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## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_0 35C NO\_1.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 3:27:41 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5  
 Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4  
 Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.0 35C NO.1  
 Remarks...

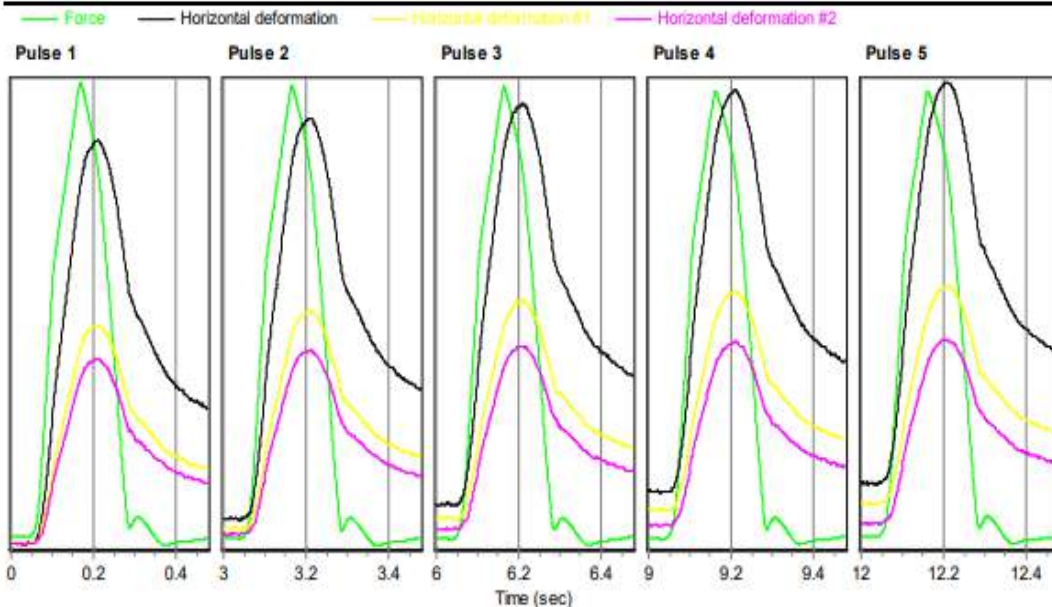
Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	63.3	63.3	63.3	63.3			63.3	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.4  
 Skin temperature (°C): 36.3  
 Perm't horiz'l defn/pulse (µm): 0.527300

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	2392	2334	2326	2270	2294	2323	41.40	1.78
Total recoverable horiz. deform. (µm)	6.97	7.10	7.12	7.24	7.16	7.12	0.09	1.21
Peak loading force (N)	1576	1567	1564	1552	1551	1562	9.37	0.60
Recoverable horiz. deform. #1 (µm)	3.74	3.82	3.83	3.89	3.88	3.83	0.05	1.42
Recoverable horiz. deform. #2 (µm)	3.23	3.29	3.29	3.34	3.27	3.28	0.04	1.10
Seating force (N)	156	154	153	151	153	153	1.45	0.95



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_5 35C NO\_1.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 3:44:53 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.5 35C NO.1  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	65.1	65.1	65.1	65.1			65.1	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

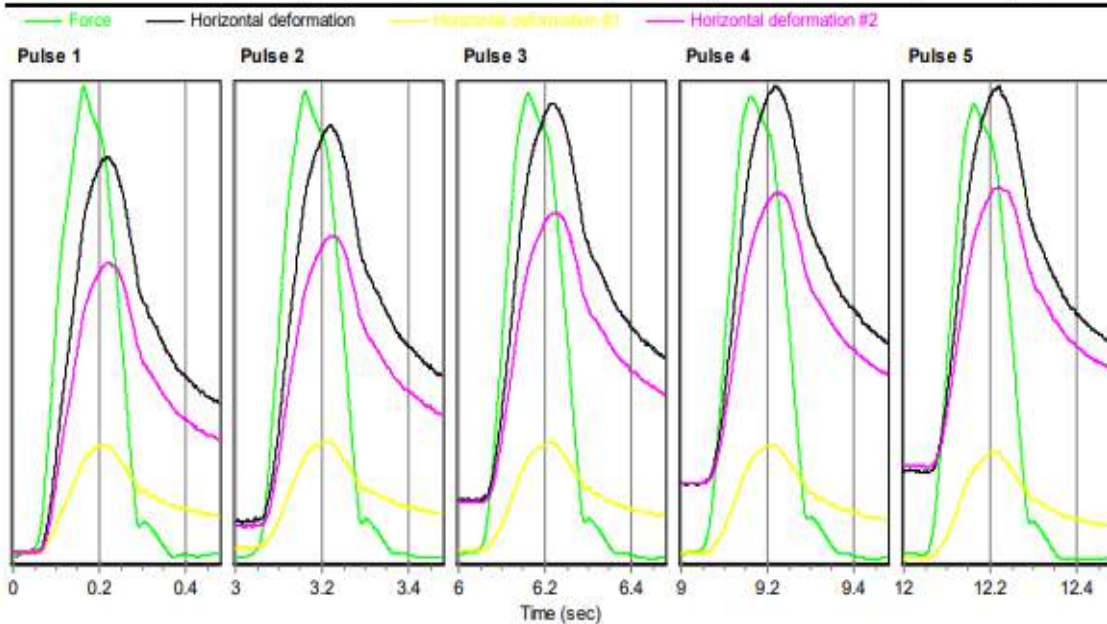
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.1  
 Skin temperature (°C): 35.8

Perm't horiz'l defn/pulse (µm): 0.578100

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	2615	2508	2464	2407	2415	2482	75.69	3.05
Total recoverable horiz. deform. (µm)	5.91	6.10	6.16	6.25	6.11	6.10	0.11	1.81
Peak loading force (N)	1502	1485	1474	1462	1433	1471	23.27	1.58
Recoverable horiz. deform. #1 (µm)	1.67	1.78	1.80	1.82	1.74	1.76	0.06	3.17
Recoverable horiz. deform. #2 (µm)	4.25	4.32	4.35	4.43	4.37	4.34	0.06	1.37
Seating force (N)	142	142	147	149	154	147	4.59	3.13



# Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_0 35C NO\_1.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:11:35 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5  
 Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4  
 Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.0 35C NO.1  
 Remarks...

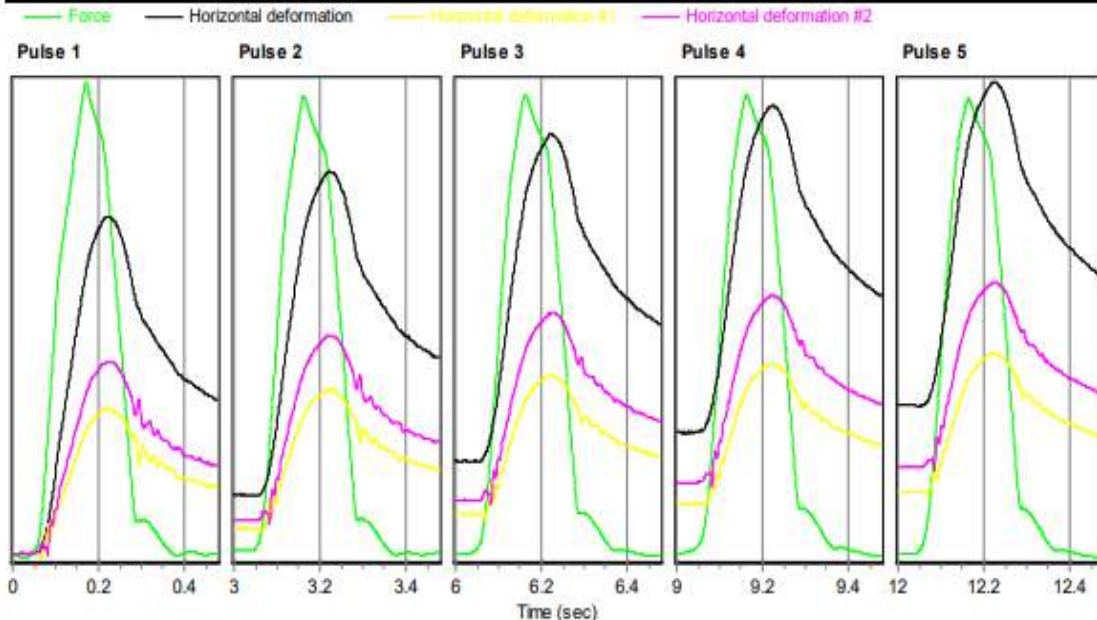
Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	63.7	63.7	63.7	63.7			63.7	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.0  
 Skin temperature (°C): 35.8  
 Perm't horiz'l def'n/pulse (µm): 2.158000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1833	1696	1663	1652	1637	1696	71.02	4.19
Total recoverable horiz. deform. (µm)	8.75	9.09	9.37	9.43	9.43	9.21	0.26	2.85
Peak loading force (N)	1525	1465	1481	1481	1467	1484	21.71	1.46
Recoverable horiz. deform. #1 (µm)	3.78	3.90	4.04	4.02	4.05	3.96	0.10	2.58
Recoverable horiz. deform. #2 (µm)	4.97	5.19	5.33	5.41	5.38	5.26	0.16	3.10
Seating force (N)	139	155	144	145	145	146	5.13	3.52





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_5 35C NO\_1.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:32:41 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.5 35C NO.1  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	63.5	63.5	63.5	63.5			63.5	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

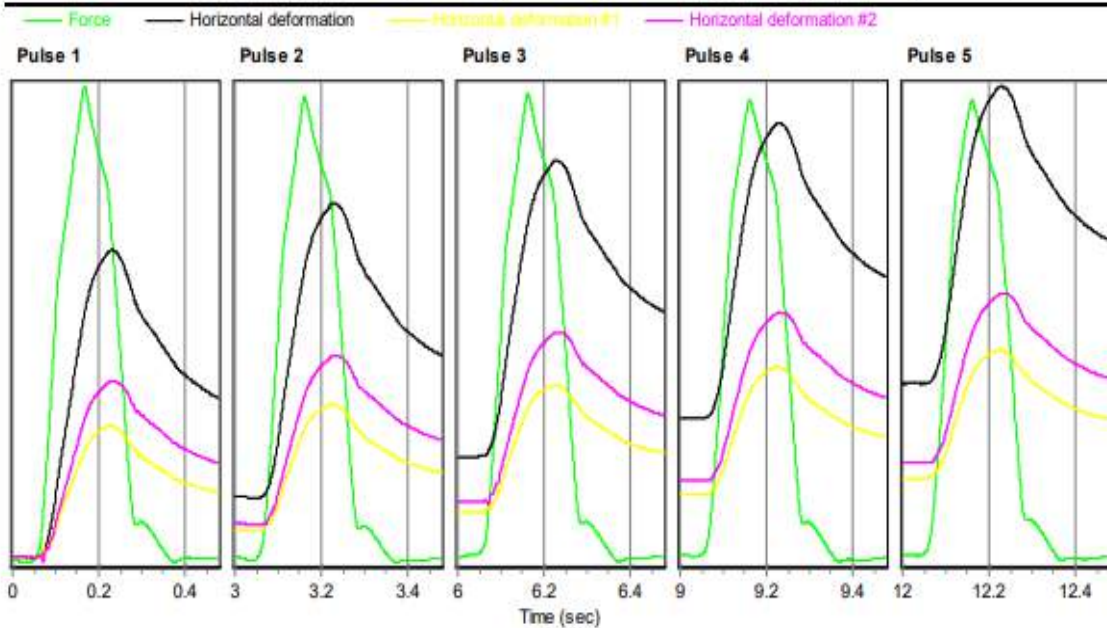
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.8  
 Skin temperature (°C): 35.5

