

Radial tension in nuclear containment vessels

by

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Abstract

Delamination in concrete nuclear pressure vessels is an expensive and dangerous phenomenon that has not been adequately studied or understood. The 2009 Crystal River Unit 3 pressure vessel delamination is the most recent and most consequential example of this phenomenon. In this event, the pressure vessel wall delaminated during steam generator replacement. The vessel was unable to be repaired. Unit 3 is currently undergoing the decommissioning process.

This research was built on research already conducted by the University of Texas at Austin. Six miniature mortar 90° wall sections were constructed making use of a 3D printer to construct the curved formwork for the specimens. This setup allows for a multitude of variables to be tested more efficiently owing to the small specimen size. This research focused on three variables radius, mortar strength, and the use of steel fibers in mix design.

Results showed that delamination is influenced by in-plane shear; a previously understudied mechanism of delamination. Increasing concrete strength and the use of steel fibers give the wall sections greater resistance to delamination and a noticeable increase in toughness. Delamination is a mixed-mode fracture problem related closely to direct tension and in-plane shear. This research shows a factor of $3.75\sqrt{f'_c}$ can be conservatively used to estimate direct tensile strength for concrete. Results also showed that limit states for precompression may need to be modified in the ASME Section III Division 2 design code.

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Acknowledgements

“You are worthy, O Lord, To receive glory and honor and power; For You created all things, And by Your will they exist and were created.” Revelation 4:11

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Dedication

For my wife Amelia and children Naomi, Silas, and Aida

Chapter 1 - Introduction

Delamination and similar failure modes have been a problem over the 74-year history of post-tension concrete in the United States of America. Curved bridge box girders and curved pressure vessels for nuclear facilities present many examples of delamination failure in post tensioned concrete's short history. In 1951, post-tensioning was first successfully used in the United States, with the completion of the Walnut Memorial Parkway Bridge in Philadelphia, Pennsylvania [1]. Concrete cracking occurred within five years of construction along the length of the post-tensioned girders. After several repairs, the bridge was demolished in 1989. In 1971, the Las Lomas Bridge in California experienced a breakout failure when undergoing post-tensioning; ten years later, a similar box girder breakout incident happened to the Kapiolani Interchange Ramp in Hawaii [2]. Actual delamination failure has been a problem in nuclear pressure vessels. In 1970, Turkey Point nuclear facilities dome one experienced delamination during the initial tensioning process. The structure's concrete was at full strength (90+ days); however, not enough concrete was in contact with the post-tensioning ducts, combined with unbalanced loading, causing the dome to delaminate [3]. In 1976, Crystal River Unit 3, also in Florida, experienced a dome delamination failure. The most likely cause of this delamination was poor concrete quality and the initial tensioning process. Electricians noticed the delamination when installing electrical conduits on the dome. They noticed that the concrete felt springy. Further investigation revealed the delamination [4]. In 1994, in India, at Kaiga atomic power station, unit 1's dome delaminated, and the interior surface of the dome collapsed during the tensioning process. Its failure was primarily attributed to low-strength concrete [5]. Finally, in 2009, Crystal River Unit 3 was undergoing an equipment upgrade. A steam generator was

scheduled to be replaced. The generator's size required the construction of a new opening in the containment vessel. During the detensioning sequence, delamination of the wall occurred. The delamination was not noticed until two days later when plant personnel observed water seeping out of the concrete a significant distance from where hydrolasing was occurring [6]. In all these examples, the repair cost millions of dollars, and the safety of the workers was put at risk. In the case of Crystal River Unit 3, the proposed repairs were so cost-intensive that the plant was decommissioned. Repairs are difficult to accomplish because the structure must be de-tensioned, the damaged concrete removed, new concrete placed, and the structure must then be re-tensioned. Construction of nuclear containment vessels is expensive and difficult to accomplish due to the skilled labor requirements, limited space provided by the reinforcing steel, and the complex tensioning sequence. Historical events reveal several main causes of delamination failure. All failures occurred during some phase of the tensioning process. The tensile force is related to the placement of post-tensioning ducts in the wall. Placing ducts to close the outer fiber of the wall results in breakout failure. The ability of the wall to withstand the radial stresses placed on it is highly dependent on the material's strength. It is a reasonable assumption that many of these failures would not have happened if a higher-strength concrete was used.

