

Creep and Shrinkage of High-Strength Concrete; A testreport Appendix A

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Creep and shrinkage of high-strength-concrete

A test report

APPENDIX A

**Creep and Shrinkage of High-Strength Concrete; A testreport; Appendix
A**

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Mix number →	Table A.1.1 Test program Number of tests are 30						
	1	2	3	4	5	6	7
Standard test conditions*	1	3	2	25	7	11	26
Sealed		4			8	12	
$\sigma/f_c = 0.4$		5			16	13	
$\sigma/f_c = 0.5$		6			17	20	
$\sigma/f_c = 0.6$		24			19	21	
$\sigma/f_c = 0.7$		9			22	33	
Recovery		29			28	27	
$t_0 = 8$ days		31			32	30	
Paste					39	38	

The numbers listed in A.1.1 is the test serial number.

* The standard test conditions are :

65 % RH

21 °C

Loading after 1 day in the mould, 26 days of water curing and 2 days of preparation (air curing)

$\sigma/f_c = 1/3$

Table A.2.1 Mix proportions							kg/m ³
Mix number							
	1	2	3	4	5	6	7
Cement	129 ¹	161 ¹	247 ¹	260 ¹	320 ²	375 ³	390 ¹
FLA	69	69	100	40	45	0	0
MS-slurry ^a	0	0	0	36	60	75	76
Sand 0-4 mm ^d	754	640	618	600	610	615	521
Gravel 4-8 mm	246	272	244	257	186	188	247
Granite 8-16 mm	985	1089	977	1026	1106	1120	989
Tap water	170	165	170	150	95	70	63
Plasticizer ^b	0	0	0	2,4	1,6	1,6	2,4
Superplasticizer ^c	0	0	0	0	8,8	12,18	12,93
Mean f_c (MPa)	10	15	37	41	81	101	101
W/(P + C)*	0,859	0,717	0,490	0,531	0,331	0,280	0,257
Aggregate ratio	0,84	0,84	0,78	0,79	0,78	0,78	0,76
A/(C + P)**	10,03	8,70	5,30	5,91	4,80	4,65	4,09
Aggregate $\leq$ 4 mm	0,40	0,34	0,35	0,34	0,33	0,34	0,32

^a 51.6 % Dry matter

^b 36 % Dry matter

^c 34 % Dry matter

^d 96 % Dry matter

¹ Cement 1 : PC(R) ; ASTM type III

² Cement 2 : PC(A/L/S) ; ASTM type IV-V

³ Cement 3 : PC(R/L/S/H) ; ASTM type III-IV

* Water/Binder ratio. The admixture water has been accounted for. The amount of water in the sand is together with the gravel and granite considered as saturated and surface-dry materials and the water is not included in the water/binder ratio.

** Aggregate/binder ratio.

Table A.3.1 Fresh concrete properties and weightloss after unloading

No.	Batch	Density fresh	Density hardened	Aircontent	Slump	Weight-loss Shrinkage	Weight-loss creep
		kg/m ³	kg/m ³	%	mm	g	g
900911-1	1	2425	---	0.95	155	---	---
900913-2	3	2449	---	0.55	105	---	---
901022-3	2	2436	2388	0.89	105	91.4	89.7
901024-4	2	2453	2378	1.30	40	22.0	22.8
901029-5	2	2413	2373	1.15	65	89.8	91.0
901031-6	2	2446	2374	0.90	115	88.2	90.3
901105-7	5	2508	2466	1.20	185		
901107-8	5	2530	2465	0.80	210		
901112-9	2	2449	2360	0.80	130		
901210-11	6	2544	2502	0.95	210	11.9	10.3
901212-12	6	2542	2501	0.90	190	3.5	3.0
901217-13	6	2535	2492	0.80	190		
910109-16	5	2454	2467	1.05	205		
910114-17	5	2524	2469	0.70	200		
910121-19	5	2494	2471	0.90	195		
910123-20	6	2505	2504	0.80	190		
910128-21	6	2519	2499	0.70	185		
910130-22	5	2462	2458	0.70	180		
910206-24	2	2421	2337	1.25	110		
910211-25	4	2406	2377	0.60	200		

Table A.3.1 Fresh concrete properties and weightloss after unloading

No.	Batch	Density fresh	Density hardened	Aircon- tent	Slump	Weight- loss Shrin- kage	Weight- loss creep
	---	kg/m ³	kg/m ³	%	mm	g	g
910213-26	7	2507	2500	1.35	205		
910305-27	6	2519	2490	0.95	210	10.9	9.4
910306-28	5	2489	2455	1.30	205	18.0	16.0
910311-29	2	2440	2359	0.80	60	81.0	80.7
910403-30	6	2546	2486	0.71	215		
910408-31	2	2403	2317	0.75	150		
910410-32	5	2491	2442	1.05	215		
910415-33	6	2517	2494	0.70	235		
910502-38	6*	---	2050	---	---		
910507-39	5*	1960	1959	---	---		
*Paste (No aggregate)							

Table A.4.1 Test conditions and mechanical properties after 27/6 days of water curing

	σ/f_{co}	RF	f_{co}	ϵ_{co}	E_{co}	E_{dyn}
	---	%	MPa	$\mu\epsilon$	MPa	MPa
900911-1	1/3	65	10	190	17737	---
900913-2	1/3	65	37	465	26867	---
901022-3	1/3	65	18	239	24603	42840
901024-4	1/3	Sealed	16	262	20089	39889
901029-5	0.4	65	14	256	---	42409
901031-6	0.5	65	18	438	---	44023
901105-7	1/3	65	84	799	35223	59614
901107-8	1/3	Sealed	83	823	33491	59087
901112-9	0.75	65	13	1093	---	39939
901210-11	1/3	65	102	850	39996	60654
901212-12	1/3	Sealed	101	877	38514	58352
901217-13	0.4	65	104	1056	---	58646
910109-16	0.4	65	81	970	---	58510
910114-17	0.6	65	80	1427	---	57857
910121-19	0.5	65	79	1198	---	58135
910123-20	0.5	65	102	1337	---	57044
910128-21	0.6	65	105	1549	---	56377
910130-22	0.7	65	79	1658	---	56635
910206-24	0.6	65	13	559	---	43513
910211-25	1/3	65	41	508	26988	47736
910213-26	1/3	65	101	866	38995	57578
910305-27	1/3	65	97	817/683*	39421	56733

Table A.4.1 Test conditions and mechanical properties after 27/6 days of water curing						
	σ/f_{co}	RF	f_{co}	ϵ_{co}	E_{co}	E_{dyn}
	---	%	MPa	$\mu\epsilon$	MPa	MPa
910306-28	1/3	65	78	749/603*	34931	56837
910311-29	1/3	65	15	223/190*	21883	42783
910403-30	1/3	65	78	705	36643	54199
910408-31	1/3	65	9	177	17552	36799
910410-32	1/3	65	59	618	31683	52421
910415-33	0.7	65	95	1717	---	55178
910502-38	1/3	65	106	1715	20636	28391
910507-39	1/3	65	78	1377	18797	28717
* Recovery strain						

DEVELOPMENT OF MECHANICAL PROPERTIES

Table A.5.1 Strength- and stiffness development for 900911-1

$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	10	17737	190
696	14	31381	171
1344	14	23292	172
2712	15	23314	180
4752	14	28306	140
$f_{c0} = 10$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 29$ days

Table A.5.2 Strength- and stiffness development for 900913-2

$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	37	26867	465
744	47	33281	431
1296	46	32583	433
2664	47	32832	436
4704	48	33680	427
$f_{c0} = 37$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 29$ days

Table A.5.3 Strength- and stiffness development for 901022-3			
$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	18	24603	239
864	25	31228	231
1536	25	30994	236
2904	26	34305	214
4872	28	35478	224
$f_{c0} = 18$ $\sigma/f_{c0} = 0.33$ RF = 65 % $t_0 = 29$ days			

Table A.5.4 Strength- and stiffness development for 901024-4			
$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	16	20089	262
816	22	32011	197
1488	25	36224	194
2856	25	39047	176
4824	30	39686	202
$f_{c0} = 16$ $\sigma/f_{c0} = 0.33$ RF = Sealed $t_0 = 29$ days			

Table A.5.5 Strength- and stiffness development for 901029-5			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	14	-----	256
624	21	28107	225
1560	22	28082	235
2880	23	30650	217
4920	23	27374	252
$f_{c0} = 14$	$\sigma/f_{c0} = 0.4$	RF = 65 %	$t_0 = 29$ days

Table A.5.6 Strength- and stiffness development for 901031-6			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	18	-----	438
816	24	24039	349
1536	25	24703	349
2832	27	25689	344
4872	27	26278	344
$f_{c0} = 18$	$\sigma/f_{c0} = 0.5$	RF = 65 %	$t_0 = 29$ days

Table A.5.7 Strength- and stiffness development for 901105-7			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	84	35223	799
864	97	42791	720
1536	99	44501	698
3024	98	45249	689
$f_{c0} = 84$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 29$ days

Table A.5.8 Strength- and stiffness development for 901107-8			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	83	33491	823
816	91	39629	738
1488	98	43788	708
2976	91	41298	709
4896	98	45502	674
$f_{c0} = 83$	$\sigma/f_{c0} = 0.33$	RF = Sealed	$t_0 = 29$ days

