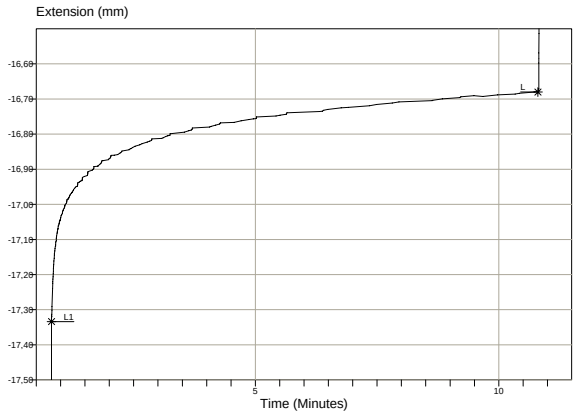
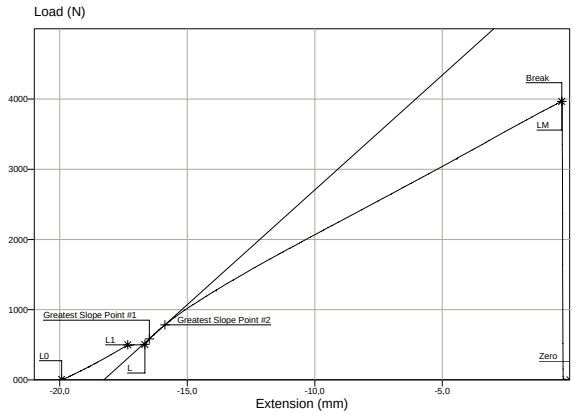
Iberográfica Capa Rota - Portugal	**Brand D** 3Ply Construction	**Elongation & Tensile**	Doc. PROC- LAB - 009 Date: 03 - 02 - 2012 Page 1 of 1 Rev. 0

Item #	Brand/ /Model	Job #	L0	L1	L	LM	L-L1	E1‰	L-L0	E%	LM-L0	EM%	Young's Modulus	Load@ LM	TT Time
			Length				Yield		Mounting		Tensile				
			mm	mm	mm	mm	mm	‰	mm	%	mm	%	MPa	kN	s
1	D/IV_3T	V002120	320,06	322,32	322,91	340,39	0,59	1,84	2,85	0,89	20,33	6,35	1.093	4,53	623,8
2	D/IV_3T	V002120	319,87	322,17	322,80	339,64	0,63	1,96	2,93	0,92	19,77	6,18	1.123	4,33	633,4
3	D/IV_3T	881218	320,04	322,63	323,30	339,65	0,67	2,07	3,26	1,02	19,61	6,13	1.073	3,97	622,8
4	D/IV_3T	881218	320,04	322,52	323,17	339,76	0,64	1,99	3,12	0,98	19,72	6,16	1.236	4,02	622,9
5	D/IV_3T	881218	320,06	322,63	323,30	339,06	0,67	2,08	3,24	1,01	19,01	5,94	1.267	3,92	622,0
6	D/V_3T	865508	320,03	322,53	323,12	338,94	0,60	1,85	3,09	0,97	18,91	5,91	1.323	4,18	622,1
7	D/V_3T	865508	320,02	322,48	323,02	338,94	0,54	1,68	3,00	0,94	18,92	5,91	1.329	4,22	622,2
8	D/V_3T	865508	320,05	322,58	322,96	338,15	0,39	1,20	2,92	0,91	18,11	5,66	1.252	3,89	81,4
9	D/V_3T	865508	320,01	322,59	322,97	338,27	0,39	1,20	2,96	0,93	18,26	5,71	1.242	3,99	81,7
10	D/V_3T	865508	320,07	322,54	322,96	338,55	0,43	1,32	2,90	0,91	18,48	5,77	1.227	4,11	81,9
11	D/V_3T	865508	320,06	322,56	322,93	338,10	0,37	1,16	2,87	0,90	18,04	5,64	1.281	4,03	81,4





Test standard: ISO 12636 4.2 (L0 to L) (*)
4.3 (L to break)
Tester: Lloyd LR 10K Plus
Grips Distance: 320 mm
Sample Dimensions: 50 x 390 mm
(*) - Bench marks not used.
An alternate 1' hold-time short test is also used.
Results may not be comparable with those strictly conducted according to ISO 12636.
Graphs: Item 3

Legend
Extension (mm)
L0: @ 10 N L1: @ 500 N
L : after 10' hold @ 500 N LM: @ break

~"Yield during Print"
L-L1: ΔL after 10' @ 500N (mm)
E1 ‰ = $[((L-L_1)/L_1)*1000]$ ‰
Default Graph Window Extension: 1 mm

~"Mounting" elongation
L-L0: ΔL after tensioning-&-seating (mm)
E % = $[((L-L_0)/L_0)*100]$ %
According to ISO 12636: E < 1,5 %

Elongation @ LoadM
LM-L0: DL @ Maximum Load (break) (mm)
EM % = $[((L_M-L_0)/L_0)*100]$ %

Modulus: stress/strain gradient @ greatest slope
Young's Modulus: (MPa)
Load @ LM: Max. Load (kN)
TT: test Time (s)