

TempTAB

Sintering Furnace Temperature Verification

WHAT IS TempTAB?

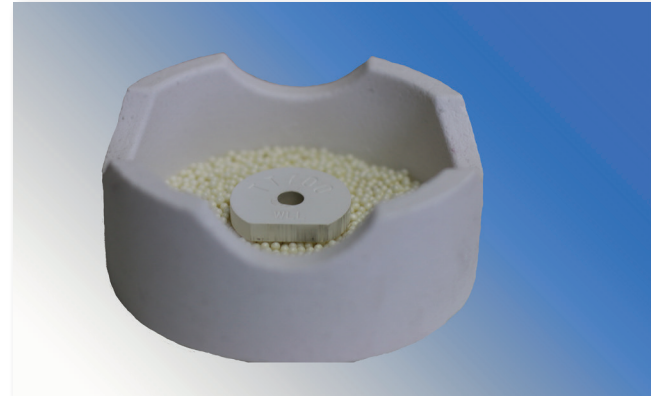
TempTAB measure the amount of energy input into the Sintering process, commonly referred to as heatwork, the combined effect of time and temperature. TempTAB are made from materials that react to heatwork by undergoing a high degree of shrinkage when sintered. Orton has developed precise data tables to convert that shrinkage to an equivalent sintering temperature.

Daily use will assure you that your sintering process is under control. Logging your daily results will allow you to build a database to spot trends before they affect your product.

HOW SHOULD I USE TempTAB?

Place the TempTAB on sintering beads within a sintering tray and place the tray into your sintering furnace. TempTAB can be sintered with your zirconia and will not cause it to discolor. Once the sintering cycle is complete, allow the TempTAB to come to room temperature, remove the TempTAB and measure the shrinkage across the widest diameter. Use a digital caliper with a measuring accuracy of 0.01 mm.

Look up the equivalent temperature using the table created Specifically for TempTAB 700. The Batch Code and product type are stamped into the face of each TempTAB. Find the dimension that you measured in the mm column, then look beside that value to see the equivalent sintering temperature. The temperature table is best used for sintering cycles that include a 2-hour soak with a heating rate of 300°C/hr.