Table A.5.9 Strength- and stiffness development for 901112-9			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	13	-----	1093
864	16	8542	751
1536	18	12246	589
2928	18	12129	588
4920	19	12679	662
$f_{c0} = 13$	$\sigma/f_{c0} = 0.75$	RF = 65 %	$t_0 = 29$ days

Table A.5.11 Strength- and stiffness development for 901210-11			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	102	39996	850
864	108	44488	795
1536	112	46544	779
3096	104	45001	764
5136	114	48251	761
$f_{c0} = 102$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 29$ days

Table A.5.12 Strength- and stiffness development for 901212-12			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	101	38514	877
816	112	44629	808
1488	110	44539	799
3048	116	47416	784
5088	114	47210	773
$f_{c0} = 101$	$\sigma/f_{c0} = 0.33$	RF = Sealed	$t_0 = 29$ days

Table A.5.13 Strength- and stiffness development for 901217-13			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	104	-----	1056
864	118	42103	950
1560	109	40239	941
2904	114	41811	935
$f_{c0} = 104$	$\sigma/f_{c0} = 0.4$	RF = 65 %	$t_0 = 29$ days

Table A.5.16 Strength- and stiffness development for 910109-16

$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	81	-----	970
816	91	37142	842
1488	95	38240	835
2880	96	38278	843
$f_{c0} = 81$ $\sigma/f_{c0} = 0.4$ RF = 65 % $t_0 = 29$ days			

Table A.5.17 Strength- and stiffness development for 910114-17

$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	80	-----	1427
888	86	26181	1279
1632	97	29649	1231
2880	100	29936	1248
$f_{c0} = 80$ $\sigma/f_{c0} = 0.6$ RF = 65 % $t_0 = 29$ days			

Table A.5.19 Strength- and stiffness development for 910121-19

$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	79	-----	1198
864	93	31714	1058
1536	86	32184	980
2904	93	33781	1000
$f_{c0} = 79$	$\sigma/f_{c0} = 0.5$	RF = 65 %	$t_0 = 29$ days

Table A.5.20 Strength- and stiffness development for 910123-20

$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	102	-----	1337
816	121	37211	1164
1488	109	34865	1146
2856	126	38556	1158
$f_{c0} = 102$	$\sigma/f_{c0} = 0.5$	RF = 65 %	$t_0 = 29$ days

Table A.5.21 Strength- and stiffness development for 910128-21

$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	105	-----	1549
984	116	31490	1426
1536	116	32139	1396
2928	124	33398	1394
$f_{c0} = 105$	$\sigma/f_{c0} = 0.6$	RF = 65 %	$t_0 = 29$ days

Table A.5.22 Strength- and stiffness development for 910130-22

$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	79	-----	1658
936	84	24217	1424
1488	93	27421	1356
2880	93	26256	1383
$f_{c0} = 79$	$\sigma/f_{c0} = 0.7$	RF = 65 %	$t_0 = 29$ days

Table A.5.24 Strength- and stiffness development for 910206-24

$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	13	-----	559
1152	19	20641	346
1680	18	18262	408
2856	19	17835	400
$f_{c0} = 13$	$\sigma/f_{c0} = 0.6$	RF = 65 %	$t_0 = 29$ days

Table A.5.25 Strength- and stiffness development for 910211-25

$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	41	26988	508
960	47	30411	497
1560	47	29798	497
2928	50	31835	479
7584	47	24450	607
$f_{c0} = 41$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 29$ days

Table A.5.26 Strength- and stiffness development for 910213-26			
$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	101	38995	866
648	112	44666	804
912	112	46062	779
1512	116	55059	780
2880	118	48531	768
7536	124	47988	790
$f_{c0} = 101$ $\sigma/f_{c0} = 0.33$ RF = 65 % $t_0 = 29$ days			

Table A.5.27 Strength- and stiffness development for 910305-27			
$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	97	39421	817
816	107	46336	740
1560	111	44076	800
3096	118	50508	729
7128	117	47879	764
$f_{c0} = 97$ $\sigma/f_{c0} = 0.33$ RF = 65 % $t_0 = 29$ days Recovery			

Table A.5.28 Strength- and stiffness development for 910306-28			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	78	34931	749
792	90	42034	680
1632	95	44343	665
3072	97	45706	660
7104	97	44595	673
$f_{c0} = 78$ $\sigma/f_{c0} = 0.33$ RF = 65 % $t_0 = 29$ days Recovery			

Table A.5.29 Strength- and stiffness development for 910311-29			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	15	21883	223
888	20	30188	210
1512	23	33465	182
2952	22	29651	200
6984	22	30129	200
$f_{c0} = 15$ $\sigma/f_{c0} = 0.33$ RF = 65 % $t_0 = 29$ days Recovery			

Table A.5.30 Strength- and stiffness development for 910403-30

$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	78	36643	705
504	101	46842	653
1104	110	49512	651
1896	108	48657	660
3408	113	51898	632
$f_{c0} = 78$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 8$ days

Table A.5.31 Strength- and stiffness development for 910408-31

$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	9	17552	177
504	14	26398	160
1248	31	54984	150
1896	17	33781	129
3264	15	28117	145
$f_{c0} = 9$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 8$ days

Table A.5.32 Strength- and stiffness development for 910410-32			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	59	31683	618
456	77	42532	549
1200	84	43799	570
1896	89	49428	513
3216	87	46940	530
$f_{c0} = 59$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 8$ days

Table A.5.33 Strength- and stiffness development for 910415-33			
$t - t_0$	f_c	E_s	ϵ_s
Hours	MPa	MPa	$\mu\epsilon$
0	95	-----	1717
696	106	26837	1566
1416	106	27609	1503
2952	111	30065	1431
6072	108	26093	1619
$f_{c0} = 95$	$\sigma/f_{c0} = 0.7$	RF = 65 %	$t_0 = 29$ days

Table A.5.38 Strength- and stiffness development for 910502-38			
$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	106	20636	1715
648	106	19888	1779
1320	92	18797	1701
2808	77	15811	1763
5640	73	12969	2046
$f_{c0} = 106$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 29$ days

Table A.5.39 Strength- and stiffness development for 910507-39			
$t - t_0$	f_c	E_s	ϵ_σ
Hours	MPa	MPa	$\mu\epsilon$
0	78	18797	1377
672	58	12767	1480
1560	79	17296	1505
2688	72	16482	1480
5520	72	13392	1821
$f_{c0} = 78$	$\sigma/f_{c0} = 0.33$	RF = 65 %	$t_0 = 29$ days

Average strains and weightloss

Table A.6.1 Average time-dependent strains and weightloss for 900911-1						
Time	ϵ_{total}	ϵ_{sh}	ϵ_{cr}	C	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_{\text{cr}}/\mu\epsilon_0$	gram
0,0	0	0	0	0,00	0,00	0,0
0,8	265	0	76	22,69	0,40	
13,5	310	44	76	22,79	0,40	
25,5	333	50	93	27,84	0,49	
78,0	428	73	165	49,53	0,87	
96,0	451	54	207	62,19	1,09	24,9
116,5	476	89	198	59,38	1,04	27,8
142,0	507	90	227	68,23	1,20	30,9
165,0	521	95	237	71,03	1,25	33,5
331,5	695	190	316	94,69	1,66	46,9
497,5	824	246	388	116,46	2,05	54,7
664,5	929	293	447	134,00	2,36	60,1
1335,0	1217	398	630	188,86	3,32	72,8

Table A.6.1 Average time-dependent strains and weightloss for 9009/11-1

Time	ϵ_{rad}	ϵ_{a}	ϵ_{c}	c	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
2014,5	1371	443	738	221,37	3,89	80,0
2680,5	1504	512	802	240,61	4,23	83,5
3349,0	1517	477	851	255,21	4,49	86,0
3979,0	1585	501	894	268,33	4,72	87,5
4704,0	1599	490	919	275,65	4,84	88,3
5400,0	1639	489	961	288,27	5,07	89,2
6048,0	1660	488	982	294,57	5,18	90,0
7296,0	1708	505	1014	304,17	5,35	90,6
8735,0	1735	497	1048	314,41	5,53	90,4

Table A.6.2 Average time-dependent strains and weightloss for 900913-2

Time	ϵ_{total}	ϵ_{el}	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	—	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
2,3	572	23	83	676	1690	6,68	0,18	
27,0	686	33	188	668	1682	15,02	0,40	
49,0	726	46	215	668	1682	17,17	0,46	4,6
68,5	761	63	233	683	1670	18,65	0,50	6,6
91,5	826	75	286	686	1706	22,86	0,61	8,7
116,5	845	92	287	678	1678	22,99	0,62	10,4
144,5	875	126	283	679	1678	22,64	0,61	12,3
166,3	905	114	325	658	1656	26,02	0,70	13,6
330,0	1066	193	409	690	1658	32,68	0,88	21,8
494,0	1154	235	454	692	1658	36,32	0,98	26,5
662,0	1212	262	485	676	1658	38,79	1,04	30,3