Scope and Aim

The intent of this research is to show the effects of material strength, radius, and fiber reinforcement in preventing the delamination failure mode and to improve the equation derived by Jongkwon Choi [7]. This is accomplished by using small-scale modeling. Previous research models are quite large, roughly 1/6 scale. This research model is approximately 1/320 scale, a tabletop-sized model. The small scale allows for more replicates and perturbation of factors.

Chapter 2 - Literature Review and Theory

Turkey Point Unit 3 delaminated in June 1970, and the Nuclear Regulatory Commission report was published in December 1970. The finding was that the dome had delaminated during the tensioning sequence. The investigation showed that the dome had eight different pours spread out over a seven-month period. The significant time span between pours was due to the winter months and poor weather conditions. This delay led to the creation of several construction joints. The concrete was allowed to cure for 90-plus days before the tensioning sequence began. During the tensioning sequence, sheath filler was observed leaking from the dome, indicating that a delamination had occurred. The dome was investigated as follows: a series of core samples were removed across the surface of the dome prior to detensioning the strands. Once cores were taken, the dome was detensioned, and concrete layers were removed from the reinforcement. Investigators found that delamination had originated from the meridional joint and progressed outward toward the edge of the dome, terminating at a surface construction joint. The investigation showed that a lack of consolidation between the pours resulted in a loss of strength. Unbalanced loading occurred during the tensioning sequence and resulted in three times the bending stress in the meridional direction and twice the bending stress in the hoop direction compared to a fully tensioned structure. Prestress forces were higher than calculated, which resulted in these outsized loads. After the damaged concrete and post-tension steel were removed from the dome, new ducts were placed, and rock anchors were placed across the dome surface in order to act as radial reinforcement and protect against future delamination. The dome was placed and retensioned, and the reactor is still in use as of the writing of this paper [3].

The first report on the Crystal River Unit 3 failure mode was published in 1976 by the NRC. The report found an issue with the initial pour of the dome. It concluded that "radial

tension stresses combined with biaxial compression to initiate the laminar cracking in a concrete having lower than normal direct tensile capacity and limited crack arresting capability” [3]. The poor concrete quality alluded to in the above quote resulted from soft coarse aggregates. Under direct tension tests, the coarse aggregate splits. This failure mode in aggregate is unusual, as most of the time, failure occurs in the interfacial transition zone (ITZ). The radial stresses induced on the wall were designed to be supported by 5000 psi of concrete. The concrete tested in the field for section L of the reactor resulted in 4570 psi. A recalculated minimum of 4500 psi was deemed to be acceptable, a very tight margin. The rest of the dome had an average compressive strength of 6000 psi. Split tension tests were performed on cores drilled from the failed dome, resulting in an average value of 708 psi. A value approaching the minimum specified tensile strength design limit (f'_{sp}), but still was still within the desired range. However, direct tension tests yielded an average tensile strength of 420 psi, with some samples tested having strength as low as 230 psi. This result is interesting as the correlation between split tensile and compressive strength is within or exceeds design ratios ($.1f'_c$ and $.8\sqrt{f'_c}$) [8]. The direct tension tests resulted in values of lower standard design ratios. The report concluded that unaccounted-for radial tension and low-quality aggregates led to the delamination of the Crystal River Unit 3’s dome. The top layer of the dome had to be completely replaced with conventional hoop reinforcement.

In 1983, Moreadith and Pages published "Delaminated Prestressed Concrete Dome: Investigation and Repair," a second report on the Crystal River delamination. They again noted the substandard performance of the concrete in tension by comparing it to standard granite aggregate. The ratio between the split tensile and direct tensile tests should yield a value of 1.2-3; instead, it yielded a much higher value of 1.7 [8]. The delamination only affected the top 12

inches of concrete. The rest of the dome remained under tension. This condition allowed repairs to be conducted instead of total dome replacement. The repair was not prestressed; instead, it involved conventional hoop reinforcements and in situ concrete. The repair was successful as the reactor went into full operation for the next 33 years.

