

Sample -1

S no	strain div	load (kg)	load(k N)	Deformation(m m)	Strain(%)	Corrected Area (mm2)	Axial Stress (kN/m2)
1	0	0	0	0	0.00	1134.11	0.00
2	30	1.8	0.018	0.3	0.39	1138.60	15.81
3	60	3.8	0.038	0.6	0.79	1143.13	33.24
4	90	7.9	0.079	0.9	1.18	1147.70	68.83
5	120	12.8	0.128	1.2	1.58	1152.30	111.08
6	150	16.4	0.164	1.5	1.97	1156.94	141.75
7	180	18.1	0.181	1.8	2.37	1161.62	155.82
8	210	19.2	0.192	2.1	2.76	1166.34	164.62
9	240	19.4	0.194	2.4	3.16	1171.09	165.66
10	270	19.4	0.194	2.7	3.55	1175.88	164.98
11	300	19.2	0.192	3	3.95	1180.72	162.61
12	330	18.8	0.188	3.3	4.34	1185.59	158.57
13	360	18.4	0.184	3.6	4.74	1190.50	154.56
14	390	17.9	0.179	3.9	5.13	1195.46	149.73
15	420	16.9	0.169	4.2	5.53	1200.45	140.78

Sample - 2

S no	strain div	load (kg)	load(kN)	Deformation(mm)	Strain(%)	Corrected Area (mm2)	Axial Stress (kN/m2)
1	0	0.5	0.005	0	0.00	1134.11	4.41
2	30	5.6	0.056	0.3	0.39	1138.60	49.18
3	60	9	0.09	0.6	0.79	1143.13	78.73
4	90	13.1	0.131	0.9	1.18	1147.70	114.14
5	120	15.1	0.151	1.2	1.58	1152.30	131.04
6	150	16.4	0.164	1.5	1.97	1156.94	141.75
7	180	17.1	0.171	1.8	2.37	1161.62	147.21
8	210	17.2	0.172	2.1	2.76	1166.34	147.47
9	240	17	0.17	2.4	3.16	1171.09	145.16
10	270	16.2	0.162	2.7	3.55	1175.88	137.77
11	300	15.5	0.155	3	3.95	1180.72	131.28

Sample - 3

S no	strain div	load (kg)	load(kN)	Deformation(mm)	Strai n(%)	Corrected Area (mm ²)	Axial Stress (kN/m ²)
1	0	0.4	0.004	0	0.00	1134.11	3.53
2	30	4.9	0.049	0.3	0.39	1138.60	43.04
3	60	7.4	0.074	0.6	0.79	1143.13	64.73
4	90	10.1	0.101	0.9	1.18	1147.70	88.00
5	120	12.2	0.122	1.2	1.58	1152.30	105.87
6	150	13.6	0.136	1.5	1.97	1156.94	117.55
7	180	14.4	0.144	1.8	2.37	1161.62	123.96
8	210	14.9	0.149	2.1	2.76	1166.34	127.75
9	240	14.9	0.149	2.4	3.16	1171.09	127.23
10	270	14	0.14	2.7	3.55	1175.88	119.06
11	300	13.9	0.139	3	3.95	1180.72	117.73
12	330	11.1	0.111	3.3	4.34	1185.59	93.62
13	360	8.7	0.087	3.6	4.74	1190.50	73.08