Perm't horizl defn/pulse (µm): 7.599000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	732	691	688	665	661	687	25.25	3.67
Total recoverable horiz. deform. (µm)	22.48	23.10	23.49	23.77	23.94	23.36	0.52	2.24
Peak loading force (N)	1559	1514	1531	1499	1499	1520	22.66	1.49
Recoverable horiz. deform. #1 (µm)	9.49	9.83	9.99	10.13	10.22	9.93	0.26	2.59
Recoverable horiz. deform. #2 (µm)	12.99	13.27	13.50	13.64	13.72	13.42	0.27	1.99
Seating force (N)	143	152	148	156	156	151	5.21	3.45



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7\_0 35C NO\_1.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:51:41 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pujatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.0 35C NO.1  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	64.5	64.5	64.5	64.5			64.5	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

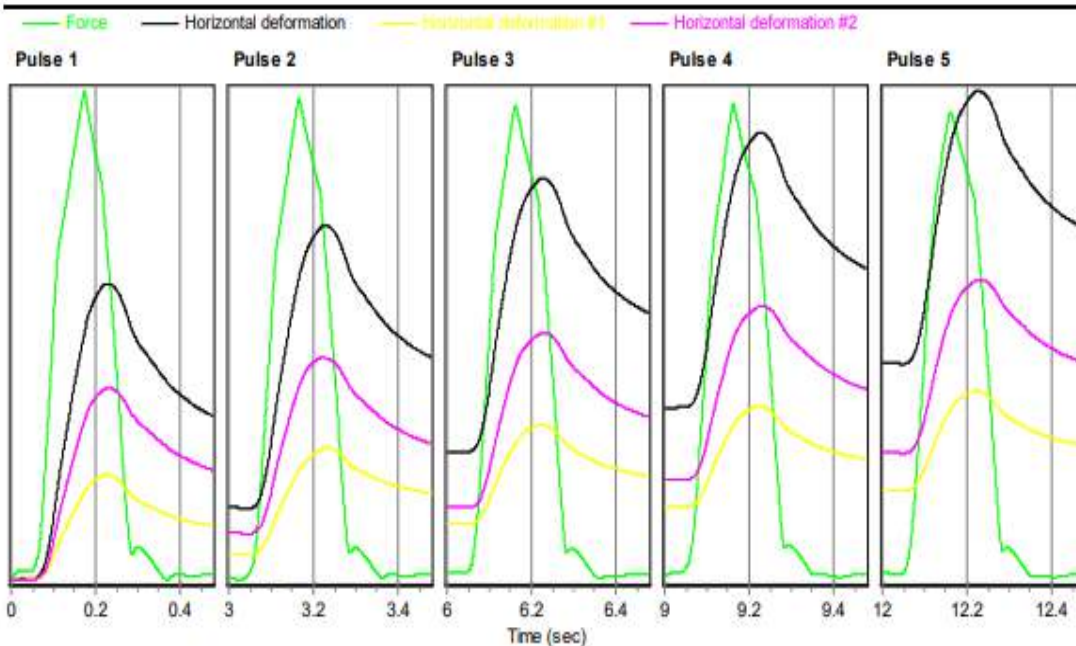
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.8  
 Skin temperature (°C): 35.6

Perm't horiz'l def'n/pulse (µm): 20.080000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	380	389	356	357	345	361	12.22	3.38
Total recoverable horiz. deform. (µm)	43.87	44.46	45.06	45.29	45.87	44.91	0.69	1.54
Peak loading force (N)	1606	1580	1544	1555	1522	1561	28.99	1.86
Recoverable horiz. deform. #1 (µm)	15.62	15.11	16.20	16.54	16.92	16.08	0.65	4.02
Recoverable horiz. deform. #2 (µm)	28.25	29.35	28.86	28.75	28.95	28.83	0.35	1.22
Seating force (N)	142	141	156	147	155	148	6.23	4.21



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7\_5 35C NO\_1.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 5:07:30 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.5 35C NO.1  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	64.4	64.4	64.4	64.4			64.4	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

Cross-sectional area (mm<sup>2</sup>): 8027.7

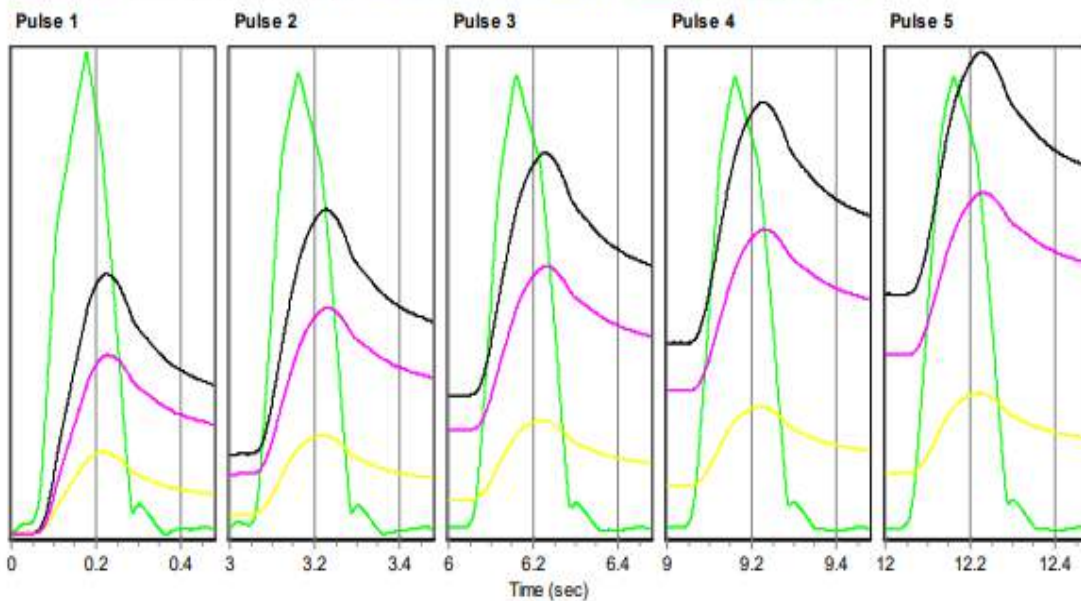
### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.5

Perm't horizl def'n/pulse (µm): 11.340000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	913	842	819	809	796	836	41.57	4.97
Total recoverable horiz. deform. (µm)	17.95	18.41	18.81	18.99	19.31	18.69	0.47	2.53
Peak loading force (N)	1575	1490	1481	1476	1477	1500	37.98	2.53
Recoverable horiz. deform. #1 (µm)	6.17	6.37	6.55	6.60	6.79	6.49	0.21	3.24
Recoverable horiz. deform. #2 (µm)	11.78	12.04	12.26	12.39	12.52	12.20	0.26	2.16
Seating force (N)	135	152	151	152	149	148	6.34	4.29

— Force — Horizontal deformation — Recoverable deformation #1 — Recoverable deformation #2





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_0 35C NO\_2.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 3:31:58 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.0 35C NO.2  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	65.7	65.7	65.7	65.7			65.7	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

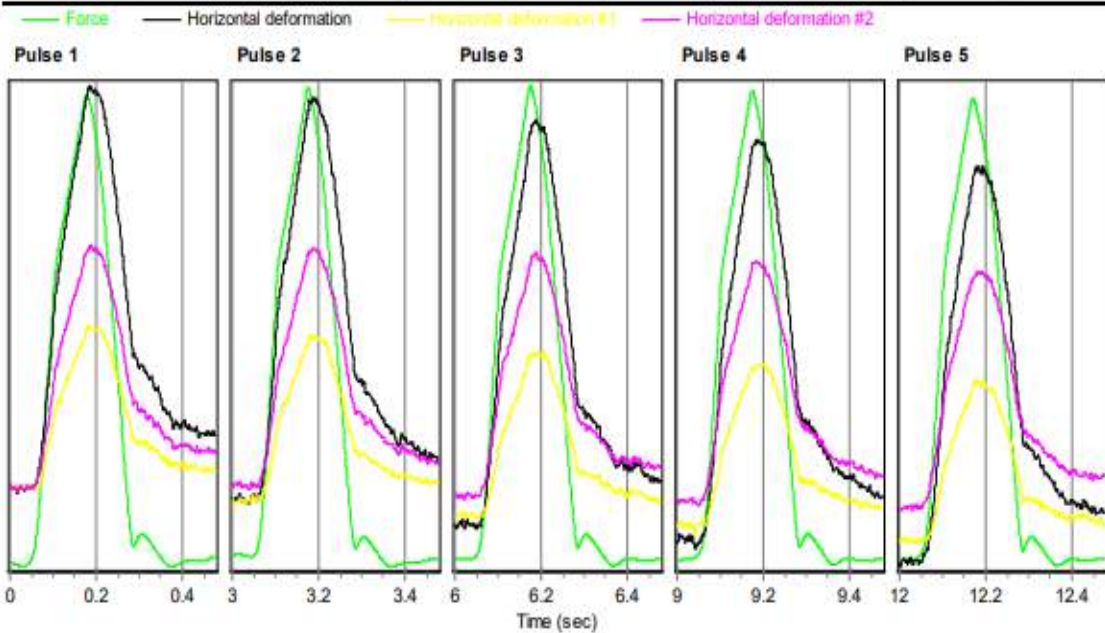
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.2  
 Skin temperature (°C): 35.7

Perm't horizl defn/pulse (µm): 0.195200

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	7213	6992	7174	7048	7180	7121	85.61	1.20
Total recoverable horiz. deform. (µm)	2.29	2.36	2.33	2.35	2.26	2.32	0.04	1.57
Peak loading force (N)	1618	1617	1636	1621	1592	1617	14.11	0.87
Recoverable horiz. deform. #1 (µm)	0.96	1.00	0.94	0.97	0.94	0.96	0.02	2.09
Recoverable horiz. deform. #2 (µm)	1.33	1.36	1.38	1.38	1.32	1.35	0.03	1.87
Seating force (N)	140	165	151	148	149	150	8.15	5.42



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_5 35C NO\_2.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 3:51:25 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pujatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.5 35C NO.2  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	62.6	62.6	62.6	62.6			62.6	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

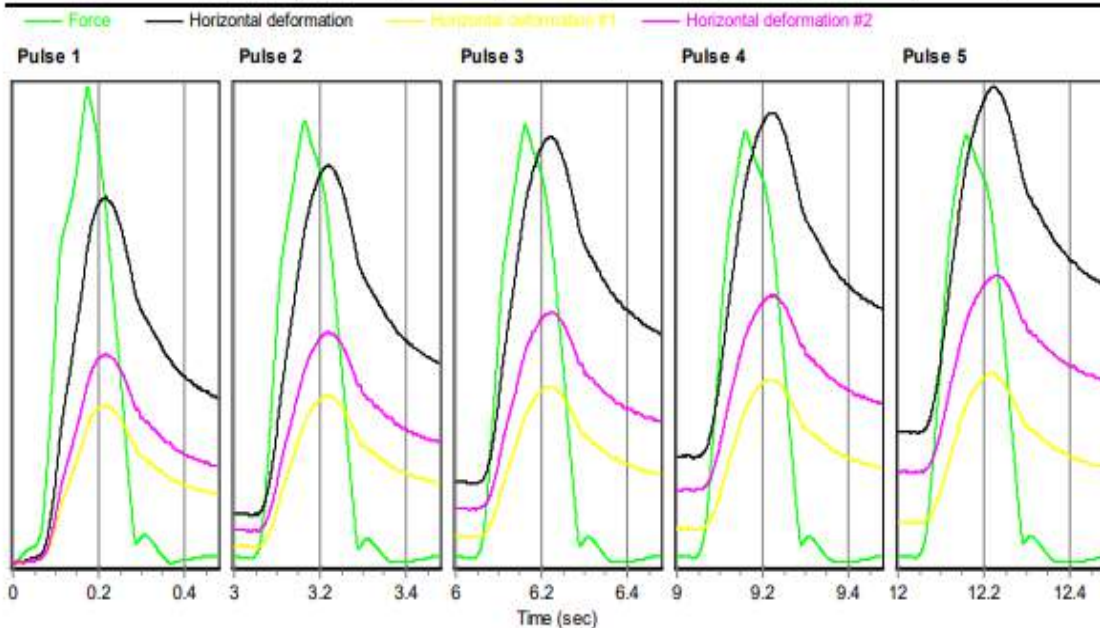
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.0  
 Skin temperature (°C): 35.7

