900	20
3	900	120
4	1500	120
5	1500	120
6	300	



Curve 2: From 4 to 6 units bridge (10h):

start temp	phase 1 heating rate	phase 1 Maximum temp	Holding time	phase 2 Maximum temp	phase 2 Maximum temp	Holding time	cooling rate	cooling to
20°C	5°C/min	900°C	30min	3°C/min	1500°C	120min	8°C/min	300°C

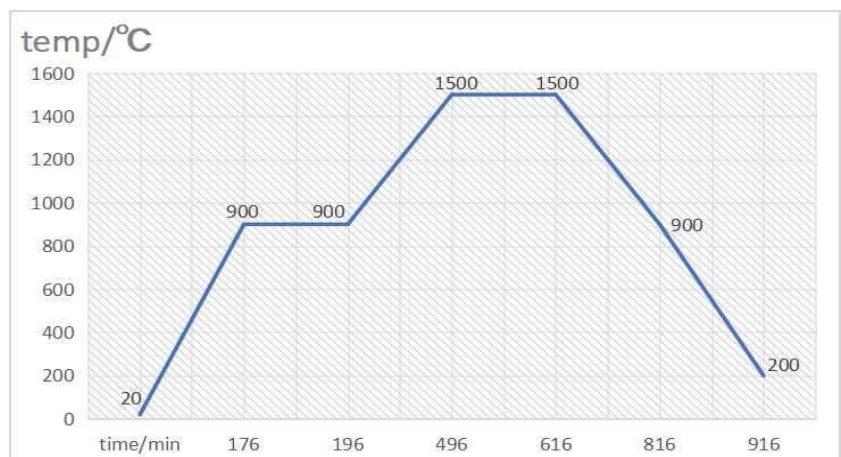
phase	temp/°C	time/min
1	20	176
2	900	30
3	900	200
4	1500	120
5	1500	150
6	300	



Curve 3: Above 7 units bridge (15h):

start temp	phase 1 heating rate	phase 1 Maximum temp	Holding time	phase 2 Maximum temp	phase 2 Maximum temp	Holding time	cooling rate	cooling to	cooling rate	cooling to
20°C	5°C/min	900°C	20min	2°C/min	1500°C	120min	3°C/min	900°C	7°C/min	200°C

phase	temp/°C	time/min
1	20	176
2	900	20
3	900	300
4	1500	120
5	1500	200
6	900	100
7	200	

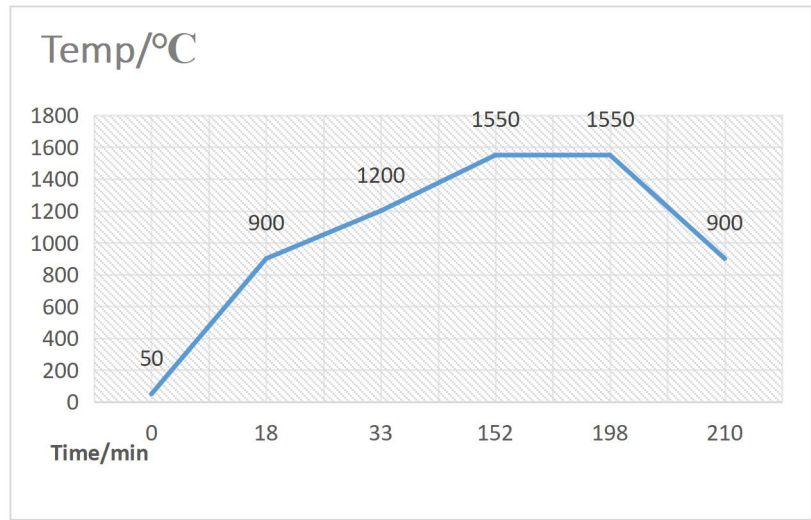


5.SHTPM Sintering Program:

Curve 1:Fast burning curve: Single crown (Thickness<2.0mm)

Start temp	Phase 1 Heating rate	Phase 1 Maximum temp	Phase 2 Maximum temp	Phase 2 Maximum temp	Phase3 Maximum temp	Phase 3 Maximum temp	Holding time	Cooling rate	Cooling to
20°C	49°C/min	900°C	20°C/min	1200°C	3°C/min	1550°C	45min	55°C/min	300°C

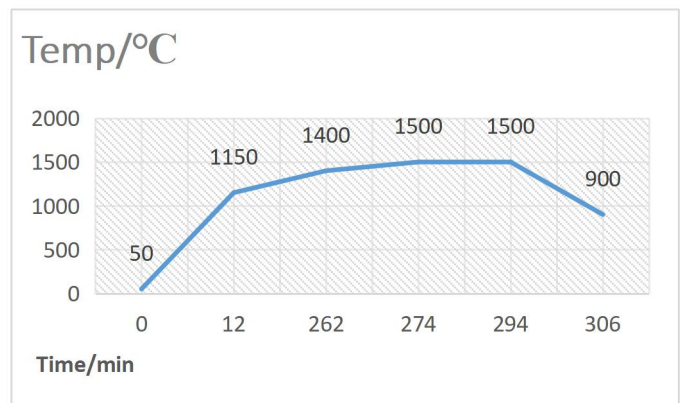
Phase	Temp/°C	Time/min	Thickness<2mm
1	20	18	
2	900	15	
3	1200	120	
4	1550	45	
5	1550	12	
6	900	0	
Total time	210min		