Table A.6.2 Average time-dependent strains and weightloss for 900913-2

Time	ϵ_{del}	ϵ_{A}	ϵ_{C}	$\epsilon_{\text{Dynamometer}}$	Strainindicator	c	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
1343,0	1421	346	610	690	1696	48,77	1,31	39,4
2013,5	1522	360	696	670	1677	55,71	1,50	45,7
2013,5	1522	360	696	670	1677	55,71	1,50	45,7
2920,0	1604	403	736	687	1691	58,92	1,58	48,7
3403,0	1663	415	782	674	1637	62,60	1,68	51,6
3932,0	1697	415	817	679	1702	65,36	1,76	53,1
4704,0	1695	395	835	643	1667	66,78	1,79	54,7
5376,0	1744	397	881	653	1714	70,49	1,89	56,1
6024,0	1757	402	890	642	1696	71,21	1,91	57,4
7224,0	1799	418	916	626	1661	73,25	1,97	59,2
8712,0	1835	411	959	629	1696	76,71	2,06	59,7

Table A. 6.3 Average time-dependent strains and weightloss for 90I012-3

Time	ϵ_{vol}	ϵ_{sh}	ϵ_{cr}	C	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0,00	0,00	0,0
1,8	344	18	82	14,00	0,34	0,4
15,5	392	20	129	21,94	0,53	5,2
42,5	461	57	160	27,20	0,66	12,3
64,0	488	61	183	31,12	0,75	16,4
92,0	540	94	202	34,39	0,83	21,2
115,0	556	97	216	36,70	0,89	24,4
138,0	570	97	229	39,02	0,94	27,1
168,0	609	131	234	39,83	0,96	30,0
336,0	745	169	331	56,37	1,36	41,7
498,0	860	241	376	63,92	1,54	49,7
665,0	943	272	427	72,66	1,75	55,6
835,0	999	300	455	77,39	1,87	61,4

Table A.6.3 Average time-dependent strains and weightloss for 90/10/2-3						
Time	ϵ_{total}	ϵ_A	ϵ_r	C	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
1505,0	1183	365	575	97,76	2,36	70,0
2200,0	1323	438	642	109,20	2,64	75,8
2847,0	1391	437	710	120,72	2,91	80,2
3520,0	1422	452	727	123,65	2,98	82,5
4196,0	1461	459	759	129,02	3,11	84,5
4868,0	1504	469	791	134,60	3,25	86,8
5540,0	1521	459	819	139,26	3,36	87,6
6884,0	1580	491	845	143,77	3,47	88,5
8222,0	1604	496	864	146,92	3,55	89,0
9662,0	1606	482	880	149,68	3,61	89,5
10070,0	1603	509	850	144,57	3,49	89,5

Table A.6.4 Average time-dependent strains and weightloss for 901024-4

Time	ϵ_{total}	ϵ_{Δ}	ϵ_{cr}	σ	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0,00	0,00	0,0
3,0	383	22	99	18,84	0,38	0,0
16,0	425	13	150	28,47	0,57	0,0
43,0	450	11	176	33,46	0,67	0,0
66,5	450	10	178	33,81	0,68	0,1
89,0	445	17	166	31,59	0,63	0,1
119,0	485	15	208	39,42	0,79	0,1
137,5	447	14	170	32,35	0,65	0,3
163,5	480	21	196	37,32	0,75	0,2
329,5	476	35	179	33,92	0,68	0,6
499,5	506	47	197	37,35	0,75	1,1
668,0	509	51	196	37,15	0,75	1,5
832,5	547	51	235	44,60	0,90	1,9

Table A.6.4 Average time-dependent strains and weightloss for 901024-4

Time	ϵ_{total}	ϵ_{ab}	ϵ_{cr}	σ	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\text{e}/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
1505,5	549	64	223	42,40	0,85	3,5
2177,0	594	60	271	51,53	1,04	5,1
2849,0	593	59	272	51,70	1,04	6,8
4200,0	624	62	300	56,97	1,14	9,8
4920,0	663	59	342	64,98	1,31	11,3
5592,0	687	62	363	68,97	1,39	12,5
6936,0	740	64	414	78,62	1,58	14,6
8280,0	780	81	438	83,16	1,67	16,7
9720,0	798	94	442	83,99	1,69	18,7
10128,0	810	118	430	81,69	1,64	19,1

Table A.6.5 Average time-dependent strains and weightloss for 90I029-5							
Time	ϵ_{ad}	ϵ_{a}	ϵ_{cr}	c	φ	Weightloss	
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram	
0,0	0	0	0	0,00	0,00	0,0	
1,0	377	15	106	18,99	0,41	0,4	
19,5	439	24	160	28,64	0,62	6,5	
46,0	506	49	201	36,10	0,79	13,1	
66,0	519	48	215	38,58	0,84	17,1	
93,0	532	57	219	39,30	0,86	22,1	
119,0	559	63	240	43,02	0,94	25,3	
137,5	605	92	257	46,10	1,00	27,5	
169,0	631	89	287	51,38	1,12	30,9	
331,5	769	164	349	62,60	1,36	43,7	
498,0	871	215	400	71,80	1,56	52,0	
668,5	977	273	448	80,31	1,75	59,3	
844,0	1018	276	486	87,12	1,90	61,7	

Table A.6.5 Average time-dependent strains and weightloss for 901029-5

Time	ϵ_{tot}	ϵ_{A}	ϵ_{C}	C	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
1512,0	1270	379	634	113,75	2,48	71,9
2176,0	1334	374	704	126,24	2,75	77,7
2831,0	1451	425	770	138,16	3,01	81,7
3572,0	1500	427	818	146,63	3,19	84,3
4192,0	1519	426	838	150,21	3,27	86,0
4864,0	1565	430	880	157,75	3,44	87,6
5536,0	1587	417	914	164,00	3,57	88,6
6880,0	1649	460	933	167,31	3,64	89,2
8224,0	1688	454	978	175,39	3,82	89,4

Table A.6.6 Average time-dependent strains and weightloss for 901031-6

Time	ϵ_{rad}	ϵ_{a}	ϵ_{c}	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0,00	0,0
2,0	665	14	214	0,49	0,9
18,0	816	43	336	0,77	6,5
46,5	881	59	385	0,88	13,8
72,0	933	71	424	0,97	18,4
90,5	996	91	468	1,07	21,3
122,5	1023	77	508	1,16	25,8
139,0	1042	90	514	1,18	28,0
171,5	1088	106	545	1,25	31,5
333,5	1302	161	704	1,61	44,1
503,0	1454	207	809	1,85	52,5
667,0	1590	248	905	2,07	58,6
836,0	1671	264	969	2,21	61,7

Table A.6.6 Average time-dependent strains and weightloss for 901031-6

Time	ϵ_{total}	ϵ_{th}	ϵ_{cr}	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
1512,0	1957	366	1153	131,36	2,64	71,8
2177,5	2145	406	1301	148,21	2,97	77,8
2828,5	2247	426	1383	157,52	3,16	81,6
3448,0	2280	393	1450	165,12	3,31	83,7
4168,0	2358	421	1499	170,76	3,43	85,8
4840,0	2404	415	1551	176,68	3,54	87,4
5512,0	2433	412	1583	180,34	3,62	88,6
6808,0	2511	449	1624	184,99	3,71	89,2
8152,0	2538	441	1660	189,01	3,79	89,5

Table A.6.7 Average time-dependent strains and weightloss for 90/105-7

Time	ϵ_{pol}	ϵ_{sh}	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindi- cator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
2,3	955	9	147	947	2444	5,22	0,18	0,5
24,0	989	14	176	918	2416	6,26	0,22	1,0
51,0	1039	39	201	904	2382	7,14	0,25	1,5
74,5	1053	47	206	904	2363	7,33	0,26	1,8
95,0	1051	52	200	881	2345	7,11	0,25	2,1
122,0	1100	57	244	910	2444	8,67	0,31	2,5
139,0	1109	55	255	907	2423	9,07	0,32	2,8
162,5	1126	63	263	906	2420	9,36	0,33	3,0
330,0	1234	113	322	924	2446	11,44	0,40	4,6
500,5	1303	156	348	898	2404	12,37	0,44	6,2
676,5	1323	164	360	906	2404	12,80	0,45	6,3

Table A.6.7 Average time-dependent strains and weightloss for 901105-7

Time	ϵ_{total}	ϵ_A	ϵ_x	$\epsilon_{\text{dynamometer}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
841,0	1319	160	360	868	2355	12,80	0,45	7,0
1504,0	1437	200	438	899	2386	15,55	0,55	9,4
2176,0	1502	224	479	931	2445	17,03	0,60	10,7
2848,0	1517	212	505	896	2416	17,95	0,63	11,9
3520,0	1517	212	506	869	2390	17,97	0,63	13,1
4189,0	1553	232	522	886	2371	18,53	0,65	14,4
4933,0	1583	231	553	912	2463	19,64	0,69	15,2
5605,0	1579	224	557	851	2446	19,79	0,70	16,1
6949,0	1628	248	581	883	2422	20,65	0,73	17,2
8269,0	1657	259	599	879	2422	21,28	0,75	18,1