Perm't horiz'l def'n/pulse (µm): 1.824000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1718	1573	1542	1522	1495	1570	78.08	4.97
Total recoverable horiz. deform. (µm)	9.31	9.30	9.40	9.37	9.44	9.36	0.05	0.58
Peak loading force (N)	1494	1367	1354	1333	1319	1373	62.57	4.56
Recoverable horiz. deform. #1 (µm)	4.14	4.14	4.17	4.18	4.39	4.21	0.10	2.27
Recoverable horiz. deform. #2 (µm)	5.17	5.16	5.23	5.19	5.05	5.16	0.06	1.17
Seating force (N)	132	153	153	155	154	149	8.78	5.88



# Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_0 35C NO\_2.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:14:34 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.0 35C NO.2  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	64.0	64.0	64.0	64.0			64.0	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

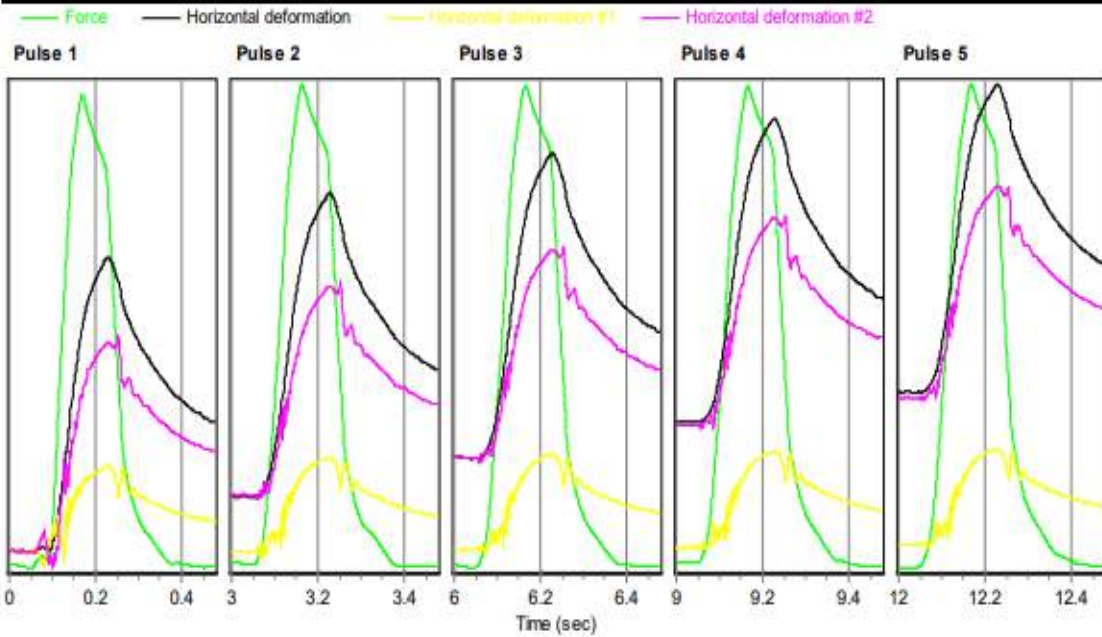
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.9  
 Skin temperature (°C): 35.6

Perm't horizl defn/pulse (µm): 2.819000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1799	1668	1639	1603	1596	1661	73.59	4.43
Total recoverable horiz. deform. (µm)	8.96	9.85	10.04	10.21	10.41	9.89	0.50	5.09
Peak loading force (N)	1539	1569	1573	1564	1587	1566	15.63	1.00
Recoverable horiz. deform. #1 (µm)	3.25	3.47	3.50	3.49	3.47	3.44	0.10	2.77
Recoverable horiz. deform. #2 (µm)	5.71	6.37	6.54	6.72	6.94	6.46	0.42	6.46
Seating force (N)	155	156	151	157	141	152	6.05	3.98





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_5 35C NO\_2.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:35:23 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pujatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.5 35C NO.2  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	63.1	63.1	63.1	63.1			63.1	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

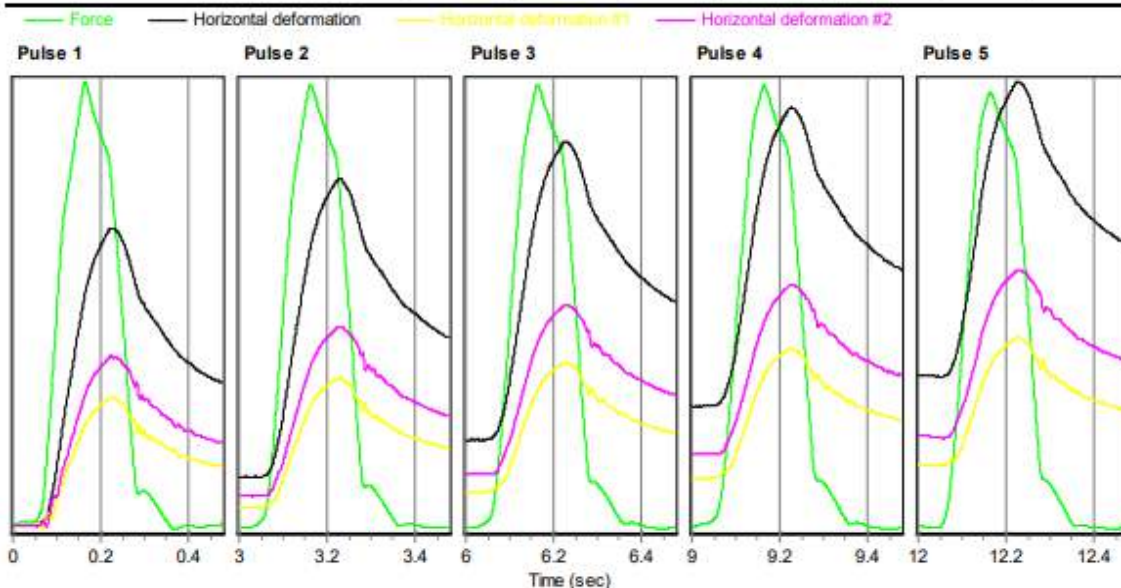
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.5

Perm't horizl defn/pulse (µm): 3.602000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1246	1189	1169	1156	1134	1179	38.15	3.24
Total recoverable horiz. deform. (µm)	12.65	13.25	13.47	13.58	13.57	13.30	0.35	2.61
Peak loading force (N)	1484	1484	1482	1478	1449	1476	13.31	0.90
Recoverable horiz. deform. #1 (µm)	5.56	5.82	5.89	5.91	5.96	5.83	0.14	2.43
Recoverable horiz. deform. #2 (µm)	7.09	7.43	7.58	7.67	7.61	7.47	0.21	2.78
Seating force (N)	150	142	143	144	149	146	3.34	2.30



# Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7\_0 35C NO\_2.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:55:09 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.0 35C NO.2  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	60.2	60.2	60.2	60.2			60.2	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

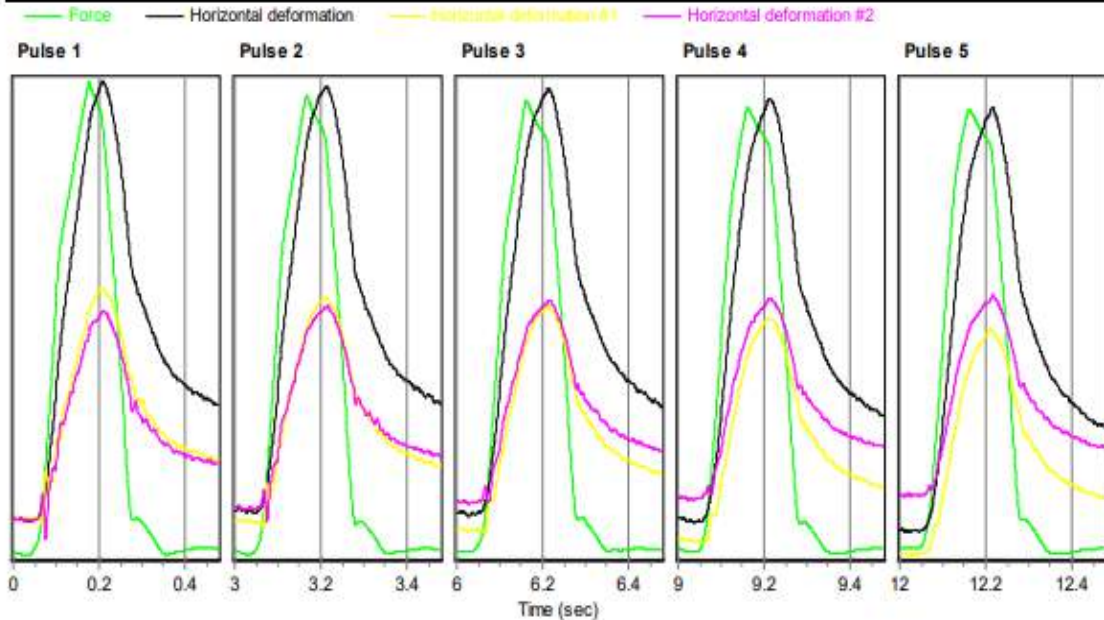
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.8  
 Skin temperature (°C): 35.5

Perm't horizl def'n/pulse (µm): 0.124600

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	2978	2903	2848	2779	2744	2850	84.16	2.95
Total recoverable horiz. deform. (µm)	5.83	5.78	5.85	5.86	5.89	5.84	0.04	0.62
Peak loading force (N)	1561	1508	1497	1464	1452	1496	38.14	2.55
Recoverable horiz. deform. #1 (µm)	3.15	3.16	3.16	3.20	3.17	3.17	0.02	0.54
Recoverable horiz. deform. #2 (µm)	2.68	2.62	2.69	2.66	2.72	2.68	0.03	1.21
Seating force (N)	141	146	142	152	157	147	5.86	3.97





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7\_5 35C NO\_2.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 5:10:37 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.5 35C NO.2  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	64.9	64.9	64.9	64.9			64.9	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

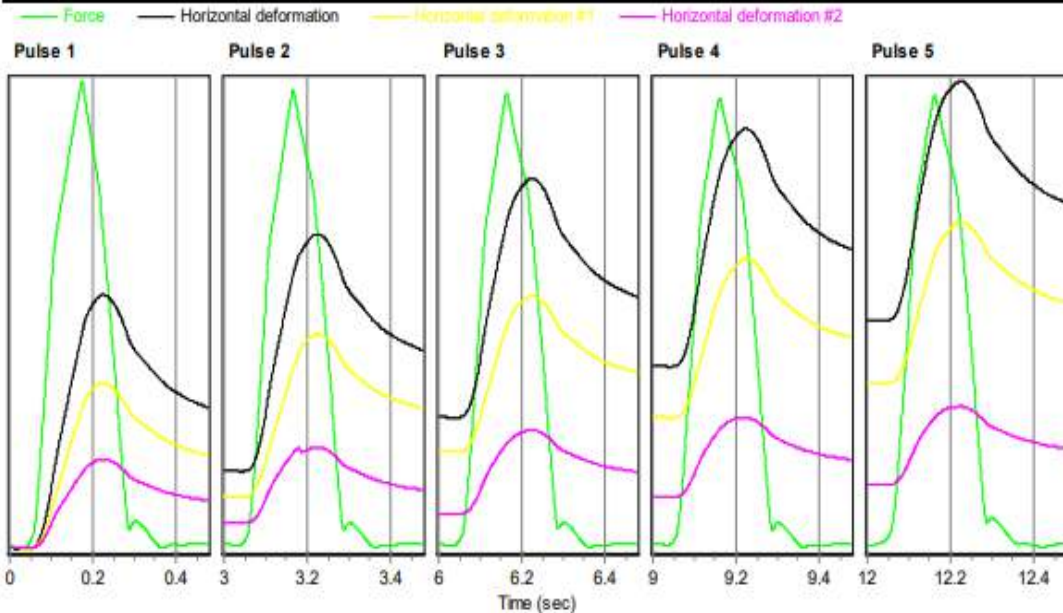
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.4