26.97	1514.1	27.47
26.96	1513.6	27.46
26.95	1513.1	27.45
26.94	1512.6	27.44
26.93	1512.1	27.43
26.92	1511.6	27.42
26.91	1511.1	27.41
26.90	1510.6	27.40
26.89	1510.1	27.39
26.88	1509.6	27.38
26.87	1509.1	27.37
26.86	1508.6	27.36
26.85	1508.1	27.35
26.84	1507.6	27.34
26.83	1507.1	27.33
26.82	1506.6	27.32
26.81	1506.1	27.31
26.80	1505.6	27.30
26.79	1505.1	27.29
26.78	1504.6	27.28
26.77	1504.1	27.27
26.76	1503.6	27.26
26.75	1503.1	27.25
26.74	1502.6	27.24
26.73	1502.1	27.23
26.72	1501.6	27.22
26.71	1501.1	27.21
26.70	1500.6	27.20
26.69	1500.1	27.19
26.68	1499.6	27.18
26.67	1499.1	27.17
26.66	1498.6	27.16
26.65	1498.1	27.15
26.64	1497.6	27.14
26.63	1497.1	27.13
26.62	1496.6	27.12
26.61	1496.1	27.11
26.60	1495.6	27.10
26.59	1495.1	27.09
26.58	1494.6	27.08
26.57	1494.1	27.07
26.56	1493.6	27.06
26.55	1493.1	27.05
26.54	1492.6	27.04
26.53	1492.1	27.03
26.52	1491.6	27.02
26.51	1491.1	27.01
26.50	1490.6	27.00
26.49	1490.1	26.99
26.48	1489.6	26.98
26.47	1489.1	26.97
26.46	1488.6	26.96
26.45	1488.1	26.95
26.44	1487.6	26.94
26.43	1487.1	26.93
26.42	1486.6	26.92
26.41	1486.1	26.91
26.40	1485.6	26.90
26.39	1485.1	26.89
26.38	1484.6	26.88
26.37	1484.1	26.87
26.36	1483.6	26.86
26.35	1483.1	26.85
26.34	1482.6	26.84
26.33	1482.1	26.83
26.32	1481.6	26.82
26.31	1481.1	26.81
26.30	1480.6	26.80
26.29	1480.1	26.79
26.28	1479.6	26.78
26.27	1479.1	26.77
26.26	1478.6	26.76
26.25	1478.1	26.75
26.24	1477.6	26.74
26.23	1477.1	26.73
26.22	1476.6	26.72
26.21	1476.1	26.71
26.20	1475.6	26.70
26.19	1475.1	26.69
26.18	1474.6	26.68
26.17	1474.1	26.67
26.16	1473.6	26.66
26.15	1473.1	26.65
26.14	1472.6	26.64
26.13	1472.1	26.63
26.12	1471.6	26.62
26.11	1471.1	26.61
26.10	1470.6	26.60
26.09	1470.1	26.59
26.08	1469.6	26.58
26.07	1469.1	26.57
26.06	1468.6	26.56
26.05	1468.1	26.55
26.04	1467.6	26.54
26.03	1467.1	26.53
26.02	1466.6	26.52
26.01	1466.1	26.51
26.00	1465.6	26.50
25.99	1465.1	26.49
25.98	1464.6	26.48
25.97	1464.1	26.47
25.96	1463.6	26.46
25.95	1463.1	26.45
25.94	1462.6	26.44
25.93	1462.1	26.43
25.92	1461.6	26.42
25.91	1461.1	26.41
25.90	1460.6	26.40
25.89	1460.1	26.39
25.88	1459.6	26.38
25.87	1459.1	26.37
25.86	1458.6	26.36
25.85	1458.1	26.35
25.84	1457.6	26.34
25.83	1457.1	26.33
25.82	1456.6	26.32
25.81	1456.1	26.31
25.80	1455.6	26.30
25.79	1455.1	26.29
25.78	1454.6	26.28
25.77	1454.1	26.27
25.76	1453.6	26.26
25.75	1453.1	26.25
25.74	1452.6	26.24
25.73	1452.1	26.23
25.72	1451.6	26.22
25.71	1451.1	26.21
25.70	1450.6	26.20
25.69	1450.1	26.19
25.68	1449.6	26.18
25.67	1449.1	26.17
25.66	1448.6	26.16
25.65	1448.1	26.15
25.64	1447.6	26.14
25.63	1447.1	26.13
25.62	1446.6	26.12
25.61	1446.1	26.11
25.60	1445.6	26.10
25.59	1445.1	26.09
25.58	1444.6	26.08
25.57	1444.1	26.07
25.56	1443.6	26.06
25.55	1443.1	26.05
25.54	1442.6	26.04
25.53	1442.1	26.03
25.52	1441.6	26.02
25.51	1441.1	26.01
25.50	1440.6	26.00
25.49	1440.1	25.99
25.48	1439.6	25.98
25.47	1439.1	25.97
25.46	1438.6	25.96
25.45	1438.1	25.95
25.44	1437.6	25.94
25.43	1437.1	25.93
25.42	1436.6	25.92
25.41	1436.1	25.91
25.40	1435.6	25.90
25.39	1435.1	25.89
25.38	1434.6	25.88
25.37	1434.1	25.87
25.36	1433.6	25.86
25.35	1433.1	25.85
25.34	1432.6	25.84
25.33	1432.1	25.83
25.32	1431.6	25.82