Table A.6.8 Average time-dependent strains and weightloss for 901107-8								
Time	ϵ_{total}	ϵ_a	ϵ_r	$\epsilon_{\text{dynamic}}$	Strainindi- cator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_r/\mu\epsilon_a$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
4,0	943	13	128	896	2329	4,65	0,16	0,3
21,0	991	18	171	919	2357	6,19	0,21	0,3
47,0	1025	47	175	900	2324	6,37	0,22	0,3
73,0	1026	8	216	870	2301	7,82	0,27	0,3
90,5	1082	27	253	921	2376	9,16	0,31	0,4
114,5	1093	33	257	911	2364	9,34	0,32	0,3
142,5	1095	36	257	898	2348	9,31	0,32	0,4
163,5	1115	38	275	904	2341	9,98	0,34	0,3
334,0	1189	64	322	919	2381	11,68	0,40	0,5
497,5	1210	73	335	891	2344	12,17	0,42	0,5
667,0	1257	88	366	912	2328	13,29	0,46	0,6

Table A.6.8 Average time-dependent strains and weightloss for 901107-8

Time	ϵ_{total}	ϵ_A	ϵ_{cr}	$\epsilon_{\text{Dynamometer}}$	Strainindicator	C	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
839,0	1270	85	383	883	2306	13,88	0,48	0,8
1507,5	1364	141	421	910	2342	15,26	0,52	1,2
2179,0	1380	102	476	889	2310	17,26	0,59	1,5
2828,5	1437	116	519	915	2355	18,82	0,65	1,8
3504,0	1409	71	536	858	2331	19,44	0,67	2,1
4175,0	1432	75	554	865	2313	20,10	0,69	2,6
4850,0	1470	97	571	860	2299	20,71	0,71	2,7
5522,0	1456	66	588	858	2374	21,35	0,73	3,0
6866,0	1521	100	619	880	2371	22,44	0,77	3,3
8210,0	1517	119	596	849	2327	21,61	0,74	3,7

Table A.6.9 Average time-dependent strains and weightloss for 90/11/2-9								
Time	ϵ_{total}	ϵ_{th}	ϵ_{cr}	$\epsilon_{\text{Dynamometer}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
1,6	3154	5	2056	513	1336	210,03	1,88	1,4
2,5	3248	9	2146	506	1294	219,29	1,96	2,1
2,5	3248	9	2146	506	1294	219,29	1,96	2,1
6,0	3446	7	2346	499	1326	239,70	2,15	4,4
23,5	3711	18	2599	511	1325	265,59	2,38	12,4
45,0	3820	30	2696	499	1323	275,48	2,47	17,3
70,5	3931	49	2789	503	1329	284,97	2,55	23,0
97,0	4048	71	2884	514	1328	294,67	2,64	27,9
97,0	4048	71	2884	514	1328	294,67	2,64	27,9
119,0	4101	75	2933	481	1265	299,67	2,68	31,3
144,0	4195	92	3010	481	1269	307,49	2,75	34,7

Table A.6.9 Average time-dependent strains and weightloss for 901112-9

Time	ϵ_{total}	ϵ_A	ϵ_c	$\epsilon_{\text{dynamic}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	—	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
163,0	4268	106	3068	489	1288	313,49	2,81	37,1
334,0	4745	188	3464	504	1310	353,94	3,17	52,7
380,0	4821	194	3534	497	1308	361,06	3,23	54,0
380,0	4821	194	3534	497	1308	361,06	3,23	54,0
510,0	5022	234	3696	515	1308	377,58	3,38	57,9
598,0	5152	251	3809	509	1323	389,15	3,48	61,5
598,0	5152	251	3809	509	1323	389,15	3,48	61,5
674,0	5258	257	3908	500	1307	399,25	3,58	63,9
840,5	5450	323	4033	517	1290	412,09	3,69	68,3
1053,0	5650	350	4207	522	1324	429,80	3,85	72,1
1053,0	5650	350	4207	522	1324	429,80	3,85	72,1
1505,0	5932	409	4430	493	1290	452,67	4,05	78,3

Table A.6.9 Average time-dependent strains and weightloss for 90/112-9								
Time	ϵ_{total}	ϵ_{sh}	ϵ_{cr}	$\epsilon_{\text{Dynamometer}}$	Strainindi- cator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_{\text{cr}}/\mu\epsilon_0$	gram
1730,0	6082	422	4568	494	1320	466,68	4,18	80,4
2181,0	6253	441	4719	517	1326	482,14	4,32	84,2
2851,0	6368	427	4848	455	1296	495,32	4,44	87,2
3528,0	6473	436	4944	447	1302	505,18	4,52	89,2
4200,0	6591	455	5042	462	1319	515,19	4,61	91,1
4872,0	6641	461	5087	454	1317	519,72	4,65	91,2
5424,0	6685	452	5140	442	1324	525,15	4,70	92,4
6864,0	6785	470	5222	463	1293	533,54	4,78	92,7
8016,0	6871	485	5293	471	1308	540,80	4,84	93,0

Table A.6.11 Average time-dependent strains and weightloss for 90/210-11

Time	ϵ_{total}	ϵ_{sh}	ϵ_{cr}	$\epsilon_{\text{dynamometer}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
2,0	1004	6	128	1149	2954	3,77	0,15	0,5
19,5	1029	10	148	1117	2894	4,37	0,17	0,4
48,0	1094	32	192	1123	2846	5,64	0,22	1,0
68,5	1141	46	225	1165	2979	6,63	0,26	1,0
95,5	1140	39	230	1143	2953	6,77	0,26	1,2
121,5	1159	59	229	1131	2933	6,75	0,26	1,4
140,5	1182	70	242	1146	2922	7,11	0,28	1,6
168,5	1199	75	254	1142	2904	7,46	0,29	1,8
331,0	1282	101	311	1144	2964	9,14	0,36	2,6
504,0	1341	142	329	1145	2923	9,68	0,38	3,1
665,0	1370	163	336	1137	2886	9,89	0,39	3,8

Table A.6.11 Average time-dependent strains and weightloss for 90/210-11

Time	ϵ_{total}	ϵ_{sh}	ϵ_{cr}	$\epsilon_{\text{dynamometer}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
833,0	1414	164	380	1163	2981	11,16	0,44	4,2
1509,0	1498	176	451	1131	2918	13,26	0,52	5,7
2177,0	1483	165	448	1100	2879	13,17	0,51	6,8
2849,0	1507	148	489	1087	2964	14,38	0,56	7,6
3521,0	1555	174	511	1106	2941	15,03	0,59	8,6
4193,0	1576	188	517	1082	2927	15,22	0,59	9,0
4837,0	1584	186	527	1070	2911	15,51	0,61	9,7
5605,0	1584	190	524	1053	2885	15,42	0,60	10,3
6853,0	1668	234	563	1109	2941	16,57	0,65	11,0
8749,0	1679	217	591	1095	2922	17,38	0,68	11,7

Table A.6.12 Average time-dependent strains and weightloss for 90/12/12-12

Time	ϵ_{total}	ϵ_{sh}	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_r/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
2,5	985	3	104	1120	2876	3,09	0,12	0,6
22,0	1036	11	148	1116	2914	4,38	0,17	0,5
49,5	1085	11	196	1107	2881	5,82	0,22	0,5
76,0	1100	32	191	1109	2857	5,66	0,22	0,5
94,0	1107	25	204	1096	2846	6,06	0,23	0,6
123,0	1162	47	237	1140	2938	7,03	0,27	0,6
145,5	1163	38	248	1119	2925	7,35	0,28	0,6
163,0	1166	35	254	1124	2919	7,52	0,29	0,6
334,5	1219	50	291	1102	2864	8,63	0,33	0,6
481,0	1256	61	318	1106	2937	9,41	0,36	0,8
669,5	1306	73	356	1114	2915	10,56	0,41	0,9

Table A.6.12 Average time-dependent strains and weightloss for 90/12/12-12							
Time	ϵ_{total}	ϵ_A	ϵ_C	$\epsilon_{\text{Dynamometer}}$	Strainindicator	c	φ
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$
838,5	1363	104	382	1139	2896	11,30	0,44
1510,0	1362	89	396	1081	2839	11,73	0,45
2180,5	1408	93	438	1110	2839	12,98	0,50
2878,0	1407	75	455	1077	2896	13,48	0,52
3530,0	1453	85	490	1081	2874	14,51	0,56
4202,0	1464	95	491	1070	2856	14,54	0,56
5126,0	1486	72	537	1074	2956	15,89	0,61
5846,0	1508	100	530	1089	2941	15,70	0,60
7142,0	1532	106	549	1084	2922	16,25	0,63
8990,0	1563	112	574	1089	2898	16,99	0,65
							3,1

Table A.6.13 Average time-dependent strains and weightloss for 9012/7-13

Time	ϵ_{total}	ϵ_{a}	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindicator	σ	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	μNPa	$\mu\epsilon_r/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
2,5	1200	21	124	952	2530	2,98	0,12	0,1
25,5	1280	9	215	940	2539	5,17	0,20	0,0
42,5	1303	5	242	935	2519	5,82	0,23	0,2
74,0	1336	9	272	926	2494	6,53	0,26	0,3
100,5	1370	7	307	940	2586	7,39	0,29	0,5
122,5	1379	9	314	932	2572	7,56	0,30	0,6
142,0	1396	10	330	928	2563	7,92	0,31	0,7
165,0	1428	27	345	936	2554	8,28	0,33	1,0
334,0	1515	78	382	943	2499	9,18	0,36	1,5
499,0	1587	108	424	964	2560	10,19	0,40	2,2
671,0	1621	116	449	933	2540	10,80	0,43	2,6