Perm't horizl defn/pulse (µm): 18.600000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	551	517	501	484	482	507	25.32	4.99
Total recoverable horiz. deform. (µm)	30.16	31.33	32.17	32.90	33.39	31.99	1.15	3.59
Peak loading force (N)	1609	1570	1561	1542	1559	1568	22.32	1.42
Recoverable horiz. deform. #1 (µm)	19.33	19.97	20.70	21.35	21.82	20.63	0.90	4.37
Recoverable horiz. deform. #2 (µm)	10.83	11.36	11.47	11.55	11.57	11.36	0.27	2.41
Seating force (N)	144	152	151	153	145	149	3.49	2.34





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_0 35C NO\_3.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 3:34:56 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.0 35C NO.3  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	63.6	63.6	63.6	63.6			63.6	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

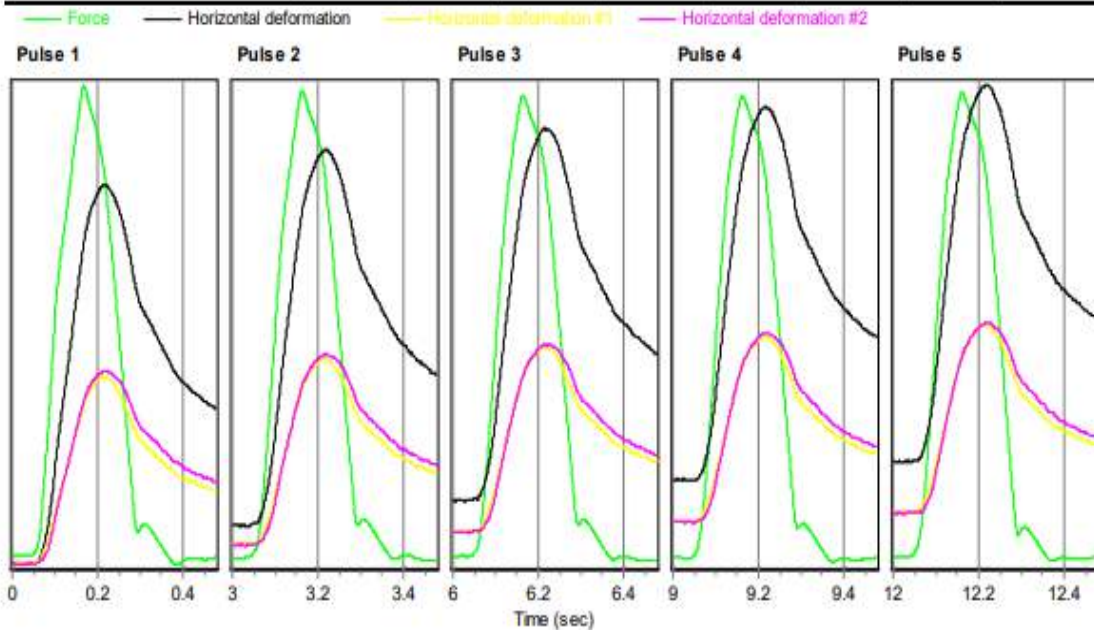
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.2  
 Skin temperature (°C): 35.8

Perm't horiz'l def'n/pulse (µm): 1.080000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	2066	1987	1956	1942	1931	1976	48.42	2.45
Total recoverable horiz. deform. (µm)	7.66	7.91	7.92	7.99	8.07	7.91	0.14	1.73
Peak loading force (N)	1502	1493	1471	1472	1479	1483	12.19	0.82
Recoverable horiz. deform. #1 (µm)	3.74	3.90	3.93	3.93	4.01	3.90	0.09	2.32
Recoverable horiz. deform. #2 (µm)	3.92	4.01	3.99	4.06	4.06	4.01	0.05	1.25
Seating force (N)	153	146	152	151	152	151	2.45	1.62





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_5 35C NO\_3.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 3:54:12 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pustajan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.5 35C NO.3  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	66.4	66.4	66.4	66.4			66.4	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

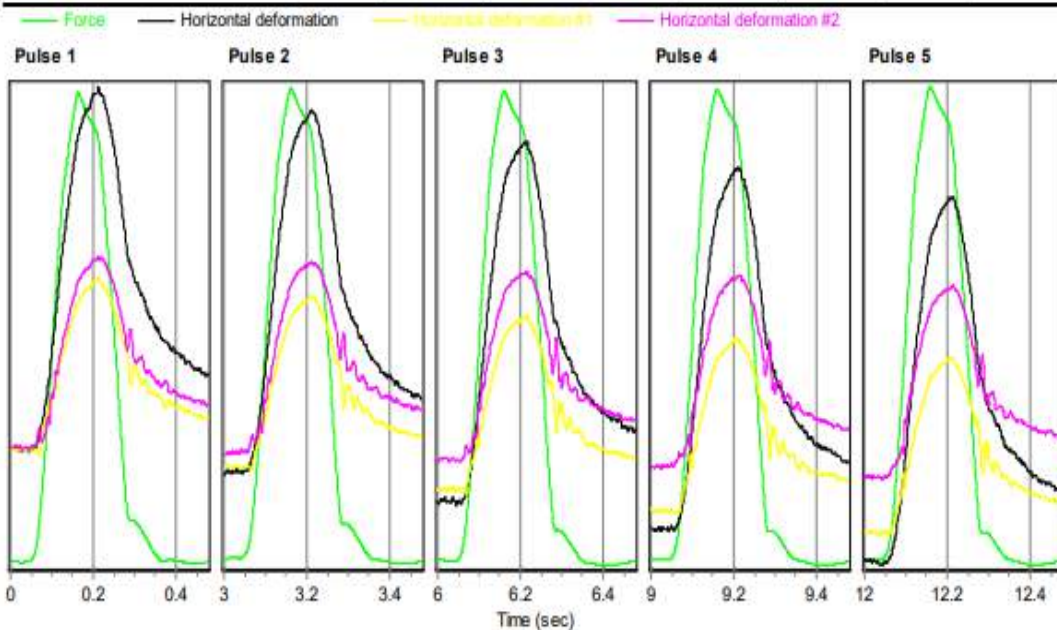
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.0  
 Skin temperature (°C): 35.7

Perm't horiz'l defn/pulse (µm): 0.527100

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	4195	4169	4198	4147	4178	4177	18.69	0.45
Total recoverable horiz. deform. (µm)	3.62	3.67	3.62	3.67	3.67	3.65	0.02	0.63
Peak loading force (N)	1507	1515	1506	1509	1519	1511	4.85	0.32
Recoverable horiz. deform. #1 (µm)	1.78	1.80	1.81	1.80	1.79	1.80	0.01	0.68
Recoverable horiz. deform. #2 (µm)	1.85	1.86	1.81	1.87	1.88	1.85	0.03	1.42
Seating force (N)	146	152	153	155	155	152	3.15	2.07



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_0 35C NO\_3.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:17:43 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4  
 Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.0 35C NO.3  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	62.6	62.6	62.6	62.6			62.6	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

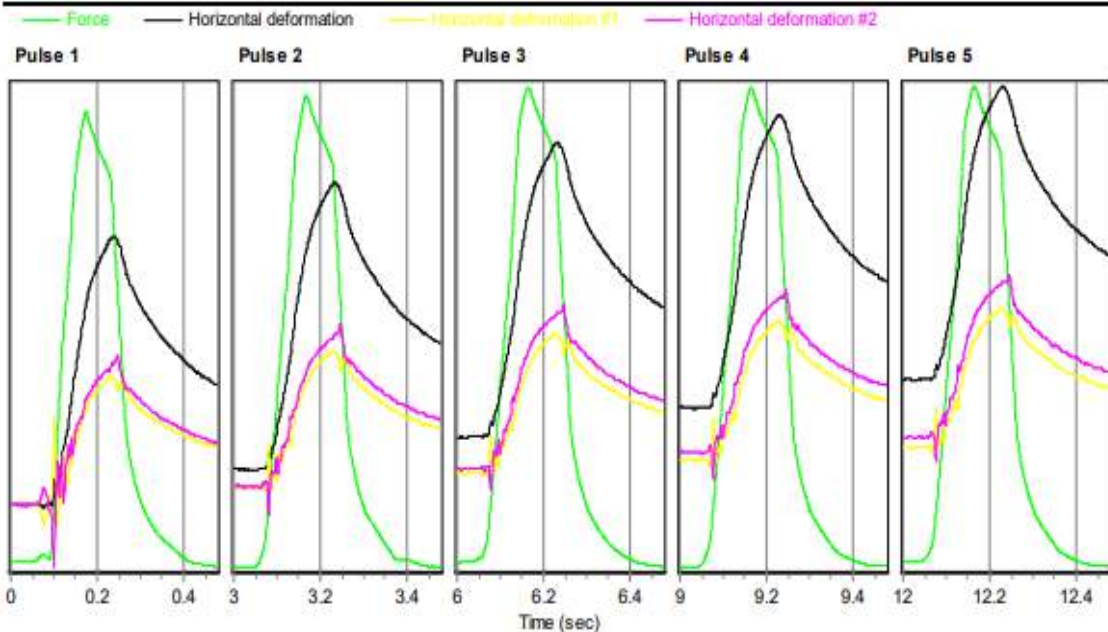
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.8  
 Skin temperature (°C): 35.2

Perm't horiz'l def'n/pulse (µm): 1.900000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	2109	2010	1965	1968	1927	1996	62.45	3.13
Total recoverable horiz. deform. (µm)	7.41	8.13	8.42	8.46	8.58	8.20	0.42	5.14
Peak loading force (N)	1460	1527	1545	1555	1545	1527	34.37	2.25
Recoverable horiz. deform. #1 (µm)	3.46	3.87	3.98	4.01	4.07	3.88	0.22	5.62
Recoverable horiz. deform. #2 (µm)	3.95	4.26	4.43	4.45	4.51	4.32	0.20	4.72
Seating force (N)	157	142	151	139	155	149	6.97	4.69



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_5 35C NO\_3.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:37:54 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pustajan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.5 35C NO.3  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	65.5	65.5	65.5	65.5			65.5	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