In the late 70s and early 80s, several curved post-tension bridges experienced concrete breakout, a similar failure mode to delamination. Dean Van Landuyt extensively covered this failure mode in his thesis, "The Effect Of Duct Arrangement On Breakout Of Internal Post-Tensioning Tendons In Horizontally Curved Concrete Box Girder Webs" [2]. This thesis gives background on radial tension and how duct placement affects radial stress in a structure. Fully grouted tendons provide better flexural capacity than greased tendons as the bond creates some level of strain compatibility between the steel and the concrete. However, it can be difficult to ensure that the grout fills the duct's interior. When grout does not fully encase the tendon, corrosion becomes a problem. Van Landuyt found that duct geometry plays a significant role in the capacity and stiffness of the post-tensioned concrete. Ducts located closer together have increased flexural strength and lower stiffness. When cracks form, the force from the closely spaced ducts results in breakout and delamination. The further the ducts are apart, the more distributed the load becomes. Larger duct spacing results in higher overall stiffness at the cost of lower flexural strength. The most force the concrete in a post-tensioned structure will withstand occurs during the jacking sequence. This force is placed directly on the stirrups. Van Landuyt found that the stirrups bear a good portion of the force. The high shear forces resulted in "Explosive failure" in his experiments. Shear failure can be avoided by spacing out the post-tensioning ducts, including hooks in the slab, and, wherever possible, avoiding straight laps.

Probably the most important statement that Van Lunduyt makes regarding this paper is, "Flexural bending of the relatively thin concrete cover is not a well-understood phenomenon" [2]

In 2003, Acharya and Menon published a paper in *Nuclear Engineering and Design* attempting to better understand the phenomenon of flexural cracking in thin-walled containers caused by radial tension. They discussed two methods for calculating radial tension: equilibrium of the slice and the Lamé' method. Equilibrium of the slice breaks a section of curved wall into multiple layers. The variable n designates the layers. The equation boiled down to its most basic form is:

$$p = \frac{P}{R} \quad (1)$$

Where p is equal to radial pressure (lb x ft/ θ) , P (lbs) is the tension force placed on the wire, and R (radian/ft) is the radius of curvature for the slice. The slice layer then has force $\frac{p}{n}$ distributed across it. This results in the reaction equation $\frac{Rp}{n}$. Radial pressure is exerted inward toward the center of the circle. This equation demonstrates that the further out the wire is from the vessel's inner wall, the less pressure will be placed on the extreme inner fiber, making delamination failure less likely. This equation overlooks some important factors, as it assumes that the tension on the wire produces a uniformly distributed load by neglecting friction and prestress loss. The reality is that the tensile stresses will be greatest at the jacking end and decrease as they approach the dead end. A modified Lamé' solution is presented as a more detailed alternative. For singly curved shells, there is very little difference in the results between the modified Lamé's solution and the equilibrium of the slice methods; however, for doubly curved shells, the equilibrium of the slice is no longer useful. For the second part of the study, Acharya and Menon studied the tensile stresses developed near the post-tensioning duct. They found that the wires transferred their tensile stresses to the duct, which created localized stresses

in the concrete. This result makes sense as the delamination failure mode usually occurs at the intersection of the concrete and the duct material. They found that the tensile stress profile "damps out within a short distance (equal to one duct diameter), regardless of the number of strands in the duct" [9] These findings line up with Van Landuyt's conclusions about the impact duct spacing on flexural strength and stiffness in regards to concrete delamination and concrete breakout strength.

After the 2009 delamination of Crystal River Unit 3 and the subsequent attempted repair, and then the final closure of the reactor due to damage, more research began to occur on delamination in nuclear pressure vessels. In 2013, Wang and Munshi brought up the issue of a lack of standardization in designing post-tensioned reinforcement [10]. They proposed that the partially post-tensioned condition is more susceptible to failure than the fully stressed condition. The ACI 359 boiler and pressure vessel code was not specific when discussing delamination failure in 2007, and the current 2023 code is still not helpful when designing radial reinforcement. It states, "The detailed analysis shall include consideration for curvature, location, size, and placement of tendon ducts, tendon stressing sequence, discontinuities, stress concentration, and Poisson's effects"[10]. The code offers no other guidance for the design of radial reinforcement. Wang and Munshi observed that previous studies using Finite Element Analysis do not accurately capture the effects radial stresses on a structure. This is due to the "coarse mesh" used to model the structure. Using an advanced FEA model, they created a "refined mesh" model that nearly quadrupled the number of surface elements taken and doubled the through-thickness measurements. They compared the coarse mesh, refined mesh, and mechanics-based models using the advanced FEA model. They found that all three models yielded similar results. The coarse mesh model lacked sufficient detail compared to the other two

models. They found that when tensioning or detensioning a full layer, the moment remains relatively small at one half of radial pressure induced by the post tensioned tendons ($0.5 P_p$) [10]. However, when a layer of reinforcement is partially tensioned or detensioned, there is an oval-shaped deformation and high moment that corresponds with this deformation. They modeled that this moment could be two and a half times higher ($1.25 P_p$) than the fully tensioned condition. The conclusion was that radial tension is unavoidable and local stresses about the ducts will cause cracking. These cracks can be arrested using radial reinforcement around the ducts.