25.31	1431.1	25.81
25.30	1430.6	25.80
25.29	1430.1	25.79
25.28	1429.6	25.78
25.27	1429.1	25.77
25.26	1428.6	25.76
25.25	1428.1	25.75
25.24	1427.6	25.74
25.23	1427.1	25.73
25.22	1426.6	25.72
25.21	1426.1	25.71
25.20	1425.6	25.70
25.19	1425.1	25.69
25.18	1424.6	25.68
25.17	1424.1	25.67
25.16	1423.6	25.66
25.15	1423.1	25.65
25.14	1422.6	25.64
25.13	1422.1	25.63
25.12	1421.6	25.62
25.11	1421.1	25.61
25.10	1420.6	25.60
25.09	1420.1	25.59
25.08	1419.6	25.58
25.07	1419.1	25.57
25.06	1418.6	25.56
25.05	1418.1	25.55
25.04	1417.6	25.54
25.03	1417.1	25.53
25.02	1416.6	25.52
25.01	1416.1	25.51
25.00	1415.6	25.50
24.99	1415.1	25.49
24.98	1414.6	25.48
24.97	1414.1	25.47
24.96	1413.6	25.46
24.95	1413.1	25.45
24.94	1412.6	25.44
24.93	1412.1	25.43
24.92	1411.6	25.42
24.91	1411.1	25.41
24.90	1410.6	25.40
24.89	1410.1	25.39
24.88	1409.6	25.38
24.87	1409.1	25.37
24.86	1408.6	25.36
24.85	1408.1	25.35
24.84	1407.6	25.34
24.83	1407.1	25.33
24.82	1406.6	25.32
24.81	1406.1	25.31
24.80	1405.6	25.30
24.79	1405.1	25.29
24.78	1404.6	25.28
24.77	1404.1	25.27
24.76	1403.6	25.26
24.75	1403.1	25.25
24.74	1402.6	25.24
24.73	1402.1	25.23
24.72	1401.6	25.22
24.71	1401.1	25.21
24.70	1400.6	25.20
24.69	1400.1	25.19
24.68	1399.6	25.18
24.67	1399.1	25.17
24.66	1398.6	25.16
24.65	1398.1	25.15
24.64	1397.6	25.14
24.63	1397.1	25.13
24.62	1396.6	25.12
24.61	1396.1	25.11
24.60	1395.6	25.10
24.59	1395.1	25.09
24.58	1394.6	25.08
24.57	1394.1	25.07
24.56	1393.6	25.06
24.55	1393.1	25.05
24.54	1392.6	25.04
24.53	1392.1	25.03
24.52	1391.6	25.02
24.51	1391.1	25.01
24.50	1390.6	25.00
24.49	1390.1	24.99
24.48	1389.6	24.98
24.47	1389.1	24.97
24.46	1388.6	24.96
24.45	1388.1	24.95
24.44	1387.6	24.94
24.43	1387.1	24.93
24.42	1386.6	24.92
24.41	1386.1	24.91
24.40	1385.6	24.90
24.39	1385.1	24.89
24.38	1384.6	24.88
24.37	1384.1	24.87
24.36	1383.6	24.86
24.35	1383.1	24.85
24.34	1382.6	24.84
24.33	1382.1	24.83
24.32	1381.6	24.82
24.31	1381.1	24.81
24.30	1380.6	24.80
24.29	1380.1	24.79
24.28	1379.6	24.78
24.27	1379.1	24.77
24.26	1378.6	24.76
24.25	1378.1	24.75
24.24	1377.6	24.74
24.23	1377.1	24.73
24.22	1376.6	24.72
24.21	1376.1	24.71
24.20	1375.6	24.70
24.19	1375.1	24.69
24.18	1374.6	24.68
24.17	1374.1	24.67
24.16	1373.6	24.66
24.15	1373.1	24.65
24.14	1372.6	24.64
24.13	1372.1	24.63
24.12	1371.6	24.62
24.11	1371.1	24.61
24.10	1370.6	24.60
24.09	1370.1	24.59
24.08	1369.6	24.58
24.07	1369.1	24.57
24.06	1368.6	24.56
24.05	1368.1	24.55
24.04	1367.6	24.54
24.03	1367.1	24.53
24.02	1366.6	24.52
24.01	1366.1	24.51
24.00	1365.6	24.50
23.99	1365.1	24.49
23.98	1364.6	24.48
23.97	1364.1	24.47
23.96	1363.6	24.46
23.95	1363.1	24.45
23.94	1362.6	24.44
23.93	1362.1	24.43
23.92	1361.6	24.42
23.91	1361.1	24.41
23.90	1360.6	24.40
23.89	1360.1	24.39
23.88	1359.6	24.38
23.87	1359.1	24.37
23.86	1358.6	24.36
23.85	1358.1	24.35
23.84	1357.6	24.34
23.83	1357.1	24.33
23.82	1356.6	24.32
23.81	1356.1	24.31
23.80	1355.6	24.30
23.79	1355.1	24.29
23.78	1354.6	24.28
23.77	1354.1	24.27
23.76	1353.6	24.26
23.75	1353.1	24.25
23.74	1352.6	24.24
23.73	1352.1	24.23
23.72	1351.6	24.22
23.71	1351.1	24.21
23.70	1350.6	24.20
23.69	1350.1	24.19
23.68	1349.6	24.18
23.67	1349.1	24.17
2		