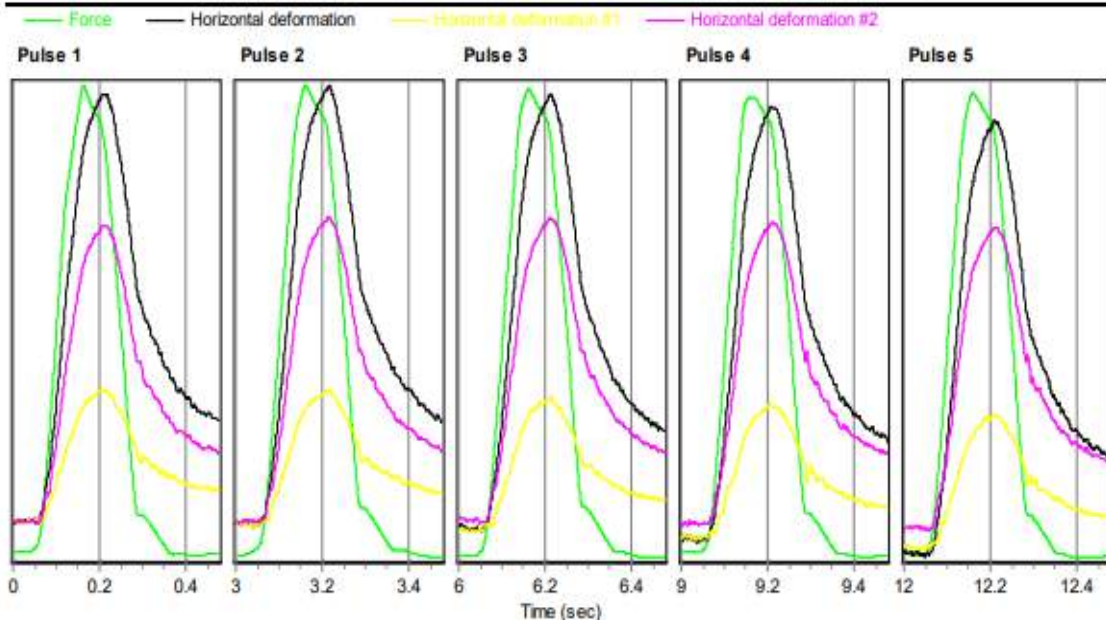
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.5

Perm't horizl def'n/pulse (µm): 0.161900

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	3484	3420	3368	3274	3352	3380	70.01	2.07
Total recoverable horiz. deform. (µm)	4.33	4.44	4.47	4.48	4.44	4.43	0.05	1.20
Peak loading force (N)	1476	1485	1473	1434	1456	1465	17.87	1.22
Recoverable horiz. deform. #1 (µm)	1.36	1.41	1.42	1.42	1.39	1.40	0.02	1.58
Recoverable horiz. deform. #2 (µm)	2.97	3.03	3.06	3.07	3.06	3.04	0.03	1.10
Seating force (N)	152	143	143	155	149	148	5.03	3.39





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7\_0 35C NO\_3.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:58:27 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pujatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.0 35C NO.3  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	60.3	60.3	60.3	60.3			60.3	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

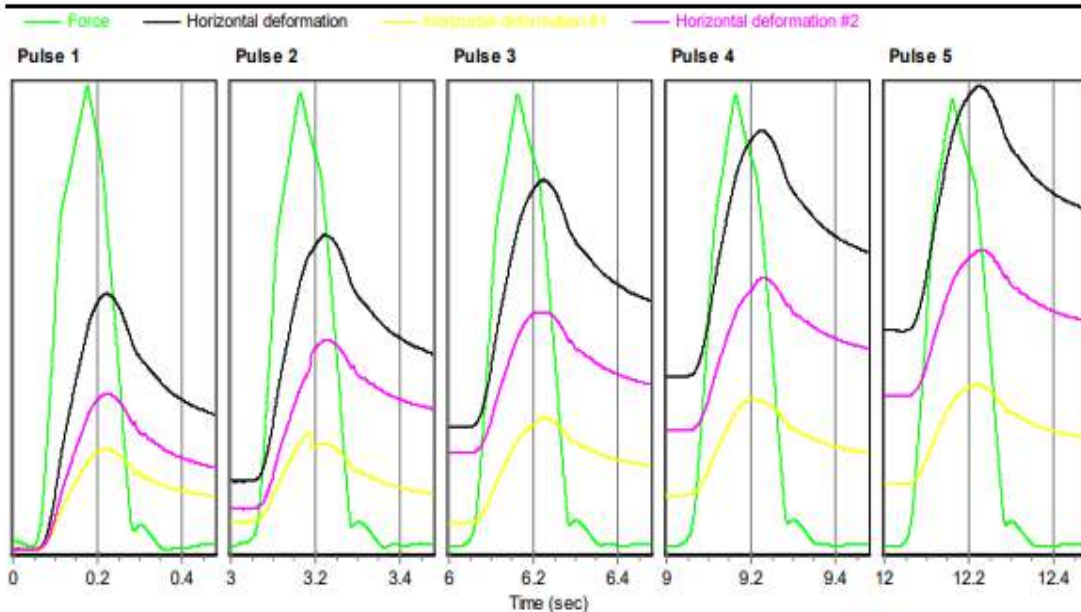
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.5

Perm't horizl def'n/pulse (µm): 10.570000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	902	880	858	842	820	860	28.58	3.32
Total recoverable horiz. deform. (µm)	18.97	19.38	19.85	20.17	20.43	19.76	0.53	2.68
Peak loading force (N)	1540	1534	1532	1528	1509	1529	10.73	0.70
Recoverable horiz. deform. #1 (µm)	7.38	8.04	7.90	8.38	8.52	8.04	0.40	5.01
Recoverable horiz. deform. #2 (µm)	11.59	11.34	11.95	11.79	11.91	11.72	0.23	1.93
Seating force (N)	162	145	142	144	145	147	7.10	4.81



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7.5 35C NO\_3.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 5:13:41 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pustajan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.5 35C NO.3  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	61.3	61.3	61.3	61.3			61.3	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

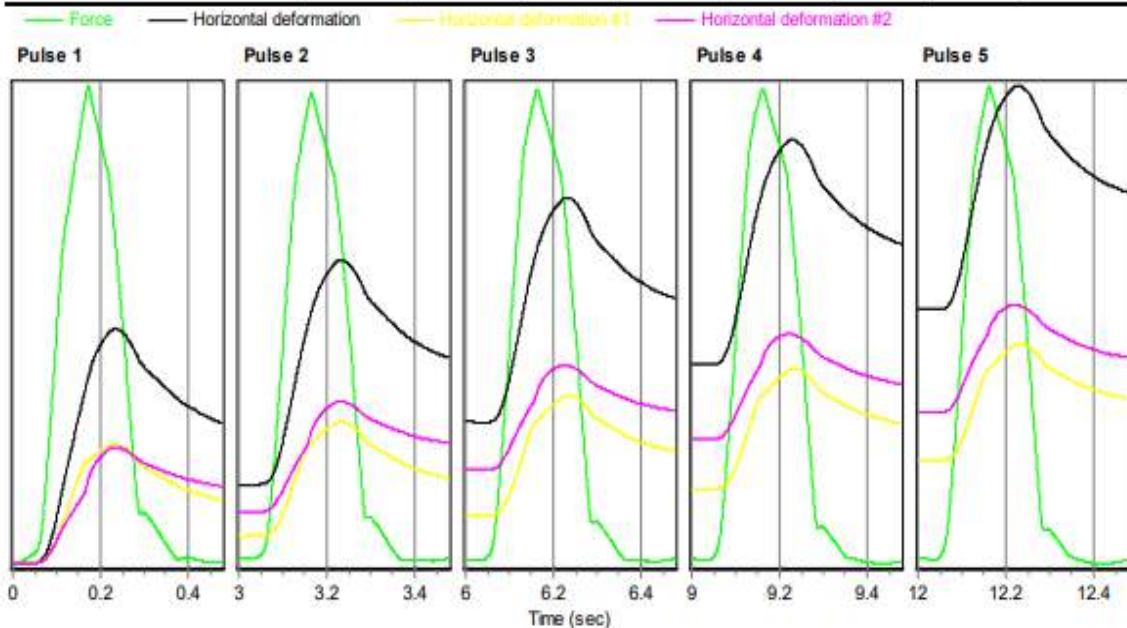
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.6  
 Skin temperature (°C): 35.3

Perm't horizl defn/pulse (µm): 16.460000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	784	738	724	710	703	732	28.96	3.96
Total recoverable horiz. deform. (µm)	20.99	21.76	22.38	22.86	23.14	22.23	0.78	3.49
Peak loading force (N)	1506	1470	1482	1484	1488	1486	11.77	0.79
Recoverable horiz. deform. #1 (µm)	12.31	12.60	12.46	12.31	12.15	12.37	0.15	1.23
Recoverable horiz. deform. #2 (µm)	8.68	9.16	9.92	10.55	11.00	9.86	0.85	8.67
Seating force (N)	137	151	150	151	152	148	5.64	3.81



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_0\_35C NO\_4.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 3:38:06 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pujatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.0 35C NO.4  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	66.0	66.0	66.0	66.0			66.0	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

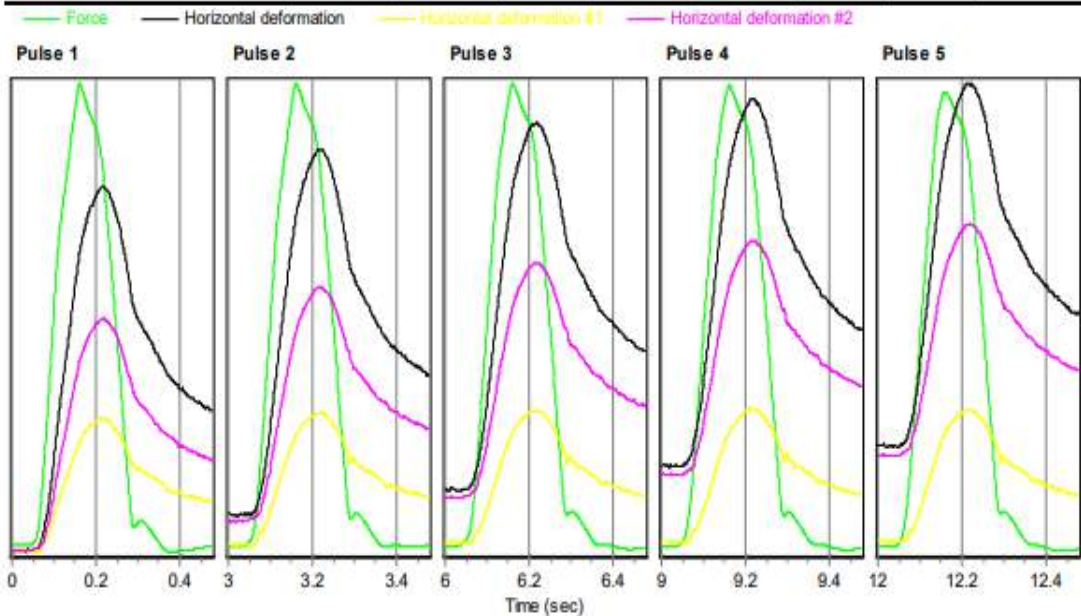
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.2  
 Skin temperature (°C): 36.0

Perm't horiz'l defn/pulse (µm): 0.897000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	2444	2365	2346	2311	2276	2348	56.54	2.41
Total recoverable horiz. deform. (µm)	6.04	6.28	6.33	6.40	6.39	6.29	0.13	2.07
Peak loading force (N)	1455	1462	1464	1457	1433	1454	11.09	0.76
Recoverable horiz. deform. #1 (µm)	2.32	2.39	2.43	2.42	2.43	2.40	0.04	1.74
Recoverable horiz. deform. #2 (µm)	3.73	3.88	3.90	3.98	3.96	3.89	0.09	2.33
Seating force (N)	153	146	145	145	149	148	3.09	2.09





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)

Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_5 35C NO\_4.D003

Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003

Test date & time: 1/1/2002 4:01:30 AM

Project: DESERTASI S3 ITB (LUCKY CAROLES)

Operator: Team Pusjatan

Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.5 35C NO.4

Remarks...