Between 2017 and 2020, Choi, Woods, Hrynyk, and Bayrak released several articles and academic papers on wall delamination in Crystal River Unit 3. The researchers removed the meridional reinforcement and focused exclusively on the radial tension generated by post-tensioning about the hoop direction. The researchers propose that radial tension was not thoroughly studied because "radial stresses are typically deemed negligible in structural design and analyses are done based on thin-walled shell assumptions" [7, 11] They recreated three downscaled 90-degree slices of a nuclear containment vessel and designed them so that delamination failure controlled. Using the extensive research summarized earlier in this paper, the researchers ensured that the ducts were placed close to the wall's outer edge to prevent breakout failure and ensure the majority of the section was placed in compression. Concrete was tested using the direct tension test, ensuring that the material did not undergo the same failure as the Crystal River Unit 3 dome delamination. Ducts were spaced two duct diameters apart to avoid undesirable local stress concentrations, as previously tested by Van Landuyt. Dr. Choi predicted delamination failure would occur close to the specimen's jacking end. This prediction lines up with Acharya and Menon's equations, when friction loss is considered, the greatest distributed load is greatest closest to the reaction. The three specimens were loaded to

delamination failure. Failure occurred as predicted, close to the jacking end. The cracks initiated at the top first: “The density of the concrete comprising the curved wall section is believed to be another possible cause of the delamination cracking being more severe at the top of the wall” [7]. The researchers showed that the failure load could be related to concrete compressive strength, delamination cracking occurred at .13f_c for the smaller specimen and .23f_c for the larger specimen. The ACI Code 359-23 sets precompression limits at .35 f_c for service load conditions. These results prove the code to be unconservative. The original Crystal River 3 dome delamination report states that standard tensile tests are a poor predictor of concrete tensile strength when subjected to radial tension. Many of the research articles in this paper note that the current equations neglect friction loss. This phenomenon needs further study as it greatly affects the moment force placed on the wall.

From this literature review, it can be determined that there are several reasons for the delamination of nuclear pressure vessels. The most consistent appears to be concrete tensile strength. All of the failures in this paper had concrete with questionable aggregate strength. The concrete is put into tension in a way that is more accurately modeled by the direct tension test rather than standard ASTM split tension tests. The direct tension force is caused by radial tension and is the greatest during partial post-tensioning. The effects of wire arrangement in the ducts are negligible, as there is compatibility between the wire and the ducts. Tension force coming from the ducts is rapidly dissipated in the form of localized stresses around the duct. The ducts need to be spaced out to increase stiffness and avoid breakout failure. The further the ducts are away from the inner edge, the more protection there is from breakout. Friction losses result in a high moment force close to the jacking end. As delamination begins, cracks form close to the jacking end. As forces increase, cracks continue to form moving from top of the structure to the bottom.

This occurs because concrete consolidation is more difficult to accomplish at the top of the structure. Radial reinforcement is thought to have the ability to arrest cracks. The code is likely not conservative when addressing any of these factors and needs to be adjusted.

Chapter 3 - Mechanics

Radial tension (σ_{rt}) is generated as a local stress emanating from the post-tension ducts. Radial tension can be manipulated by changing wall thickness, radius of curvature, and duct spacing. Equations two and three are the best mechanics-based equations currently available for predicting radial tensile stresses. [6, 7]

$$f_f = f_{po}(1 - e^{-(Kl+\mu)}) \quad (2)$$

$$\sigma_{rt} = \frac{t_o}{t_{total}} \cdot \frac{F}{R} \cdot \frac{1}{2\Sigma D_{duct}} \quad (3)$$