Table A.6.13 Average time-dependent strains and weightloss for 90/217-13								
Time	ϵ_{total}	ϵ_a	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindi- cator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_d/\mu\epsilon_0$	gram
834,0	1631	121	454	931	2518	10,92	0,43	2,9
1506,0	1745	130	560	959	2580	13,46	0,53	4,3
2178,0	1757	107	594	911	2547	14,28	0,56	5,1
2854,0	1757	102	600	887	2525	14,42	0,57	5,9
3526,0	1803	129	619	894	2502	14,88	0,59	6,7
4198,0	1776	96	625	853	2504	15,02	0,59	7,2
4870,0	1848	130	662	903	2582	15,92	0,63	7,7
5542,0	1884	146	682	910	2568	16,40	0,65	8,0
6881,0	1908	150	702	907	2568	16,87	0,66	8,6
8760,0	1879	91	733	852	2534	17,61	0,69	9,3

Table A.6.16 Average time-dependent strains and weightloss for 910109-16

Time	ϵ_{total}	ϵ_{sh}	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
4,0	1133	19	144	1662	4339	4,46	0,15	0,9
18,0	1224	21	233	1709	4374	7,21	0,24	0,6
43,5	1275	26	279	1728	4298	8,63	0,29	1,1
69,5	1285	17	298	1678	4389	9,22	0,31	1,4
88,5	1349	65	314	1720	4365	9,74	0,32	1,7
116,0	1371	72	328	1692	4327	10,18	0,34	2,0
136,0	1353	58	325	1668	4298	10,06	0,33	2,1
162,5	1396	81	345	1664	4274	10,68	0,36	2,4
330,5	1499	116	413	1674	4312	12,80	0,43	3,4
495,5	1590	143	477	1702	4401	14,78	0,49	4,4
667,0	1630	154	505	1689	4343	15,66	0,52	5,1

Table A.6.17 Average time-dependent strains and weightloss for 91014-17

Time	ϵ_{total}	ϵ_{th}	ϵ_{ss}	$\epsilon_{\text{hydromechanics}}$	Strainindicator	c	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
3,0	1801	11	363	1114	2884	7,57	0,25	0,6
14,0	1933	20	486	1041	2915	10,12	0,34	0,5
41,0	2080	28	625	1105	2941	13,01	0,44	1,1
65,5	2140	51	663	1113	2904	13,80	0,46	1,5
91,0	2183	59	697	1127	2876	14,53	0,49	1,9
119,5	2280	61	793	1143	2970	16,51	0,56	2,4
134,5	2292	72	794	1137	2956	16,54	0,56	2,7
158,0	2298	54	817	1101	2938	17,03	0,57	2,9
326,0	2503	97	979	1123	2964	20,40	0,69	4,2
495,0	2611	141	1043	1112	2905	21,74	0,73	5,5
667,0	2725	149	1149	1128	2979	23,95	0,81	6,3

Table A.6.17 Average time-dependent strains and weightloss for 910114-17								
Time	ϵ_{total}	ϵ_{a}	ϵ_{d}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
831,0	2779	172	1180	1128	2945	24,59	0,83	7,0
1503,0	2938	179	1332	1115	2978	27,74	0,93	9,0
2178,0	2992	171	1394	1059	2920	29,04	0,98	10,7
2850,0	3070	206	1437	1058	2881	29,94	1,01	12,6
3522,0	3141	180	1535	1053	2970	31,97	1,08	13,7
4194,0	3221	227	1567	1078	2936	32,65	1,10	14,6
4866,0	3252	237	1589	1067	2909	33,11	1,11	15,3
5514,0	3287	237	1623	1065	2887	33,82	1,14	16,0
6882,0	3382	271	1685	1078	2935	35,11	1,18	17,1
7602,0	3417	285	1705	1093	2916	35,52	1,20	17,9
8784,0	3492	296	1770	1105	2894	36,87	1,24	18,9

Table A.6.19 Average time-dependent strains and weightloss for 910121-19

Time	ϵ_{total}	ϵ_{A}	ϵ_{C}	$\epsilon_{\text{dynamic}}$	Strainindicator	C	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
4,0	1444	7	240	1273	3355	6,04	0,20	0,3
16,0	1474	6	269	1243	3291	6,79	0,22	0,5
44,0	1568	45	325	1249	3234	8,18	0,27	0,9
68,0	1652	40	414	1303	3407	10,43	0,35	1,3
90,0	1680	48	435	1287	3375	10,96	0,36	1,5
117,0	1701	51	452	1278	3342	11,38	0,38	2,0
136,5	1746	84	464	1289	3327	11,70	0,39	2,2
161,0	1754	81	475	1271	3307	11,97	0,40	2,3
330,0	1902	125	579	1268	3345	14,59	0,48	4,0
497,0	2042	165	680	1324	3414	17,12	0,57	4,9
668,0	2071	179	694	1284	3365	17,49	0,58	5,7

Table A.6.19 Average time-dependent strains and weightloss for 910121-19								
Time	ϵ_{total}	ϵ_a	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindi- cator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
813,0	2110	195	718	1284	3336	18,07	0,60	6,3
1556,0	2236	208	830	1271	3388	20,90	0,69	8,5
2200,0	2289	208	883	1237	3334	22,24	0,74	10,2
2857,0	2375	222	955	1271	3435	24,06	0,80	11,7
3529,0	2396	232	967	1254	3403	24,35	0,81	12,9
4105,0	2435	252	985	1245	3379	24,82	0,82	13,8
4873,0	2480	274	1008	1259	3346	25,40	0,84	14,6
5542,0	2530	273	1060	1275	3403	26,71	0,89	15,2
6910,0	2545	273	1075	1234	3369	27,08	0,90	16,4
8784,0	2676	310	1169	1312	3399	29,45	0,98	18,3

Table A.6.20 Average time-dependent strains and weightloss for 910123-20

Time	ϵ_{tot}	ϵ_{th}	ϵ_{c}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	—	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
4,0	1634	22	275	1190	3143	5,36	0,21	0,5
22,0	1654	18	300	1136	3107	5,84	0,22	0,5
44,0	1719	11	371	1142	3077	7,23	0,28	0,7
72,0	1808	21	449	1187	3170	8,77	0,34	1,0
91,0	1824	38	450	1194	3156	8,77	0,34	1,2
116,0	1853	33	483	1158	3139	9,43	0,36	1,4
139,0	1847	32	478	1144	3125	9,32	0,36	1,4
164,0	1886	66	483	1165	3106	9,43	0,36	1,8
336,0	2025	95	593	1189	3173	11,57	0,44	2,6
504,0	2092	122	633	1169	3126	12,35	0,47	3,2
671,0	2134	147	650	1163	3102	12,69	0,49	3,6

Table A.6.20 Average time-dependent strains and weightloss for 910123-20

Time	ϵ_{cal}	ϵ_{a}	ϵ_{cr}	$\epsilon_{\text{dynamometer}}$	Strainindicator	σ	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_{\text{cr}}/\mu\epsilon_{\text{a}}$	gram
867,0	2168	164	667	1130	3075	13,02	0,50	4,1
1460,0	2257	139	781	1146	3141	15,24	0,58	5,3
2206,0	2306	145	824	1120	3095	16,09	0,62	6,5
2854,0	2355	159	859	1110	3074	16,75	0,64	7,2
3526,0	2421	173	911	1145	3184	17,77	0,68	8,0
4054,0	2439	178	925	1129	3167	18,05	0,69	8,5
4870,0	2473	194	942	1129	3146	18,37	0,70	8,9
5542,0	2493	191	965	1128	3135	18,83	0,72	9,4
6862,0	2548	209	1003	1142	3175	19,56	0,75	10,2
8736,0	2642	248	1057	1182	3144	20,63	0,79	11,3

Table A.6.21 Average time-dependent strains and weightloss for 910128-21

Time	ϵ_{total}	ϵ_{th}	ϵ_{cp}	$\epsilon_{\text{dynamic}}$	Strainindicator	σ	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
3,5	1844	9	286	1133	2933	4,54	0,18	1,4
17,0	1955	7	399	1167	2992	6,32	0,26	1,3
41,5	2045	25	472	1132	2917	7,48	0,30	1,7
67,5	2062	28	486	1100	2851	7,70	0,31	2,2
114,0	2171	37	584	1116	2919	9,27	0,38	2,4
136,5	2226	54	623	1131	2895	9,88	0,40	2,4
165,0	2288	63	676	1151	2970	10,71	0,44	2,6
329,0	2442	97	796	1157	2961	12,62	0,51	3,4
501,0	2529	112	868	1143	2990	13,76	0,56	4,0
647,0	2580	135	896	1134	2937	14,21	0,58	4,4
832,0	2649	126	974	1138	2982	15,45	0,63	4,8