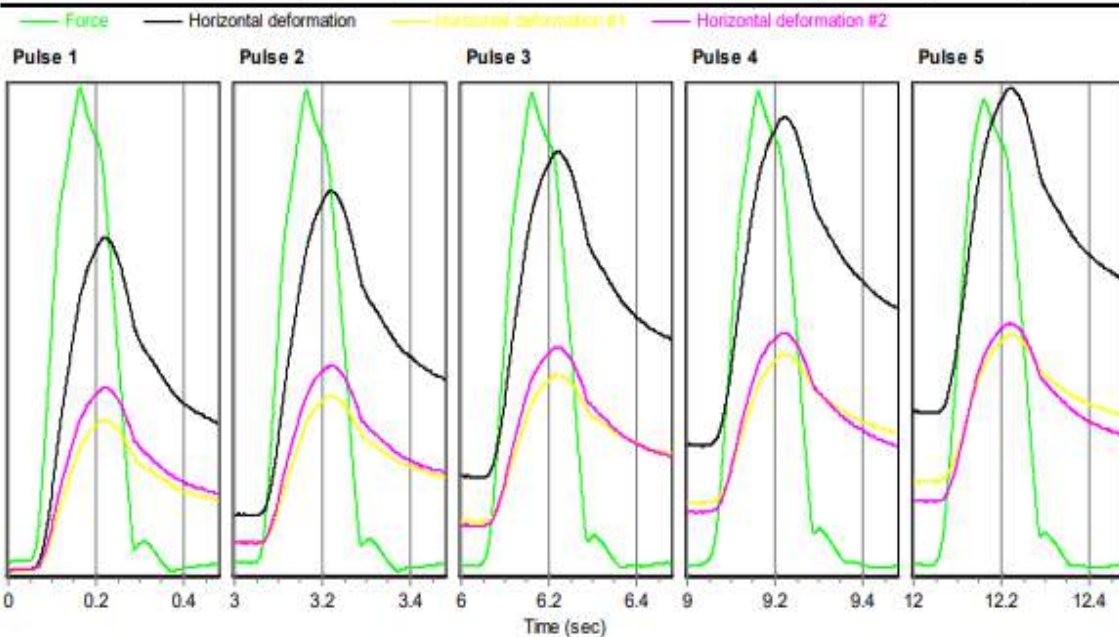
Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	64.1	64.1	64.1	64.1			64.1	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.0  
 Skin temperature (°C): 35.8  
 Perm't horizl defn/pulse (µm): 2.266000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1775	1717	1670	1667	1626	1691	50.86	3.01
Total recoverable horiz. deform. (µm)	8.46	8.69	8.92	8.99	9.02	8.82	0.21	2.40
Peak loading force (N)	1436	1428	1425	1433	1403	1425	11.67	0.82
Recoverable horiz. deform. #1 (µm)	3.74	3.82	3.90	3.86	3.87	3.84	0.06	1.46
Recoverable horiz. deform. #2 (µm)	4.72	4.87	5.02	5.12	5.15	4.98	0.16	3.24
Seating force (N)	153	155	147	145	152	150	3.95	2.63



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_0 35C NO\_4.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:21:26 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.0 35C NO.4  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	62.9	62.9	62.9	62.9			62.9	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

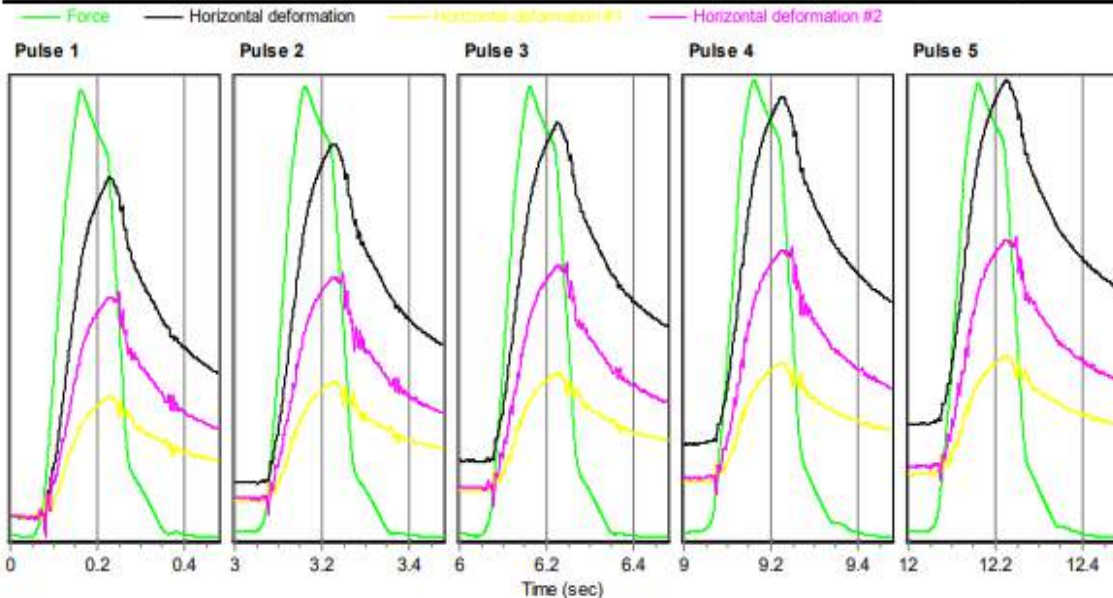
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.8  
 Skin temperature (°C): 35.4

Perm't horizl def'n/pulse (µm): 1.426000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1593	1539	1517	1512	1501	1532	32.93	2.15
Total recoverable horiz. deform. (µm)	9.92	10.30	10.44	10.67	10.63	10.39	0.27	2.60
Peak loading force (N)	1484	1488	1487	1514	1497	1494	11.09	0.74
Recoverable horiz. deform. #1 (µm)	3.41	3.50	3.56	3.62	3.56	3.53	0.07	1.97
Recoverable horiz. deform. #2 (µm)	6.51	6.80	6.88	7.05	7.07	6.86	0.20	2.98
Seating force (N)	149	157	154	151	157	153	3.31	2.16





# Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_5 35C NO\_4.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:40:51 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5  
 Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4  
 Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.5 35C NO.4  
 Remarks...

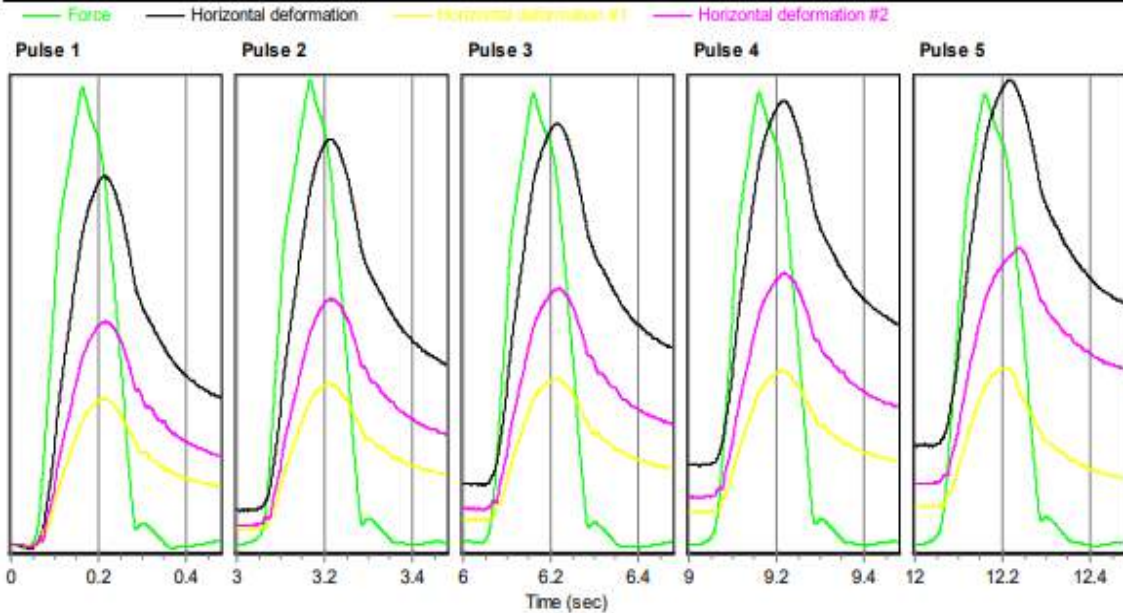
Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	64.6	64.6	64.6	64.6			64.6	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.4  
 Perm't horiz'l def'n/pulse (µm): 1.455000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1499	1483	1442	1439	1429	1458	27.40	1.88
Total recoverable horiz. deform. (µm)	10.32	10.62	10.53	10.64	10.70	10.56	0.13	1.24
Peak loading force (N)	1492	1518	1464	1476	1474	1485	18.93	1.27
Recoverable horiz. deform. #1 (µm)	4.04	4.15	4.11	4.16	4.84	4.26	0.29	6.88
Recoverable horiz. deform. #2 (µm)	6.28	6.47	6.43	6.48	5.86	6.30	0.23	3.71
Seating force (N)	148	145	154	145	145	147	3.73	2.53



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7\_0 35C NO\_4.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 5:01:23 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pujatun  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.0 35C NO.4  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	59.1	59.1	59.1	59.1			59.1	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

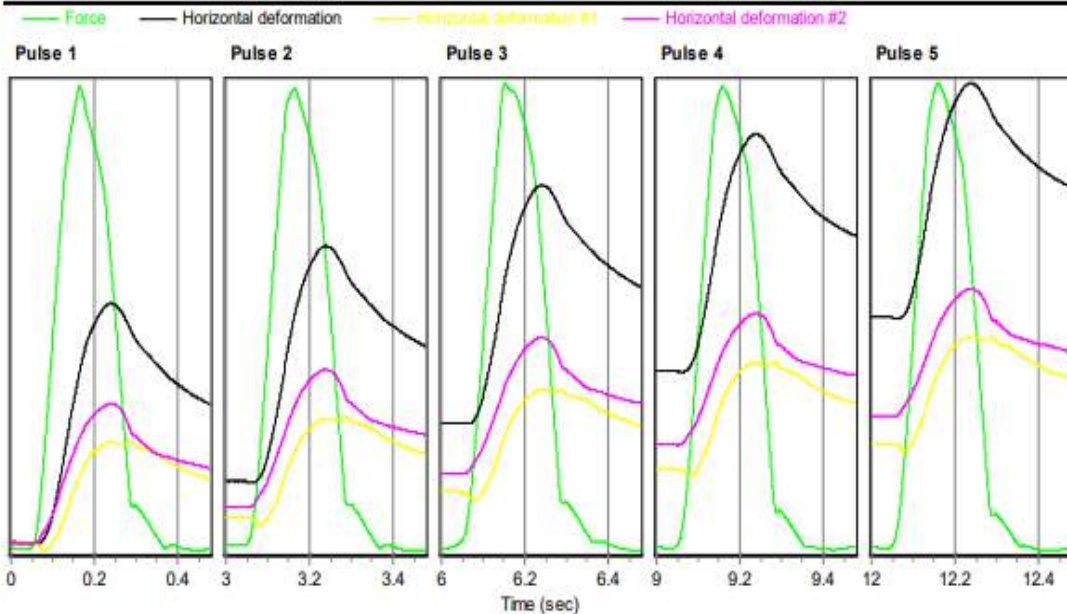
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.5

Perm't horizl defn/pulse (µm): 14.620000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	709	706	685	688	688	695	10.27	1.48
Total recoverable horiz. deform. (µm)	23.68	23.55	24.69	24.34	24.55	24.16	0.46	1.91
Peak loading force (N)	1481	1467	1492	1477	1490	1481	8.87	0.60
Recoverable horiz. deform. #1 (µm)	9.94	9.64	10.50	10.72	10.80	10.32	0.46	4.41
Recoverable horiz. deform. #2 (µm)	13.74	13.91	14.19	13.62	13.74	13.84	0.20	1.44
Seating force (N)	146	155	145	150	149	149	3.46	2.33



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7\_5 35C NO\_4.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 5:16:50 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pujatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.5 35C NO.4  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	65.3	65.3	65.3	65.3			65.3	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