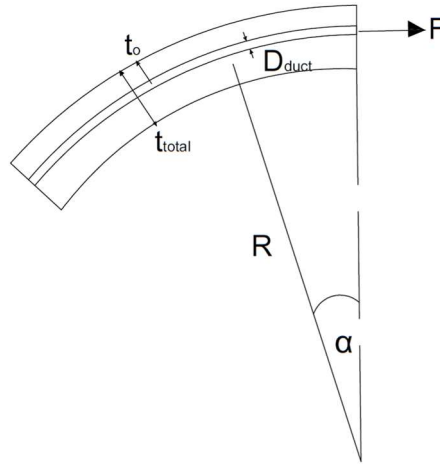


Figure 1: Equation variables labeled

Portions of equations 1 and 2 are illustrated in figure 1. Post tension (F) is directly affected by friction loss (f_f), as defined by ACI 343-95R, which is induced by the interior surface of the duct and the angle of the curve. Friction causes radial stress to be generated perpendicular to the ducts. Force is greatest at the live end where delamination most often occurs. (f_{po}) Is the stress applied at the live/jacking end. (K) The wobble coefficient is negligible for all specimens discussed in this paper due to the model's small size. (l) is the arc length of the wall section being considered. (μ) is the friction coefficient. It is the friction loss rate between the

live and dead end of a post-tensioned structure. (a) is the angular change of the prestressing steel and allows the calculation of loads at specific points along the wall. Equation 2 was developed by Dr. Choi of the University of Texas at Austin. (t_o) is the outer thickness of the wall taken from the extreme fiber to the center of the duct. (t_{total}) is the total thickness of the section. (F) is the force including friction loss at a specified angle of the section. (R) is the radius of the section. ($2\Sigma D_{duct}$) is the summation of two multiplied by the number of post-tension ducts multiplied by the diameter of the post-tension ducts. This portion was developed by Dean Van Luydt. The above equation applies only to the hoop direction of the structure. However, based on experimental observations and previous research, there are other forces at work that lead to delamination failure, primarily in-plane shear.

$$V = V_p - V_r \quad (4)$$

$$V_p = P_j * \sin \theta \quad (5)$$

$$V_r = \sum_{i=1}^n \sigma_{rti} * R * b * \Delta\theta * b * \cos(\theta - \frac{2i-1}{2}\Delta\theta i) \quad (6)$$

In-plane shear (V) is calculated by subtracting the shear generated by radial tensile stress (V_r) from the shear (V_p) created by the live end force (P_j). (V_r) is a numerical integration that calculates shear generated by radial tension at any angle along the curve. free body diagram below illustrates the directional components of the above equation. Figure 2 illustrates the forces acting on the wall section. This equation assumes that out of plane shear stresses are in equilibrium with in-plane shear stress. The standard equation for shear stress ($\tau = \frac{VQ}{Ib}$) from

mechanics of materials was used to calculate the in-plane shear stress. The wall section was placed on its “side” for calculation purposes.

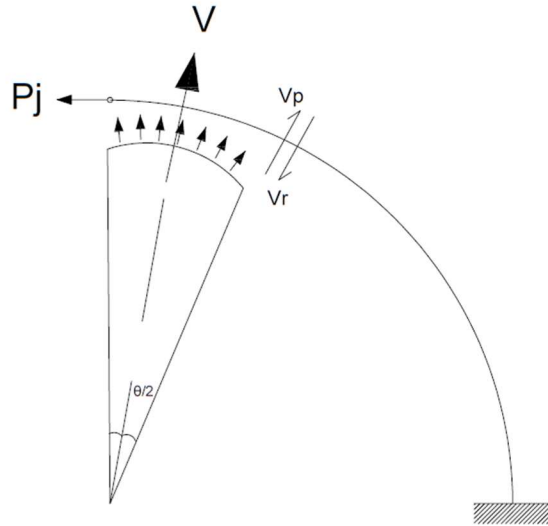


Figure 2: In-Plane Shear Free Body Diagram

Full size containment vessels have other forces that need to be considered. Additional post-tensioned strands supply large meridional forces, and concrete's coarse aggregates contribute to a containment vessel's ability to resist shear forces. Concrete's direct tensile capacity is a good comparison to radial tensile forces. In addition, steel fibers and radial reinforcement have the ability to arrest cracks around ducts and control localized stresses, and internal duct friction is a large contributor to in-plane shear. The effects of Poisson's ratio have not been included in this equation. Equation 2 needs to be modified to include the listed effects in order to be used for design purposes. The greatest of these additional effects is in-plane shear.