Dimension mm	Temperature for 120 Minute hold Degrees C
26.12	1600.0
26.13	1599.0
26.14	1598.0
26.15	1597.0
26.16	1596.0
26.17	1594.9
26.18	1593.9
26.19	1592.9
26.20	1591.9
26.21	1590.9
26.22	1589.9
26.23	1588.9
26.24	1587.9
26.25	1586.9
26.26	1585.9
26.27	1584.8
26.28	1583.8
26.29	1582.8
26.30	1581.8
26.31	1580.8
26.32	1579.8
26.33	1578.8
26.34	1577.8
26.35	1576.8
26.36	1575.8
26.37	1574.7
26.38	1573.7
26.39	1572.7
26.40	1571.7
26.41	1570.7
26.42	1569.7
26.43	1568.7
26.44	1567.7
26.45	1566.7
26.46	1565.7
26.47	1564.6
26.48	1563.6
26.49	1562.6
26.50	1561.6
26.51	1560.6
26.52	1559.6
26.53	1558.6
26.54	1557.6
26.55	1556.6
26.56	1555.6
26.57	1554.5
26.58	1553.5
26.59	1552.5
26.60	1551.5
26.61	1550.5

Dimension mm	Temperature for 120 Minute hold Degrees C
26.62	1549.5
26.63	1548.5
26.64	1547.5
26.65	1546.5
26.66	1545.5
26.67	1544.4
26.68	1543.4
26.69	1542.4
26.70	1541.4
26.71	1540.4
26.72	1539.4
26.73	1538.4
26.74	1537.4
26.75	1536.4
26.76	1535.4
26.77	1534.3
26.78	1533.3
26.79	1532.3
26.80	1531.3
26.81	1530.3
26.82	1529.3
26.83	1528.3
26.84	1527.3
26.85	1526.3
26.86	1525.3
26.87	1524.2
26.88	1523.2
26.89	1522.2
26.90	1521.2
26.91	1520.2
26.92	1519.2
26.93	1518.2
26.94	1517.2
26.95	1516.2
26.96	1515.2
26.97	1514.1
26.98	1513.1
26.99	1512.1
27.00	1511.1
27.01	1510.1
27.02	1509.1
27.03	1508.1
27.04	1507.1
27.05	1506.1
27.06	1505.1
27.07	1504.0
27.08	1503.0
27.09	1502.0
27.10	1501.0
27.11	1500.0

Dimension mm	Temperature for 120 Minute hold Degrees C
27.12	1498.9
27.13	1497.9
27.14	1496.8
27.15	1495.7
27.16	1494.7
27.17	1493.6
27.18	1492.6
27.19	1491.5
27.20	1490.4
27.21	1489.4
27.22	1488.3
27.23	1487.2
27.24	1486.2
27.25	1485.1
27.26	1484.0
27.27	1483.0
27.28	1481.9
27.29	1480.9
27.30	1479.8
27.31	1478.7
27.32	1477.7
27.33	1476.6
27.34	1475.5
27.35	1474.5
27.36	1473.4
27.37	1472.3
27.38	1471.3
27.39	1470.2
27.40	1469.1
27.41	1468.1
27.42	1467.0
27.43	1466.0
27.44	1464.9
27.45	1463.8
27.46	1462.8
27.47	1461.7
27.48	1460.6
27.49	1459.6
27.50	1458.5
27.51	1457.4
27.52	1456.4
27.53	1455.3
27.54	1454.3
27.55	1453.2
27.56	1452.1
27.57	1451.1
27.58	1450.0