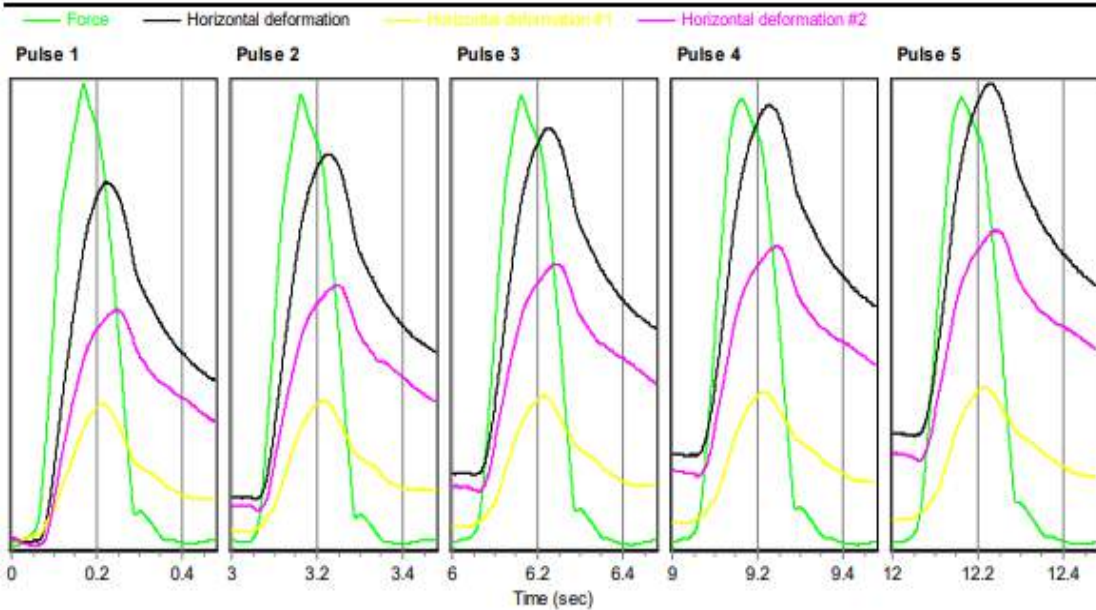
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.6  
 Skin temperature (°C): 35.3

Perm't horizl defn/pulse (µm): 1.431000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1682	1603	1574	1547	1540	1589	51.54	3.24
Total recoverable horiz. deform. (µm)	9.00	9.13	9.31	9.39	9.46	9.26	0.17	1.86
Peak loading force (N)	1475	1427	1428	1416	1420	1433	21.23	1.48
Recoverable horiz. deform. #1 (µm)	3.59	3.58	3.55	3.59	3.45	3.55	0.05	1.50
Recoverable horiz. deform. #2 (µm)	5.40	5.55	5.77	5.80	6.01	5.71	0.21	3.69
Seating force (N)	136	151	146	146	145	145	4.89	3.37





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_0 35C NO\_5.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 3:41:42 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.0 35C NO.5  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	70.6	70.6	70.6	70.6			70.6	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

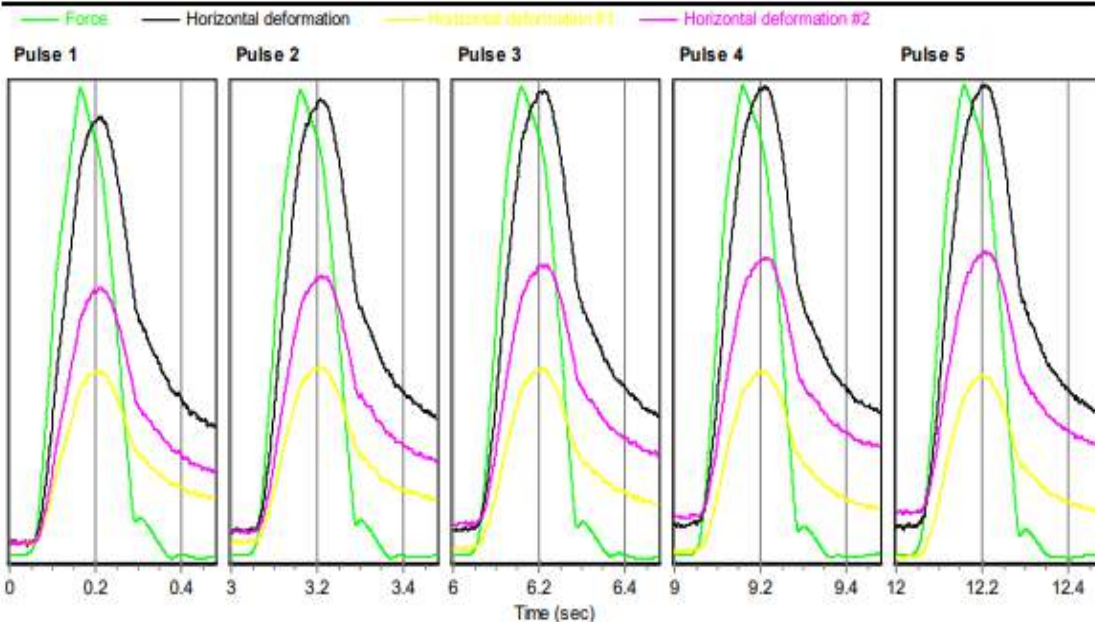
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.1  
 Skin temperature (°C): 35.8

Perm't horiz1 defn/pulse (µm): 0.053510

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	3365	3242	3242	3199	3175	3245	65.61	2.02
Total recoverable horiz. deform. (µm)	4.23	4.37	4.41	4.48	4.52	4.40	0.10	2.26
Peak loading force (N)	1500	1494	1507	1509	1512	1505	6.33	0.42
Recoverable horiz. deform. #1 (µm)	1.75	1.86	1.86	1.89	1.89	1.85	0.05	2.79
Recoverable horiz. deform. #2 (µm)	2.48	2.51	2.55	2.59	2.63	2.55	0.05	2.06
Seating force (N)	150	150	149	149	149	150	0.51	0.34



# Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 5\_5 35C NO\_5.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:04:34 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 5.5 35C NO.5  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	64.2	64.2	64.2	64.2			64.2	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

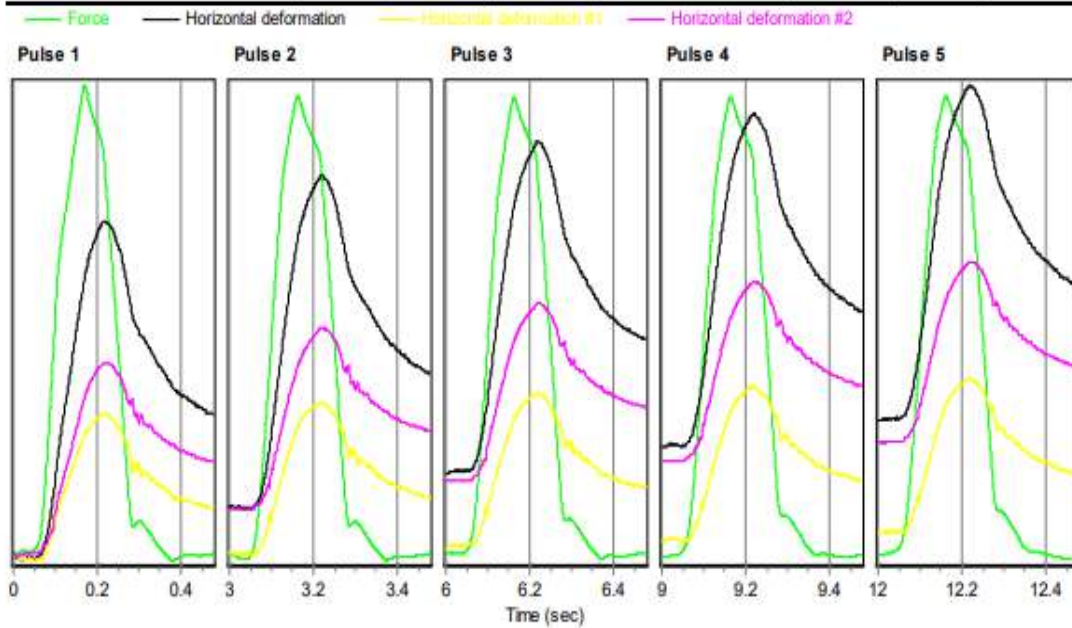
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 36.0  
 Skin temperature (°C): 35.7

Perm't horizl def'n/pulse (µm): 1.687000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	2178	2025	1963	1974	1959	2020	82.43	4.08
Total recoverable horiz. deform. (µm)	7.49	7.83	8.02	8.05	8.12	7.90	0.23	2.87
Peak loading force (N)	1563	1519	1508	1523	1524	1527	18.65	1.22
Recoverable horiz. deform. #1 (µm)	3.68	3.82	3.87	3.85	3.84	3.81	0.07	1.79
Recoverable horiz. deform. #2 (µm)	3.81	4.01	4.15	4.21	4.28	4.09	0.17	4.04
Seating force (N)	143	150	155	143	145	147	4.72	3.20



# Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_0 35C NO\_5.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 4:27:33 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

## Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

## Specimen Information

Identification: ACWC 6.0 35C NO.5  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	62.8	62.8	62.8	62.8			62.8	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

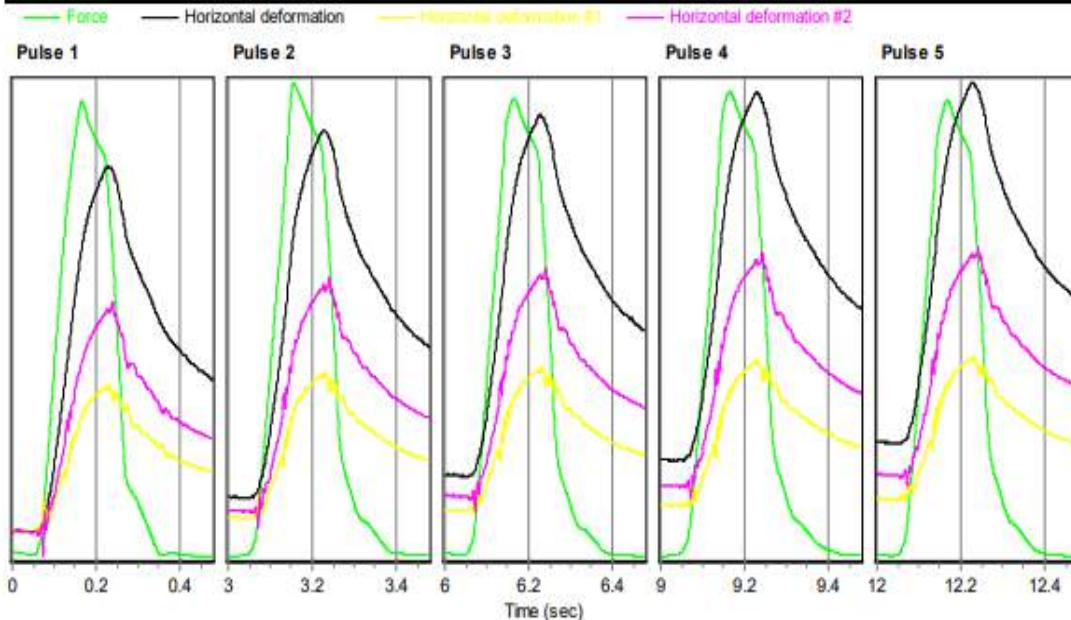
Cross-sectional area (mm<sup>2</sup>): 8027.7

## Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.8  
 Skin temperature (°C): 35.7

Perm't horizl def'n/pulse (µm): 1.162000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1692	1701	1636	1648	1636	1662	28.20	1.70
Total recoverable horiz. deform. (µm)	9.24	9.65	9.64	9.77	9.65	9.59	0.18	1.88
Peak loading force (N)	1466	1539	1479	1509	1480	1494	26.49	1.77
Recoverable horiz. deform. #1 (µm)	3.68	3.75	3.83	3.82	3.74	3.76	0.05	1.43
Recoverable horiz. deform. #2 (µm)	5.56	5.91	5.82	5.95	5.90	5.83	0.14	2.40
Seating force (N)	153	140	151	141	145	146	5.31	3.63





