

Dados - Protetores Bucais sem ciclagem

Mouthguard	Area	Strain				Mouthguard	Area	Strain	Mouthguard	Area	Strain
Control	Tooth	244				Control	Tooth	244	Control	Bone	340
Control	Tooth	421				Control	Tooth	421	Control	Bone	227
Control	Bone	340				Control	Tooth	58	Control	Bone	38
Control	Bone	227				Control	Tooth	63	Control	Bone	41
Control	Tooth	58		média	DP	Control	Tooth	130	Control	Bone	125
Control	Tooth	63				Control	Tooth	139	Control	Bone	62
Control	Bone	38		144,05	100,7589024	Control	Tooth	100	Control	Bone	126
Control	Bone	41				Control	Tooth	113	Control	Bone	79
Control	Tooth	130	Tooth	122,4	92,69781125	Control	Tooth	65	Control	Bone	142
Control	Tooth	139	Bone	165,7	106,1102207	Control	Tooth	78	Control	Bone	174
Control	Bone	125				Control	Tooth	20	Control	Bone	88
Control	Bone	62				Control	Tooth	75	Control	Bone	137
Control	Tooth	100				Control	Tooth	139	Control	Bone	218
Control	Tooth	113				Control	Tooth	176	Control	Bone	476
Control	Bone	126				Control	Tooth	27	Control	Bone	127
Control	Bone	79				Control	Tooth	91	Control	Bone	185
Control	Tooth	65				Control	Tooth	50	Control	Bone	71
Control	Tooth	78				Control	Tooth	97	Control	Bone	236
Control	Bone	142				Control	Tooth	123	Control	Bone	215
Control	Bone	174				Control	Tooth	239	Control	Bone	207
Control	Tooth	20									
Control	Tooth	75									
Control	Bone	88									
Control	Bone	137									
Control	Tooth	139									
Control	Tooth	176									
Control	Bone	218									
Control	Bone	476									
Control	Tooth	27									
Control	Tooth	91									
Control	Bone	127									
Control	Bone	185									
Control	Tooth	50									
Control	Tooth	97									
Control	Bone	71									
Control	Bone	236									
Control	Tooth	123									
Control	Tooth	239									
Control	Bone	215									
Control	Bone	207									

Mg 1+3	Tooth	66			
Mg 1+3	Bone	44			
Mg 1+3	Tooth	65			
Mg 1+3	Bone	88			
Mg 1+3	Tooth	150			
Mg 1+3	Bone	88			
Mg 1+3	Tooth	124		média	DP
Mg 1+3	Bone	100		78	53,19125396
Mg 1+3	Tooth	77			
Mg 1+3	Bone	18	Tooth	83	60,19572215
Mg 1+3	Tooth	61	Bone	73	60,19572215
Mg 1+3	Bone	23			
Mg 1+3	Tooth	30			
Mg 1+3	Bone	28			
Mg 1+3	Tooth	38			
Mg 1+3	Bone	33			
Mg 1+3	Tooth	94			
Mg 1+3	Bone	198			
Mg 1+3	Tooth	199			
Mg 1+3	Bone	252			
Mg 1+3	Tooth	162			
Mg 1+3	Bone	117			
Mg 1+3	Tooth	55			
Mg 1+3	Bone	54			
Mg 1+3	Tooth	54			
Mg 1+3	Bone	99			
Mg 1+3	Tooth	120			
Mg 1+3	Bone	80			
Mg 1+3	Tooth	27			
Mg 1+3	Bone	53			
Mg 1+3	Tooth	79			
Mg 1+3	Bone	28			
Mg 1+3	Tooth	97			
Mg 1+3	Bone	53			
Mg 1+3	Tooth	45			
Mg 1+3	Bone	25			
Mg 1+3	Tooth	63			
Mg 1+3	Bone	37			
Mg 1+3	Tooth	62			
Mg 1+3	Bone	47			