Chapter 4 - Model Design and Construction

Model Design

The experimental model, pictured in Figure 2, is a 1/320 scale hoop section of a nuclear containment vessel, a tabletop-size model. The wall is six inches high, one and a half inches thick, and has three .375-inch eccentrically located post-tensioning ducts spaced at 1.5 inches. The cross-sectional dimensions were driven by a self-imposed minimum three duct requirement. A thickness-to-diameter ratio of no less than 1/5 was mandated in order to provide a sufficient amount of mortar cover for the wall section. Shear reinforcement was provided by a .25-inch steel wire mesh inset .2 inches from either wall. The wall section is located between two anchor blocks. It has a 90-degree curve simulating a section of the wall between the buttresses of a reactor. The model has fixed free boundary conditions to avoid creating a statically indeterminate problem. Table 1, below, lists model boundary conditions.

Table 1: Model Boundary Conditions

Axis	Boundary Condition	State	Model Component
X	Rotation	Fixed	Model Platform
X	Translation	Free	Enabled by Teflon Sheets and free dead end
Y	Rotation	Free	Enabled by Teflon Sheets and free dead end
Y	Translation	Fixed	Model Platform
Z	Rotation	Fixed	Model Platform
Z	Translation	Free	Enabled by Teflon Sheets and free dead end

Low relaxation strand with a 5/16 in diameter and a rupture strength of 270 kip was selected due to the tensile strength of the wire and elastic properties, ideal for post-tensioning purposes. The wire was placed in PTFE tubing to mitigate friction loss. There was minimal space

between the duct and the wire due to the model's small scale. However, the wire was able to move freely within the duct. The wall section was cast on from ultra-high-performance concrete with bearing plates cast on either side. One bearing plate receives a load from the hydraulic rams, and the other forms a cold joint with the wall section. The cold joint had steel bolts welded between the ducts as reinforcement. Figure 1 illustrates an overhead view and cross sectional view of the model.

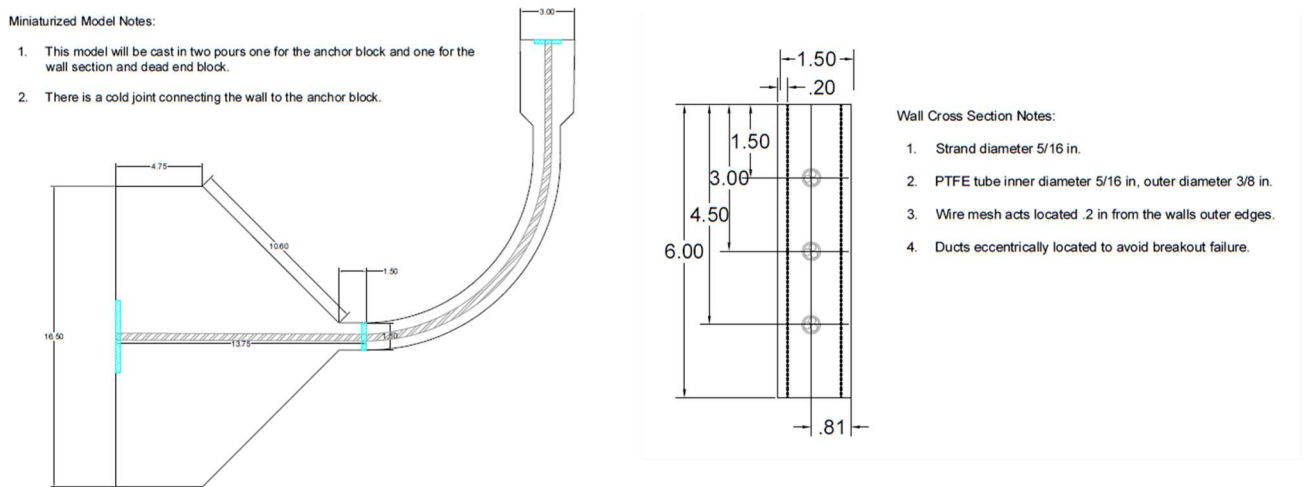


Figure 3: Overhead view and layout view of model

Model Construction

Construction of the experiments began with the live end anchor block. The form work for the anchor was constructed of 3/4 in plywood and was more conventional in nature. The curved wall form work was initially constructed out of thin HDPE sheets bent into 90 degree inner and outer radii around wooden dowl rods placed at angles around the wall. 3D printed plastic chairs were affixed to the wall using superglue in order to fix the shear reinforcement at the correct depth. When it came time to pour experiment 1, lateral pressure from the concrete caused the formwork to bulge out of place. The wall had a non-uniform cross section as a result. The results from the break were unsurprisingly unreliable. The experimental results were discarded as a result. The second experiment was much improved. The wall form work was designed in

SolidWorks and 3D printed. The printer could only print on a 10 x 10 in surface. The formwork was digitally broken up and glued together using epoxy. Wooden chairs were used to space the shear reinforcement in place of the 3D printed chairs. The wooden chairs were easily constructed using a band saw. The thicker 3D printed formwork allowed for small holes to be drilled on either side of the wooden chairs. Nylon filament and cyanoacrylate were used to secure the chairs and shear reinforcement in place. The wall was screwed onto a wooden platform with sheets of PTFE placed on top. The outer perimeter of the formwork was then sealed. The next pour resulted in a uniform cross section adequate for gathering experimental data.