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)

Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 6\_5 35C NO\_5.D003

Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003

Test date & time: 1/1/2002 4:43:18 AM

Project: DESERTASI S3 ITB (LUCKY CAROLES)

Operator: Team Pusjatan

Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 6.5 35C NO.5  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	63.4	63.4	63.4	63.4			63.4	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

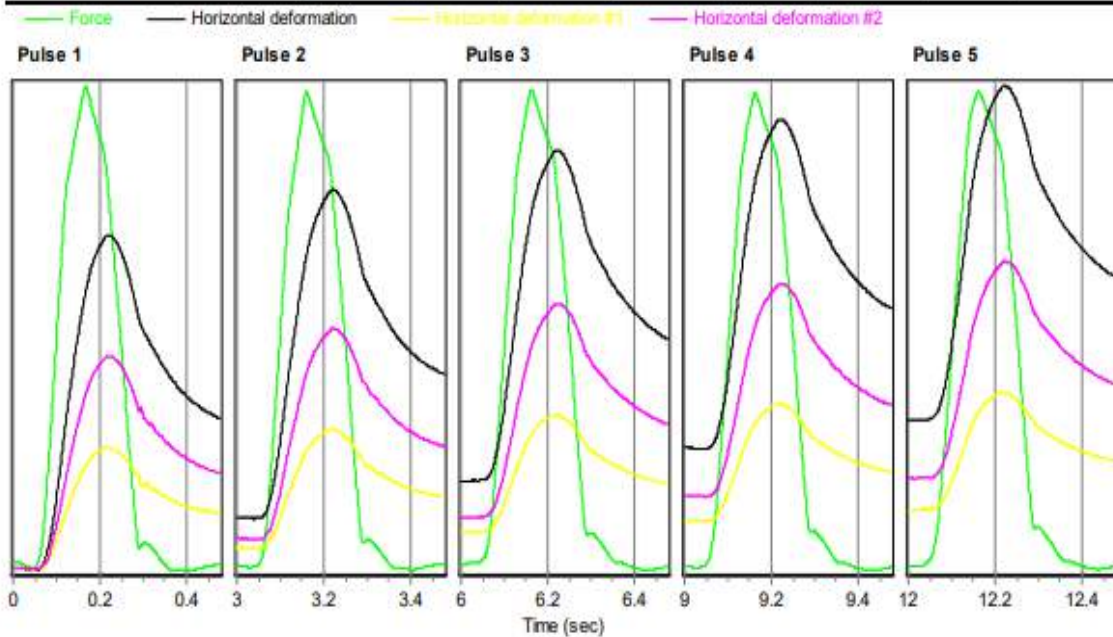
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.4

Perm't horizl defn/pulse (µm): 3.959000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	990	950	939	925	914	943	26.27	2.78
Total recoverable horiz. deform. (µm)	15.65	16.21	16.51	16.66	16.92	16.39	0.43	2.65
Peak loading force (N)	1466	1458	1466	1457	1463	1462	3.95	0.27
Recoverable horiz. deform. #1 (µm)	5.56	5.71	5.84	5.88	5.91	5.78	0.13	2.25
Recoverable horiz. deform. #2 (µm)	10.10	10.50	10.67	10.78	11.01	10.61	0.31	2.89
Seating force (N)	160	150	149	148	144	150	5.45	3.63



## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7\_0 35C NO\_5.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 5:04:20 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.0 35C NO.5  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	62.3	62.3	62.3	62.3			62.3	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

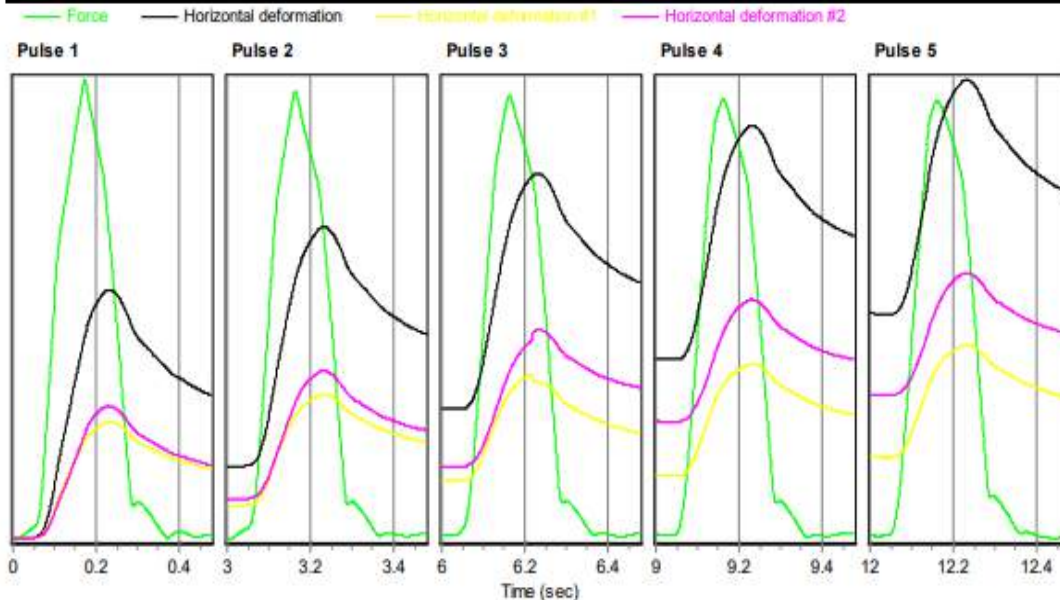
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

Conditioning pulses: 5  
 Core temperature (°C): 35.7  
 Skin temperature (°C): 35.5

Perm't horizl defn/pulse (µm): 14.370000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	690	655	634	616	603	639	30.52	4.77
Total recoverable horiz. deform. (µm)	23.77	24.45	24.88	25.29	25.79	24.84	0.69	2.79
Peak loading force (N)	1525	1488	1466	1449	1446	1475	29.00	1.97
Recoverable horiz. deform. #1 (µm)	11.25	11.60	12.53	12.48	12.75	12.12	0.58	4.82
Recoverable horiz. deform. #2 (µm)	12.52	12.84	12.35	12.82	13.04	12.71	0.25	1.95
Seating force (N)	135	135	143	149	144	141	5.49	3.89





## Indirect Tensile Modulus Test

Test method: ASTM D4123-82 / AASHTO TP31 (horiz. lvdts only, assumed Poisson's ratio)  
 Data fileName: D:\DATA 2019\LUCKY (UNHAS)\ACWC 7.5 35C NO\_5.D003  
 Template file name: D:\DATA 2019\LUCKY (UNHAS)\SEPTEMBER 2019.P003  
 Test date & time: 1/1/2002 5:20:53 AM  
 Project: DESERTASI S3 ITB (LUCKY CAROLES)  
 Operator: Team Pusjatan  
 Comments:

### Setup Parameters

Target temperature (°C): 35  
 Loading pulse width (ms): 250  
 Pulse repetition period (ms): 3000  
 Conditioning pulse count: 5

Peak loading force (N): 1500  
 Estimated Poisson's ratio: 0.4

Seating force: AASHTO TP31 (10% of peak)

### Specimen Information

Identification: ACWC 7.5 35C NO.5  
 Remarks...

Dimensions	Point 1	Point 2	Point 3	Point 4	Point 5	Point 6	Average	Std Dev
Length (mm)	63.5	63.5	63.5	63.5			63.5	
Diameter (mm)	101.1	101.1	101.1	101.1			101.1	

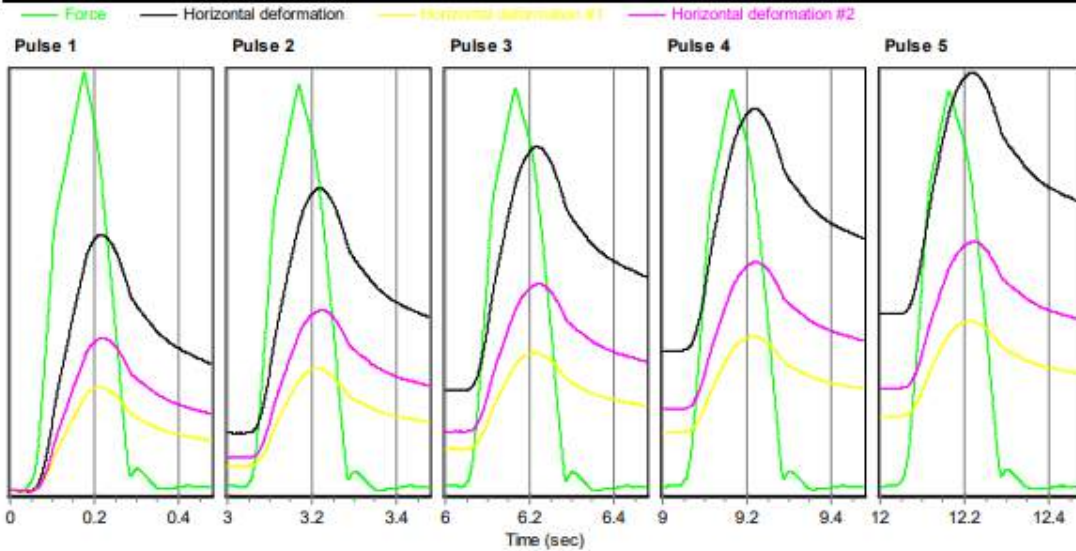
Cross-sectional area (mm<sup>2</sup>): 8027.7

### Test Results

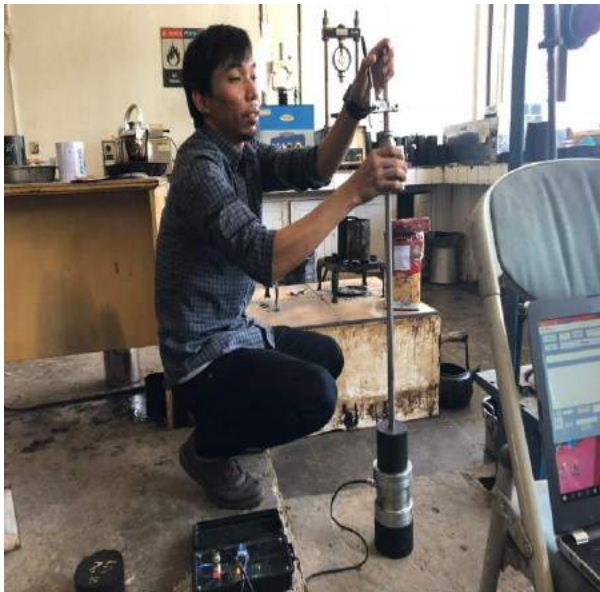
Conditioning pulses: 5  
 Core temperature (°C): 35.6  
 Skin temperature (°C): 35.4

Perm't horiz'l def'n/pulse (µm): 6.255000

	Pulse 1	Pulse 2	Pulse 3	Pulse 4	Pulse 5	Mean	Std. Dev.	%CV
Resilient modulus (MPa)	1149	1082	1064	1057	1048	1080	36.23	3.35
Total recoverable horiz. deform. (µm)	14.63	14.92	15.06	15.15	15.23	15.00	0.21	1.43
Peak loading force (N)	1593	1530	1519	1518	1513	1535	29.56	1.93
Recoverable horiz. deform. #1 (µm)	5.81	5.99	5.86	5.88	5.87	5.88	0.06	1.01
Recoverable horiz. deform. #2 (µm)	8.82	8.92	9.20	9.28	9.36	9.12	0.21	2.31
Seating force (N)	140	154	153	148	148	149	5.04	3.39



## Pengujian LWD Laboratorium







# MARSHALL TEST





## TEST UMMATA

