

APPENDIX G

SUMMARY OF SIMULATIONS PERFORMED

Table G.1 Test cases for the cylinder actuated at $l/2$

Name	h (mm)	E (GPa)	η (loss factor)	ρ (kg/m ³)	x_o (actuator position)
Case 1a	5.580	50.895	0.007	512.545	$l/2$
Case 2a	4.784	70.895	0.007	597.826	$l/2$
Case 3a	4.300	90.895	0.007	665.116	$l/2$
Case 4a	3.930	110.895	0.007	727.735	$l/2$
Case 5a	3.640	130.895	0.007	785.714	$l/2$
Case 6a	3.390	150.895	0.007	843.658	$l/2$
Case 7a	3.190	170.895	0.007	896.552	$l/2$
Case 1b	5.580	50.895	0.0206	512.545	$l/2$
Case 2b	4.784	70.895	0.0206	597.826	$l/2$
Case 3b	4.300	90.895	0.0206	665.116	$l/2$
Case 4b	3.930	110.895	0.0206	727.735	$l/2$
Case 5b	3.640	130.895	0.0206	785.714	$l/2$
Case 6b	3.390	150.895	0.0206	843.658	$l/2$
Case 7b	3.190	170.895	0.0206	896.552	$l/2$
Case 1c	5.580	50.895	0.0520	512.545	$l/2$
Case 2c	4.784	70.895	0.0520	597.826	$l/2$
Case 3c	4.300	90.895	0.0520	665.116	$l/2$
Case 4c	3.930	110.895	0.0520	727.735	$l/2$
Case 5c	3.640	130.895	0.0520	785.714	$l/2$
Case 6c	3.390	150.895	0.0520	843.658	$l/2$
Case 7c	3.190	170.895	0.0520	896.552	$l/2$

Table G.2 Test cases for the cylinder actuated at $l/4$

Name	h (mm)	E (GPa)	η (loss factor)	ρ (kg/m ³)	x_o (actuator position)
Case 1d	5.580	50.895	0.007	512.545	$l/4$
Case 2d	4.784	70.895	0.007	597.826	$l/4$
Case 3d	4.300	90.895	0.007	665.116	$l/4$
Case 4d	3.930	110.895	0.007	727.735	$l/4$
Case 5d	3.640	130.895	0.007	785.714	$l/4$
Case 6d	3.390	150.895	0.007	843.658	$l/4$
Case 7d	3.190	170.895	0.007	896.552	$l/4$
Case 1e	5.580	50.895	0.0206	512.545	$l/4$
Case 2e	4.784	70.895	0.0206	597.826	$l/4$
Case 3e	4.300	90.895	0.0206	665.116	$l/4$
Case 4e	3.930	110.895	0.0206	727.735	$l/4$
Case 5e	3.640	130.895	0.0206	785.714	$l/4$
Case 6e	3.390	150.895	0.0206	843.658	$l/4$
Case 7e	3.190	170.895	0.0206	896.552	$l/4$
Case 1f	5.580	50.895	0.0520	512.545	$l/4$
Case 2f	4.784	70.895	0.0520	597.826	$l/4$
Case 3f	4.300	90.895	0.0520	665.116	$l/4$
Case 4f	3.930	110.895	0.0520	727.735	$l/4$
Case 5f	3.640	130.895	0.0520	785.714	$l/4$
Case 6f	3.390	150.895	0.0520	843.658	$l/4$
Case 7f	3.190	170.895	0.0520	896.552	$l/4$