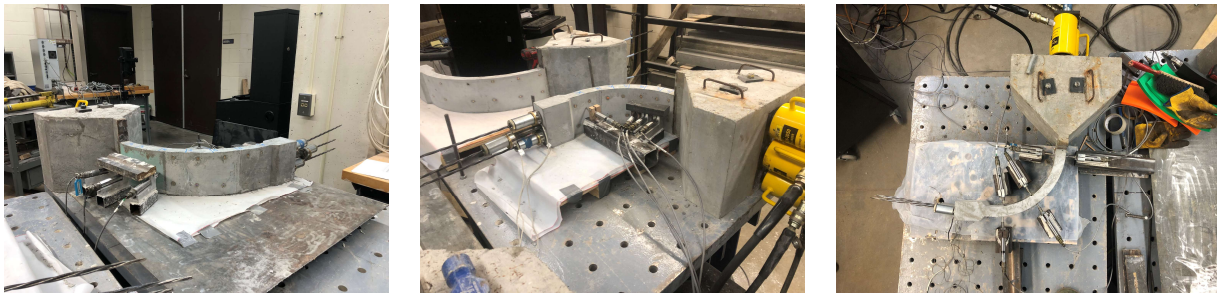


Figure 4: Model Layout for experiments 2, 5, and 6

Limitations

Wire placement presents a limitation in small scale samples. The wall section was designed with a small eccentricity of .125 inches towards the inner face. The intent behind this design feature to avoid breakout failure as the wall sections rotate outward. In practice, the tight radius of the curve and thickness of the wire resulted in the eccentricity remaining true to design for roughly the first 1/3 of the curve then gradually transitioning to the outside of the curve. The wire placement crossed over the center of the cross section to the outside causing a potential increase in shear stress close to the 75 degree mark of the structure. This is well outside the tolerances specified by design code. ACI 359 states, “Maximum allowable angular misalignment of bars with respect to the bearing plate shall be ... for nonspherical bearing plate applications:

± 1 degree at live-end and fixed-end anchor nuts.” To improve this construction error different more flexible strand should be used.

Chapter 5 - Mix Design and Materials Characterization

Mix Design

Due to the model's small size, mortar was used in place of concrete. Three mix designs were used: a low strength mix with a water-to-cement ratio (W/C) of .33, a high strength mix with a W/C of .29, and the same high strength mix with steel fibers included at 2% by volume of cementitious material. The use of mortar eliminated consolidation and placement issues that would have arisen from coarse aggregate use. The mix design was heavily based on previous research conducted at KSU [12]. The original mix had a W/C of .27 and a compressive strength above 12,000 psi. The mix did not consolidate well enough around the radial reinforcing mesh. The mix water-cement ratio was therefore increased to .29 with a compressive strength of 10,000 psi to improve consolidation in the model. The W/C of .29 was still not sufficient to obtain the desired flow without the addition of large amounts of superplasticizer. Master Glenium 7500 was used as it was the most potent plasticizer in the lab. A dosage of 8% per cementitious weight was found to reach the desired flow for sufficient consolidation. However, this was not achieved without some trial and error. One sample had to be completely redone due to large voids forming around the reinforcing steel located at the cold joint. This was due to not enough superplasticizer. The dosage was increased from 6% to 8%. It should be noted that 8% superplasticizer is a large dose, considering there are no large aggregates with high absorption. The manufacturer states that the maximum dosage is fifteen percent. The low strength mix had a lower dosage at four

percent by weight of cement and yet had a comparable compressive strength to the high strength mixes. This is most likely due to superplasticizer having a retarding effect on concrete strength.