Mg 2+2	Tooth	45			
Mg 2+2	Bone	113			
Mg 2+2	Tooth	36			
Mg 2+2	Bone	14			
Mg 2+2	Tooth	8			
Mg 2+2	Bone	97		média	DP
Mg 2+2	Tooth	69		85	72,08893635
Mg 2+2	Bone	23			
Mg 2+2	Tooth	29	Tooth	78	73,07861664
Mg 2+2	Bone	36	Bone	91	72,56610416
Mg 2+2	Tooth	28			
Mg 2+2	Bone	21			
Mg 2+2	Tooth	49			
Mg 2+2	Bone	27			
Mg 2+2	Tooth	81			

Mg 2+2	Tooth	45			
Mg 2+2	Tooth	36			
Mg 2+2	Tooth	8			
Mg 2+2	Tooth	69			
Mg 2+2	Tooth	29			
Mg 2+2	Tooth	28			
Mg 2+2	Tooth	49			
Mg 2+2	Tooth	169			
Mg 2+2	Tooth	81			

Mg 2+2	Bone	113			
Mg 2+2	Bone	14			
Mg 2+2	Bone	97			
Mg 2+2	Bone	23			
Mg 2+2	Bone	36			
Mg 2+2	Bone	21			
Mg 2+2	Bone	40			
Mg 2+2	Bone	27			
Mg 2+2	Bone	33			

Mg 2+2	Bone	40
Mg 2+2	Tooth	169
Mg 2+2	Bone	27
Mg 2+2	Tooth	81
Mg 2+2	Bone	33
Mg 2+2	Tooth	117
Mg 2+2	Bone	165
Mg 2+2	Tooth	121
Mg 2+2	Bone	52
Mg 2+2	Tooth	142
Mg 2+2	Bone	169
Mg 2+2	Tooth	106
Mg 2+2	Bone	58
Mg 2+2	Tooth	16
Mg 2+2	Bone	173
Mg 2+2	Tooth	61
Mg 2+2	Bone	68
Mg 2+2	Tooth	317
Mg 2+2	Bone	248
Mg 2+2	Tooth	25
Mg 2+2	Bone	12
Mg 2+2	Tooth	35
Mg 2+2	Bone	220
Mg 2+2	Tooth	19
Mg 2+2	Bone	110
Mg 2+2	Tooth	123
Mg 2+2	Bone	132

Mg 3+1	Tooth	61
Mg 3+1	Bone	60
Mg 3+1	Tooth	63
Mg 3+1	Bone	69
Mg 3+1	Tooth	89
Mg 3+1	Bone	82
Mg 3+1	Tooth	36
Mg 3+1	Bone	56
Mg 3+1	Tooth	62
Mg 3+1	Bone	81
Mg 3+1	Tooth	43
Mg 3+1	Bone	29
Mg 3+1	Tooth	33
Mg 3+1	Bone	59
Mg 3+1	Tooth	39
Mg 3+1	Bone	63
Mg 3+1	Tooth	9
Mg 3+1	Bone	16
Mg 3+1	Tooth	17
Mg 3+1	Bone	23
Mg 3+1	Tooth	279
Mg 3+1	Bone	101
Mg 3+1	Tooth	174
Mg 3+1	Bone	97
Mg 3+1	Tooth	52
Mg 3+1	Bone	13
Mg 3+1	Tooth	45
Mg 3+1	Bone	31
Mg 3+1	Tooth	155
Mg 3+1	Bone	103
Mg 3+1	Tooth	80
Mg 3+1	Bone	35
Mg 3+1	Tooth	24
Mg 3+1	Bone	54
Mg 3+1	Tooth	65
Mg 3+1	Bone	31
Mg 3+1	Tooth	82
Mg 3+1	Bone	133
Mg 3+1	Tooth	134
Mg 3+1	Bone	31