Curve 2: Below 3 units bridge (Thickness<5.4mm)

Start temp	Phase 1 Heating rate	Phase 1 Maximum temp	Phase 2 Maximum temp	Phase 2 Maximum temp	Phase3 Maximum temp	Phase 3 Maximum temp	Holding time	Cooling rate	Cooling to
20°C	95°C/min	1150°C	1°C/min	1400°C	8.3°C/min	1500°C	20min	50°C/min	300°C

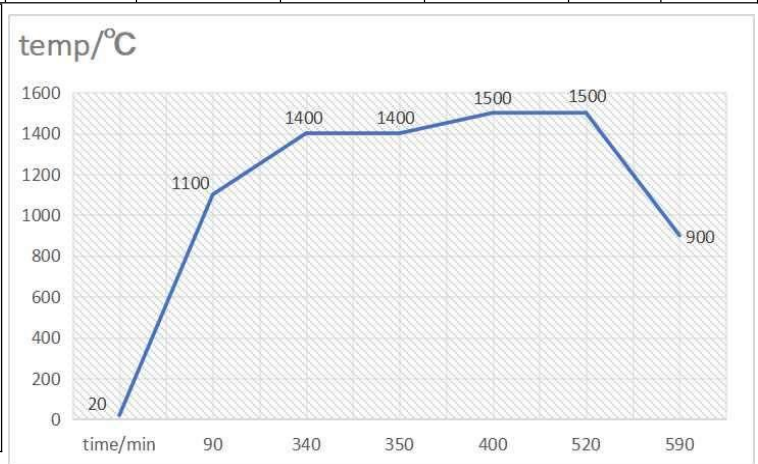
Phase	Temp/°C	Time/min	Thickness<5.4mm
1	20	12	
2	1150	250	
3	1400	12	
4	1500	20	
5	1500	12	
6	900	-121	
Total time	306min		



Curve 3: From 4 to 6 units bridge (Thickness<7.3mm)

Start temp	Phase 1 heating rate	Phase 1 Maximum temp	Phase 2 Maximum temp	Phase 2 Maximum temp	Holding time	Phase3 Maximum temp	Phase 3 Maximum temp	Holding time	Cooling rate	Cooling to
20 °C	12°C/min	1100°C	1.2°C/min	1400°C	10min	2°C/min	1500°C	120min	9°C /min	300°C

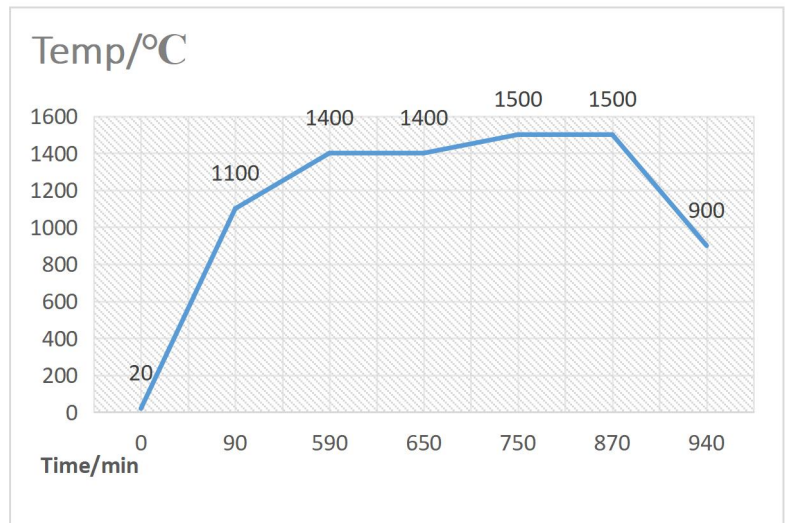
Phase	Temp/°C	Time/min	Thickness<7.3mm
1	20	90	
2	1100	250	
3	1400	10	
4	1400	50	
5	1500	120	
6	1500	70	
7	900	0	
Total time	590min		



Curve 4: From 4 to 6 units bridge (Thickness<7.3mm)

Start temp	Phase 1 heating rate	Phase 1 Maximum temp	Phase 2 Maximum temp	Phase 2 Maximum temp	Holding time	Phase3 Maximum temp	Phase 3 Maximum temp	Holding time	Cooling rate	Cooling to
20°C	12°C/min	1100°C	0.6°C/min	1400°C	60min	1°C/min	1500°C	120min	9°C/min	3°C

Phase	Temp/°C	Time/min	Thickness<11.3mm
1	20	90	
2	1100	500	
3	1400	60	
4	1400	100	
5	1500	120	
6	1500	70	
7	900	0	
Total time	940min		



6.AT Multilayer/ATW Sintering Program:

start temp	phase 1 heating rate	phase 1 Maximum temp	Holding time	phase 2 Maximum temp	phase 2 Maximum temp	Holding time	cooling rate	cooling to
20°C	5°C/min	900°C	30min	3°C/min	1450°C	120min	8°C/min	300°C

phase	temp/°C	time/min
1	20	176
2	900	30
3	900	184
4	1450	120
5	1450	144
6	300	