Table A.6.21 Average time-dependent strains and weightloss for 910128-21								
Time	ϵ_{total}	ϵ_{sh}	ϵ_{gr}	$\epsilon_{\text{dynamic}}$	Strainindi- cator	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
1509,0	2742	101	1092	1064	2976	17,32	0,70	6,1
2178,0	2839	157	1133	1099	2908	17,97	0,73	7,3
2927,0	2931	153	1229	1102	2967	19,49	0,79	8,1
3599,0	2950	159	1242	1076	2927	19,70	0,80	8,8
4343,0	3046	178	1319	1125	2996	20,92	0,85	9,3
4943,0	3063	176	1337	1095	2972	21,21	0,86	9,6
5495,0	3106	198	1359	1097	2945	21,54	0,88	10,1
7007,0	3198	215	1434	1119	2947	22,74	0,93	11,3
8880,0	3283	235	1499	1120	2962	23,77	0,97	12,5

Table A.6.22 Average time-dependent strains and weightloss for 910130-22

Time	ϵ_{load}	ϵ_{th}	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strain indicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
4,0	2070	6	405	1025	2719	7,31	0,24	1,7
20,5	2260	21	581	1030	2718	10,47	0,35	1,9
37,0	2278	10	610	992	2638	11,00	0,37	2,1
63,0	2397	25	714	1003	2672	12,88	0,43	2,6
84,0	2469	41	770	1024	2718	13,88	0,46	2,8
114,0	2523	48	817	1015	2672	14,73	0,49	3,1
140,0	2599	47	893	1031	2742	16,11	0,54	3,4
161,5	2607	61	888	1026	2714	16,02	0,54	3,6
329,0	2847	101	1088	1005	2675	19,63	0,66	5,0
497,0	2946	141	1148	1019	2683	20,70	0,69	5,9
692,5	3007	165	1185	932	2615	21,37	0,71	6,8

Table A.6.22 Average time-dependent strains and weightloss for 910130-22								
Time	ϵ_{total}	ϵ_A	ϵ_C	$\epsilon_{\text{dynamometer}}$	Strainindi- cator	C	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_A/\mu\epsilon_0$	gram
833,0	3133	169	1305	1027	2713	23,54	0,79	7,4
1503,0	3288	161	1470	955	2682	26,51	0,89	9,4
2177,0	3423	168	1596	973	2706	28,79	0,96	11,6
2880,0	3558	199	1701	990	2738	30,68	1,03	12,8
3552,0	3615	216	1741	887	2681	31,40	1,05	14,1
3552,0	3615	216	1741	887	2681	31,40	1,05	14,1
4248,0	3728	227	1843	1020	2743	33,25	1,11	14,9
4896,0	3770	234	1878	978	2706	33,88	1,13	15,6
5685,0	3845	253	1934	944	2710	34,88	1,17	16,7
6909,0	3947	278	2011	1011	2711	36,28	1,21	18,3
8832,0	4123	289	2177	1016	2719	39,26	1,31	20,3

Table A.6.24 Average time-dependent strains and weightloss for 910206-24

Time	ϵ_{total}	ϵ_A	ϵ_c	C	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0,00	0,00	0,0
3,0	996	13	424	54,34	0,76	0,8
21,0	1142	15	567	72,75	1,02	6,9
45,0	1226	16	652	83,57	1,17	12,8
72,0	1302	32	712	91,27	1,27	17,8
90,0	1340	39	742	95,18	1,33	20,6
114,0	1383	50	775	99,33	1,39	24,0
138,0	1428	52	817	104,76	1,46	26,8
167,0	1486	78	848	108,77	1,52	29,8
334,0	1709	141	1010	129,44	1,81	41,3
477,5	1843	197	1088	139,44	1,95	47,6
670,5	1975	219	1197	153,52	2,14	53,7
836,5	2075	249	1267	162,45	2,27	57,3

Table A 6.24 Average time-dependent strains and weightloss for 910206-24						
Time	ϵ_{total}	ϵ_a	ϵ_c	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
1509,5	2305	297	1449	185,72	2,59	67,3
2185,5	2481	351	1571	201,37	2,81	73,5
2857,5	2579	367	1653	211,98	2,96	75,9
3649,0	2693	385	1748	224,11	3,13	78,7
4369,0	2706	407	1741	223,15	3,11	79,4
4993,0	2758	409	1791	229,56	3,20	79,8
5665,0	2822	430	1833	235,03	3,28	80,6
7009,0	2878	424	1895	242,92	3,39	81,0
8785,0	2984	464	1961	251,37	3,51	82,8

Table A.6.25 Average time-dependent strains and weightloss for 910211-25

Time	ϵ_{total}	ϵ_{sh}	ϵ_{c}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
2,5	636	8	119	711	1834	8,68	0,23	2,2
17,0	697	5	184	694	1775	13,42	0,36	3,4
44,0	781	23	250	695	1794	18,21	0,49	6,6
67,0	844	45	290	712	1859	21,19	0,57	8,7
88,0	865	56	301	687	1826	22,00	0,59	10,2
122,0	902	71	322	674	1774	23,49	0,63	12,2
136,0	948	74	366	711	1865	26,71	0,72	13,1
164,0	1003	104	391	706	1828	28,56	0,77	14,7
312,0	1160	145	507	725	1886	36,98	1,00	20,1
497,0	1233	177	547	672	1788	39,94	1,08	24,5
668,0	1304	190	605	692	1817	44,16	1,19	27,6

Table A.6.25 Average time-dependent strains and weightloss for 910211-25							
Time	ϵ_{total}	ϵ_{A}	ϵ_{D}	$\epsilon_{\text{Dynamometer}}$	Strainindicator	c	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	μNPa	gram
836,5	1361	206	647	699	1833	47,21	1,27
1484,5	1538	239	791	709	1846	57,72	1,56
2157,0	1640	272	860	670	1828	62,79	1,69
2829,0	1693	263	922	637	1820	67,27	1,81
3501,0	1805	304	993	679	1837	72,46	1,95
4173,0	1842	297	1037	666	1851	75,72	2,04
4773,0	1902	327	1066	669	1810	77,83	2,10
5445,0	1963	342	1113	691	1810	81,21	2,19
6861,0	2038	355	1174	694	1872	85,73	2,31
8784,0	2169	382	1279	706	1846	93,36	2,52
							30,1
							36,6
							41,5
							44,5
							46,5
							48,0
							49,2
							50,5
							53,0
							55,9

Table A.6.26 Average time-dependent strains and weightloss for 910213-26

Time	ϵ_{gel}	ϵ_{sh}	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
3,0	934	3	65	1099	2867	1,91	0,07	1,7
17,0	985	18	100	1103	2894	2,97	0,12	1,7
37,5	1005	8	130	1092	2855	3,86	0,15	1,8
70,0	1051	6	179	1106	2922	5,29	0,21	2,0
85,5	1074	21	186	1112	2908	5,52	0,22	2,2
115,0	1096	32	198	1108	2884	5,87	0,23	2,3
133,0	1093	12	215	1088	2871	6,36	0,25	2,4
161,0	1123	43	213	1099	2856	6,32	0,25	2,5
357,0	1201	72	262	1082	2895	7,77	0,30	3,4
496,0	1237	78	293	1085	2862	8,67	0,34	3,9
664,0	1292	101	325	1117	2935	9,63	0,38	4,4

Table A.6.26 Average time-dependent strains and weightloss for 910213-26								
Time	ϵ_{total}	ϵ_{A}	ϵ_{C1}	$\epsilon_{\text{Dynamometer}}$	Strainindicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
833,0	1300	92	341	1104	2911	10,11	0,39	4,9
1505,0	1362	104	393	1107	2969	11,62	0,45	6,3
2177,0	1405	104	434	1093	2931	12,87	0,50	7,5
2849,0	1411	105	440	1060	2906	13,02	0,51	8,4
3521,0	1438	126	445	1061	2886	13,18	0,51	9,0
4193,0	1439	124	449	1040	2861	13,31	0,52	9,5
4865,0	1491	140	485	1101	2933	14,37	0,56	10,0
5539,0	1501	153	482	1086	2930	14,26	0,56	10,6
6907,0	1524	181	476	1087	2902	14,11	0,55	11,6
8736,0	1613	197	550	1143	2938	16,29	0,64	13,0

Table A.6.27 Average time-dependent strains and weightloss for 910305-27

Time	ϵ_{total}	ϵ_{el}	ϵ_{pl}	$\epsilon_{\text{dynamic}}$	Strain indicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
3,0	935	11	107	1066	2806	3,33	0,13	1,1
18,0	953	6	130	1035	2739	4,02	0,16	1,1
42,0	991	29	144	1032	2698	4,49	0,18	1,3
66,0	1026	14	195	1041	2777	6,04	0,24	1,5
90,0	1046	32	197	1031	2754	6,12	0,24	1,8
110,0	1053	41	196	1037	2736	6,07	0,24	1,8
139,0	1074	54	203	1015	2718	6,30	0,25	2,1
326,0	1134	70	247	1004	2742	7,67	0,30	3,0
494,0	1181	85	279	997	2694	8,67	0,34	3,5
690,0	1242	92	333	1013	2758	10,34	0,41	4,0
830,0	1224	76	330	970	2736	10,26	0,40	4,4