Mg 2+2	Tooth	117	Mg 2+2	Bone	165
Mg 2+2	Tooth	121	Mg 2+2	Bone	52
Mg 2+2	Tooth	142	Mg 2+2	Bone	169
Mg 2+2	Tooth	106	Mg 2+2	Bone	58
Mg 2+2	Tooth	16	Mg 2+2	Bone	173
Mg 2+2	Tooth	61	Mg 2+2	Bone	68
Mg 2+2	Tooth	317	Mg 2+2	Bone	248
Mg 2+2	Tooth	25	Mg 2+2	Bone	12
Mg 2+2	Tooth	35	Mg 2+2	Bone	220
Mg 2+2	Tooth	19	Mg 2+2	Bone	110
Mg 2+2	Tooth	123	Mg 2+2	Bone	132

Mouthguard	Area	Strain	Mouthguard	Area	Strain
Mg 3+1	Tooth	61	Mg 3+1	Bone	60
Mg 3+1	Tooth	63	Mg 3+1	Bone	69
Mg 3+1	Tooth	89	Mg 3+1	Bone	82
Mg 3+1	Tooth	36	Mg 3+1	Bone	56
Mg 3+1	Tooth	62	Mg 3+1	Bone	81
Mg 3+1	Tooth	43	Mg 3+1	Bone	29
Mg 3+1	Tooth	33	Mg 3+1	Bone	59
Mg 3+1	Tooth	39	Mg 3+1	Bone	63
Mg 3+1	Tooth	9	Mg 3+1	Bone	16
Mg 3+1	Tooth	17	Mg 3+1	Bone	23
Mg 3+1	Tooth	279	Mg 3+1	Bone	101
Mg 3+1	Tooth	174	Mg 3+1	Bone	97
Mg 3+1	Tooth	52	Mg 3+1	Bone	13
Mg 3+1	Tooth	45	Mg 3+1	Bone	31
Mg 3+1	Tooth	155	Mg 3+1	Bone	103
Mg 3+1	Tooth	80	Mg 3+1	Bone	35
Mg 3+1	Tooth	24	Mg 3+1	Bone	54
Mg 3+1	Tooth	65	Mg 3+1	Bone	31
Mg 3+1	Tooth	82	Mg 3+1	Bone	133
Mg 3+1	Tooth	134	Mg 3+1	Bone	31

ESTUDO IN VITRO	
Legenda:	
Mouthguard:	Grupo de protetores bucais
Área mensurada:	dente (tooth) ou osso (bone)
Control:	Protetor bucal sem reforço
Mg 1+3:	Protetor bucal com reforço a 1mm da vestibular
Mg 2+2:	Protetor bucal com reforço a 2mm da vestibular
Mg 3+1:	Protetor bucal com reforço a 3 mm da vestibular

Valores de microdeformações obtidas no **processo alveolar da maxila** após uso de diferentes tipos de protetores bucais sem e com reforços em análise por elementos finitos (estudo in silico)

TIPO DE PB	TEMPO TOQUE FEA	VALOR FEA
Controle	0,0089 s	319 $\mu\epsilon$
Mg 1+3	0,0063 s	267 $\mu\epsilon$
Mg 2+2	0,0063 s	270 $\mu\epsilon$
Mg 3+1	0,0063 s	221 $\mu\epsilon$

Valores de microdeformações obtidas em **incisivos centrais** superiores após uso de diferentes tipos de protetores bucais sem e com reforços em análise por elementos finitos (estudo in silico)

TIPO DE PB	TEMPO TOQUE FEA	VALOR FEA
Controle	0,0089 s	524 $\mu\epsilon$
Mg 1+3	0,0063 s	124 $\mu\epsilon$
Mg 2+2	0,0063 s	114 $\mu\epsilon$
Mg 3+1	0,0063 s	119 $\mu\epsilon$

Dados Protetores Bucais Extended Load

GRUPO CONVENCIONAL Limites Limites: 3933,3 a -3901,3 uS

[illegible]

GRUPO 2+2 Limites:3922,5 a -3901,7 uS

[illegible]