

衝撃波管実験事前予測値

Test Gas			Driver gas		
Air			Air		
g1 =	1.401	(-)	g4 =	1.401	(-)
T1 =	288.0	(K)	T4 =	288.0	(K)
R1 =	287.1	(J/kg K)	R4 =	287.1	(J/kg K)
a1 =	340.4	(m/s)	a4 =	340.4	(m/s)

Pressure Transducer		
C_PT1	3.488	(mV/kPa)
C_PT3	3.384	(mV/kPa)
Δx	0.500	(m)

#	P4/P1	P1	P4	P4	P4-P1	tdia	Ms	us	Δt	P2/P1	P2	P2-P1	V1	V3
	(-)		(kPaA)	(kPaG)	(kPaA)					(-)	(kPaA)	(kPaA)		
1	1.50	大気圧 (0.00 kPaG)	152.0	50.7	50.7		1.091	371.3	1.35E-03	1.22	124	22.5	78.4	76.1
2	2.00		202.6	101.3	101.3		1.160	394.8	1.27E-03	1.40	142	40.8	142.4	138.1
3	3.00		303.9	202.6	202.6		1.263	429.9	1.16E-03	1.70	172	70.4	245.6	238.2
4	4.00		405.2	303.9	303.9		1.340	456.1	1.10E-03	1.93	195	94.1	328.2	318.5
5	5.00		506.5	405.2	405.2		1.403	477.5	1.05E-03	2.13	216	114	399.3	387.4
6	10.0	10 kPaA	100.0	-1.3	90.0		1.608	547.3	9.14E-04	2.85	28.5	18.5	64.6	62.6
7	20.0		200.0	98.7	190.0		1.827	621.8	8.04E-04	3.73	37.3	27.3	95.2	92.3
8	30.0		300.0	198.7	290.0		1.960	667.1	7.50E-04	4.32	43.2	33.2	115.7	112.2
9	40.0		400.0	298.7	390.0		2.057	700.1	7.14E-04	4.77	47.7	37.7	131.6	127.6
10	50.0		500.0	398.7	490.0		2.133	726.0	6.89E-04	5.14	51.4	41.4	144.5	140.2
11	1.00E+02	1 kPaA	100.0	-1.3	99.0		2.370	806.6	6.20E-04	6.39	6.39	5.39	18.8	18.2
12	2.00E+02		200.0	98.7	199.0		2.608	887.6	5.63E-04	7.77	7.77	6.77	23.6	22.9
13	3.00E+02		300.0	198.7	299.0		2.747	935.0	5.35E-04	8.64	8.64	7.64	26.7	25.9
14	4.00E+02		400.0	298.7	399.0		2.844	968.0	5.17E-04	9.28	9.28	8.28	28.9	28.0
15	5.00E+02		500.0	398.7	499.0		2.919	993.5	5.03E-04	9.79	9.79	8.79	30.7	29.8