Table A.6.27 Average time-dependent strains and weightloss for 910305-27								
Time	ϵ_{total}	ϵ_a	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindicator	σ	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
1483,0	1339	135	387	997	2782	12,02	0,47	5,9
2155,0	1368	151	400	991	2742	12,42	0,49	6,6
2707,0	1405	165	423	1000	2712	13,15	0,52	7,5
3475,0	1463	184	462	1017	2778	14,34	0,57	8,4
4051,0	1485	172	496	1040	2765	15,40	0,61	8,6
4723,0	1501	202	482	1024	2733	14,95	0,59	9,3
5395,0	1544	200	526	1050	2775	16,34	0,64	9,7
6763,0	1543	190	537	1026	2724	16,66	0,66	10,9
6764,0	812	190	488	38	-23	15,15	0,60	10,9
6793,0	762	199	429	134	-23	13,31	0,52	10,7
6817,0	774	219	421	134	-23	13,08	0,52	10,8
6841,0	763	202	427	89	-23	13,25	0,52	10,8

Table A.6.27 Average time-dependent strains and weightloss for 910305-27

Time	ϵ_{total}	ϵ_{A}	ϵ_{cr}	$\epsilon_{\text{dynamometer}}$	Strainindicator	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_r/\mu\epsilon_0$	gram
6869,0	746	202	410	87	-23	12,72	0,50	10,8
6894,0	769	227	408	100	-23	12,66	0,50	10,9
6918,0	748	217	397	102	-23	12,33	0,49	10,9
6947,0	740	204	402	94	-23	12,48	0,49	10,9
7107,0	751	225	393	126	-23	12,19	0,48	11,0
7299,0	723	214	375	89	-23	11,66	0,46	11,2
7470,0	756	232	390	91	-23	12,10	0,48	11,3
7998,0	712	213	365	90	-23	11,32	0,45	12,0
8718,0	741	251	356	100	-23	11,05	0,44	12,5

Table A.6.28 Average time-dependent strains and weightloss for 910306-28

Time	ϵ_{rel}	ϵ_{sh}	ϵ_{cr}	$\epsilon_{dynamic}$	Strainindi- cator	c	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/MPa$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
2,5	850	7	94	1357	3543	3,59	0,13	0,4
16,5	884	11	125	1309	3435	4,76	0,17	0,5
41,0	926	15	162	1327	3491	6,20	0,22	0,9
65,0	940	16	175	1296	3444	6,69	0,23	1,3
86,0	970	39	182	1301	3414	6,97	0,24	1,4
115,0	1003	29	225	1329	3522	8,59	0,30	1,8
134,0	1010	33	227	1303	3500	8,69	0,30	2,0
162,0	1027	39	239	1311	3472	9,14	0,32	2,2
189,0	1044	43	252	1296	3449	9,63	0,34	2,4
353,0	1131	80	302	1301	3504	11,54	0,40	3,8
521,0	1176	91	336	1290	3438	12,85	0,45	4,7

Table A.6.28 Average time-dependent strains and weightloss for 910306-28

Time	ϵ_{total}	ϵ_a	ϵ_{dyn}	Strain indicator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\text{e}/\text{MPa}$	$\mu\epsilon_a/\mu\epsilon_0$	gram
688,5	1216	90	1285	3510	14,40	0,50	5,5
808,0	1268	132	1293	3462	14,77	0,52	6,4
1460,0	1363	169	1310	3509	17,00	0,59	9,0
2132,0	1392	181	1263	3443	17,67	0,62	10,4
2924,0	1450	200	1303	3523	19,17	0,67	12,2
3644,0	1477	209	1289	3479	19,84	0,69	13,2
4268,0	1503	219	1278	3461	20,46	0,71	13,9
4940,0	1545	240	1317	3520	21,22	0,74	15,1
5612,0	1579	252	1330	3491	22,07	0,77	16,2
6932,0	1600	225	1309	3496	23,93	0,84	18,0
6934,0	911	225	79	-14	20,64	0,72	18,0
6959,0	891	228	93	-14	19,75	0,69	17,7

Table A.6.28 Average time-dependent strains and weightloss for 910306-28								
Time	ϵ_{total}	ϵ_A	ϵ_c	$\epsilon_{\text{dynamic}}$	Strain indicator	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\text{e/MPa}$	$\mu\epsilon/\mu\epsilon$	gram
6983,0	920	264	510	93	-14	19,50	0,68	17,8
7007,0	911	259	506	104	-14	19,35	0,68	17,8
7035,0	886	237	503	129	-14	19,21	0,67	17,9
7060,0	870	232	492	135	-14	18,82	0,66	17,9
7084,0	910	275	489	97	-14	18,68	0,65	17,9
7113,0	884	251	488	122	-14	18,64	0,65	18,0
7273,0	871	246	479	128	-14	18,32	0,64	18,1
7465,0	882	262	474	113	-14	18,11	0,63	18,4
7636,0	891	283	462	101	-14	17,65	0,62	18,5
8164,0	862	262	454	117	-14	17,35	0,61	19,9
8884,0	876	283	447	111	-14	17,08	0,60	22,2

Table A.6.29 Average time-dependent strains and weightloss for 910311-29

Time	ϵ_{rad}	ϵ_{th}	ϵ_{cr}	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0,00	0,00	0,0
2,5	310	6	81	16,67	0,37	0,6
17,0	333	13	97	19,91	0,44	5,1
46,0	407	22	163	33,31	0,73	11,8
72,0	424	22	180	36,85	0,81	16,1
94,0	460	40	197	40,36	0,88	19,5
117,0	468	55	190	39,00	0,85	22,5
137,5	479	64	193	39,49	0,87	24,7
166,0	502	71	209	42,82	0,94	27,4
333,5	611	108	281	57,62	1,26	38,4
497,0	695	138	335	68,65	1,50	45,5
665,0	746	143	380	77,84	1,71	50,5
837,0	826	194	410	84,03	1,84	55,0

Table A.6.29 Average time-dependent strains and weightloss for 910311-29

Time	ϵ_{tot}	ϵ_a	ϵ_c	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
1509,0	1003	260	521	106,67	2,34	65,6
2181,0	1074	270	582	119,22	2,61	71,2
2853,0	1171	321	627	128,49	2,82	74,0
3525,0	1205	330	653	133,78	2,93	75,9
4173,0	1254	358	673	137,91	3,02	77,1
4845,0	1299	369	708	145,05	3,18	78,6
5541,0	1346	387	736	150,85	3,31	79,9
6693,0	1339	385	731	149,83	3,28	81,0
6694,5	1152	385	734	150,44	3,30	81,0
6722,0	1066	299	734	150,35	3,30	80,9
6742,0	1127	360	734	150,45	3,30	81,0
6766,0	1162	404	725	148,64	3,26	81,1
6790,0	1155	405	718	147,06	3,22	81,2

Table A.6.29 Average time-dependent strains and weightloss for 910311-29

Time	ϵ_{tot}	ϵ_{A}	ϵ_{C}	C	ψ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
6818,0	1104	352	719	147,43	3,23	81,2
6843,0	1129	378	719	147,24	3,23	81,3
6867,0	1168	415	720	147,50	3,23	81,2
7055,0	1144	393	718	147,07	3,22	81,6
7247,0	1144	397	714	146,32	3,21	81,5
7418,0	1159	420	707	144,80	3,17	81,4
7946,0	1125	395	697	142,89	3,13	82,3
8666,0	1134	410	691	141,68	3,11	82,6

Table A.6.30 Average time-dependent strains and weightloss for 910403-30

Time	ϵ_{total}	ϵ_a	ϵ_r	$\epsilon_{\text{dynamic}}$	Strainindicator	c	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_r/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
3,5	898	6	186	1341	3513	7,22	0,26	0,1
24,0	976	22	248	1262	3309	9,61	0,35	0,2
48,0	1063	44	314	1305	3419	12,15	0,45	0,1
72,0	1124	72	347	1338	3467	13,45	0,49	0,3
96,0	1129	74	350	1316	3420	13,55	0,50	0,4
120,0	1197	102	390	1348	3478	15,08	0,55	0,5
138,0	1209	95	409	1316	3443	15,82	0,58	0,6
168,0	1220	100	415	1309	3411	16,05	0,59	0,7
192,0	1259	97	456	1326	3508	17,66	0,65	0,8
336,0	1307	126	476	1301	3398	18,43	0,68	1,4
504,0	1354	125	523	1311	3474	20,25	0,74	1,9

Table A.6.30 Average time-dependent strains and weightloss for 910403-30

Time	ϵ_{total}	ϵ_A	ϵ_{cr}	$\epsilon_{\text{dynamometer}}$	Strainindicator	σ	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
672,0	1391	153	533	1315	3420	20,65	0,76	2,6
840,0	1428	164	559	1341	3516	21,62	0,79	3,1
1512,0	1477	187	585	1309	3419	22,66	0,83	4,6
2184,0	1502	171	626	1302	3398	24,22	0,89	5,8
2856,0	1540	195	639	1309	3454	24,73	0,91	6,3
3528,0	1542	187	650	1282	3413	25,16	0,92	7,0
4200,0	1608	227	676	1363	3527	26,16	0,96	7,5
4874,0	1615	231	678	1346	3497	26,24	0,96	8,2
5522,0	1640	250	684	1348	3475	26,49	0,97	8,7
6242,0	1631	257	669	1335	3468	25,89	0,95	9,3
8760,0	1707	256	745	1371	3478	28,84	1,06	11,0

Table A.6.31 Average time-dependent strains and weightloss for: 910408-31

Time	ϵ_{total}	ϵ_{th}	ϵ_{ex}	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0,00	0,00	0,0
2,5	264	14	73	23,39	0,41	0,7
13,0	308	9	122	39,29	0,69	3,9
40,5	339	15	147	47,25	0,83	10,5
89,0	398	51	170	54,84	0,96	16,9
112,0	416	36	203	65,46	1,15	19,5
133,0	430	60	194	62,35	1,10	21,5
161,5	464	67	221	70,98	1,25	23,6
325,0	578	131	270	87,07	1,53	32,3
493,0	629	146	307	98,76	1,74	37,4
666,0	711	201	333	107,32	1,89	41,5
1072,0	770	231	362	116,59	2,05	44,3
1510,0	890	287	426	137,19	2,41	50,6

Table A.6.31 Average time-dependent strains and weightloss for 910408-31

Time	ϵ_{tot}	ϵ_{A}	ϵ_{C}	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
2182,0	950	314	460	2,60	53,9
2758,0	997	336	485	2,74	54,9
3526,0	1050	361	513	2,90	56,0
4196,0	1064	375	513	2,90	56,2
4868,0	1097	362	558	3,16	57,0
5564,0	1111	377	557	3,15	57,6
8760,0	1186	395	614	3,48	57,9

Table A.6.32 Average time-dependent strains and weightloss for 910410-32

Time	ϵ_{tot}	ϵ_{A}	ϵ_{C}	$\epsilon_{\text{Dymension}}$	Strainindi- cator	c	ρ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	—	$\mu\epsilon/\text{MPa}$	$\mu\epsilon/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
3,5	847	25	205	1034	2686	10,45	0,33	0,9
16,5	903	47	238	971	2501	12,17	0,39	1,1
40,5	991	74	299	978	2501	15,27	0,48	2,0
64,0	1059	79	363	978	2554	18,53	0,59	2,8
87,5	1126	105	403	1006	2595	20,61	0,65	3,4
114,5	1189	134	438	1017	2613	22,35	0,71	3,9
134,0	1201	127	456	968	2571	23,27	0,74	4,2
161,0	1255	156	481	1017	2624	24,58	0,78	4,8
282,5	1329	170	541	980	2574	27,64	0,88	6,2
328,5	1375	189	568	1015	2654	28,99	0,92	6,5
496,0	1417	213	586	1018	2656	29,91	0,95	7,7

Table A.6.32 Average time-dependent strains and weightloss for 910410-32

Time	ϵ_{total}	ϵ_{ax}	ϵ_{az}	$\epsilon_{\text{dynamic}}$	Strainindicator	σ	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_2/\mu\epsilon_0$	gram
833,0	1510	251	641	992	2551	32,75	1,04	9,4
1512,0	1593	301	674	1028	2672	34,40	1,09	11,3
2184,0	1622	320	684	997	2601	34,94	1,11	12,7
2712,0	1679	340	720	1027	2666	36,79	1,17	13,5
3528,0	1698	359	721	1008	2619	36,82	1,17	14,3
4200,0	1738	378	742	1029	2656	37,90	1,20	15,0
4872,0	1748	369	761	1004	2632	38,86	1,23	16,1
5520,0	1782	390	774	1022	2664	39,53	1,25	17,1
8760,0	1879	461	800	1062	2658	40,87	1,29	19,6

Table A.6.33 Average time-dependent strains and weightloss for 910415-33

Time	ϵ_{tot}	ϵ_{A}	ϵ_{C}	$\epsilon_{\text{hydroxide}}$	Strainindi- cator	C	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
3,0	2126	8	401	1198	3138	6,05	0,23	0,8
17,0	2204	20	468	1151	3051	7,06	0,27	0,9
43,0	2358	22	619	1199	3097	9,35	0,36	1,1
68,0	2397	30	650	1168	3063	9,81	0,38	1,2
90,0	2425	30	678	1152	3034	10,24	0,40	1,4
121,0	2540	24	799	1201	3139	12,07	0,47	1,7
140,0	2559	44	798	1219	3123	12,05	0,47	1,7
164,0	2567	47	803	1200	3104	12,12	0,47	1,9
330,5	2778	100	961	1231	3125	14,50	0,56	2,5
501,0	2848	107	1024	1192	3066	15,45	0,60	3,1
669,0	2959	121	1122	1219	3142	16,94	0,65	3,6

Table A.6.33 Average time-dependent strains and weightloss for 910415-33

Time	ϵ_{del}	ϵ_{sh}	ϵ_{c}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_{\text{c}}/\mu\epsilon_{\text{sh}}$	gram
843,0	3020	137	1167	1208	3109	17,61	0,68	3,8
1515,0	3196	152	1328	1205	3141	20,04	0,77	5,1
2091,0	3269	172	1380	1193	3094	20,83	0,80	5,8
2859,0	3333	182	1435	1186	3041	21,66	0,84	6,7
3530,0	3458	198	1543	1225	3123	23,30	0,90	7,2
4202,0	3507	180	1611	1202	3097	24,32	0,94	7,9
4922,0	3546	224	1605	1200	3078	24,23	0,93	8,7
8952,0	3862	284	1861	1246	3092	28,10	1,08	11,7

Table A.6.38 Average time-dependent strains and weightloss for 910502-38								
Time	ϵ_{total}	ϵ_A	ϵ_B	$\epsilon_{\text{dynamic}}$	Strainindi- cator	σ	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
2,5	2101	8	378	1173	3060	10,68	0,22	0,8
28,0	2324	93	517	1131	2839	14,60	0,30	1,0
43,0	2507	71	721	1167	2997	20,38	0,42	1,3
73,0	2669	128	827	1159	2972	23,37	0,48	1,6
91,0	2776	132	929	1188	3037	26,26	0,54	1,8
111,5	2839	178	946	1185	2998	26,73	0,55	1,8
140,5	2973	217	1041	1189	2981	29,43	0,61	2,3
164,5	2965	214	1037	1162	2947	29,29	0,60	2,4
331,0	3369	279	1375	1192	2975	38,85	0,80	3,5
331,0	3394	309	1370	1216	2975	38,71	0,80	3,5
504,0	3590	341	1534	1198	2933	43,36	0,89	4,1

Table A.6.38 Average time-dependent strains and weightloss for 910502-38

Time	ϵ_{tot}	ϵ_{th}	ϵ_{d}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	μMPa	$\mu\epsilon_0/\mu\epsilon_0$	gram
648,0	3837	407	1715	1187	2956	48,46	1,00	5,0
815,0	3982	433	1835	1175	3008	51,85	1,07	5,5
1607,0	4464	464	2285	1210	3002	64,58	1,33	8,8
2327,0	4668	509	2444	1208	2963	69,06	1,43	10,7
2831,0	4878	537	2627	1233	3012	74,22	1,53	12,1
2831,0	4878	537	2627	1233	3012	74,22	1,53	12,1
3503,0	5070	602	2753	1217	2968	77,79	1,61	14,4
3503,0	5070	602	2753	1217	2968	77,79	1,61	14,4
4175,0	5278	636	2927	1256	3019	82,72	1,71	16,8
4847,0	5352	692	2945	1263	3052	83,22	1,72	18,0
8544,0	5964	949	3300	1232	2912	93,25	1,92	24,9

Table A.6.39 Average time-dependent strains and weightloss for 910S07-39

Time	ϵ_{total}	ϵ_A	ϵ_{ex}	$\epsilon_{\text{dynamic}}$	Strainindi- cator	c	φ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	---	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_2/\mu\epsilon_0$	gram
0,0	0	0	0	0	0	0,00	0,00	0,0
3,0	1701	13	311	1354	3513	12,02	0,23	1,0
21,5	2027	54	596	1400	3539	23,04	0,43	2,6
47,0	2068	44	648	1322	3420	25,02	0,47	3,7
76,0	2245	94	774	1360	3428	29,90	0,56	5,0
98,0	2337	87	872	1357	3454	33,69	0,63	6,2
119,0	2376	89	910	1321	3388	35,16	0,66	7,4
144,0	2490	103	1010	1344	3464	39,02	0,73	8,8
531,0	3145	330	1438	1337	3370	55,57	1,04	15,2
650,0	3304	374	1553	1333	3433	60,00	1,13	17,0
867,0	3504	389	1737	1291	3379	67,12	1,26	22,1
1531,0	3994	565	2053	1371	3522	79,30	1,49	27,4

Table A.6.39 Average time-dependent strains and weightloss for 910507-39

Time	ϵ_{total}	ϵ_{th}	ϵ_{cr}	$\epsilon_{\text{dynamic}}$	Strainindicator	c	ϕ	Weightloss
Hours	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	$\mu\epsilon$	—	$\mu\epsilon/\text{MPa}$	$\mu\epsilon_0/\mu\epsilon_0$	gram
2203,0	4210	629	2205	1323	3431	85,18	1,60	32,5
2875,0	4487	745	2365	1390	3505	91,36	1,72	36,6
3531,0	4656	808	2470	1375	3472	95,44	1,79	41,2
4179,0	4786	905	2505	1387	3449	96,77	1,82	45,7
4899,0	4916	980	2559	1385	3508	98,88	1,86	48,8
8424,0	5550	1190	2983	1404	3447	115,24	2,17	61,7

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