Materials Characterization

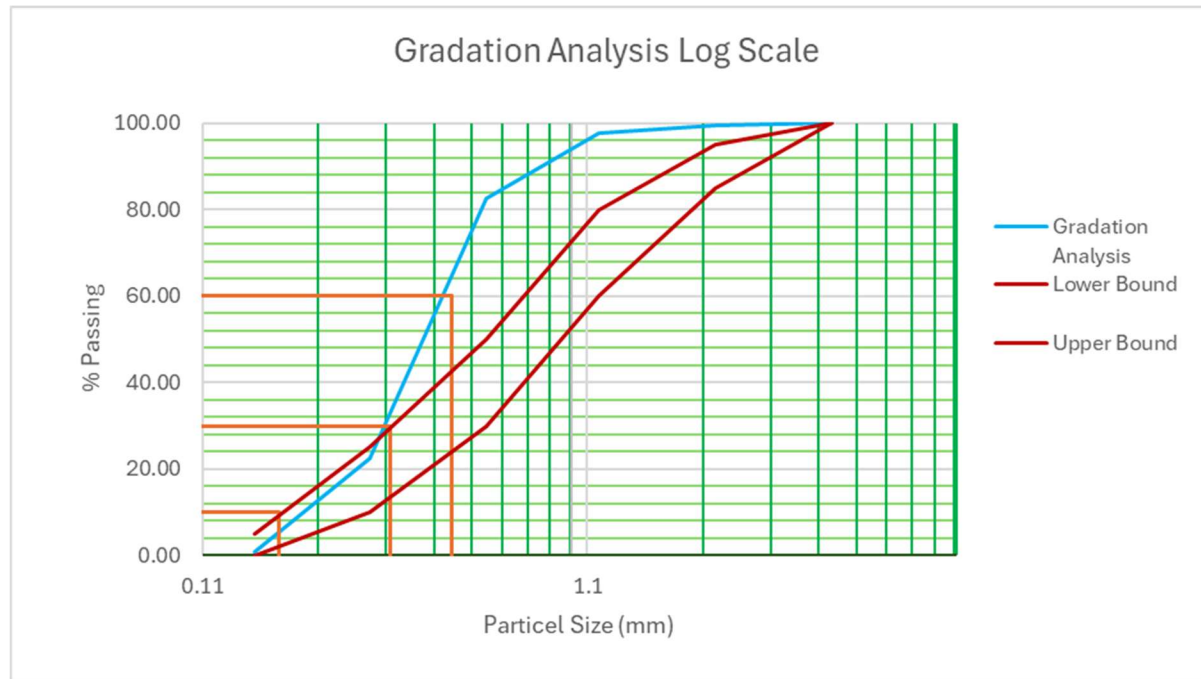


Figure 5: Menards Mason Sand Gradation Analysis compared to ASTM C144 limits

The fine aggregates came from Menards Mastercraft Mason Sand, which is advertised to meet or exceed ASTM C144. A sieve analysis (ASTM C136) and absorption test (AASHTO T84) were conducted on the masonry sand and confirmed that the sand exceeded the upper limit of ASTM C144 and had an absorption of .7 percent and a specific gravity of 2.6. This aggregate performance closely replicates the previous mix design by Mhamankar [12]. Experiments 3 and 6 include the use of steel fibers. Fibers were obtained from HiPer Fiber Solutions and were 10 mm in length and .2 mm in diameter. The fiber length was the shortest length available at KSU and was selected due to the size constraints of the model.

The live end anchor blocks were intended to meet UHPC standards as defined by the Federal Highway Administration Publication No. 06-103 [13]. The standard for low strength uncured UHPC is 8,000 to 13,000 psi compressive strength. The mix design was taken from previous research at KSU [12], which resulted in compressive strengths ranging from 11,000 psi to 14,000 psi. The results had a wide range due to the small batch size and the use of large amounts of accelerators to generate heat. This resulted in the mix setting up in 30 minutes or less; this rapid setup led to consolidation issues and loss of strength for some compressive samples and one anchor block.

Mix procedure for wall sections was finalized as follows:

1. Mix aggregates and steel fibers for 2 min in a separate mixing bowl
2. Mix cementitious materials, water, and superplasticizer for 2 min
3. Add aggregates and steel fibers mix for 4 to 6 minutes until the desired consistency is reached.
4. Mixing the aggregates and steel fiber separately resulted in a consistent distribution of fibers with minimal clumping.

Table 2: Material Properties at time of testing

KSU Material Testing Data			
Experiment	Compressive Strength (f_c)	Split Tensile Strength (f_{st})	Direct Tensile Strength (f_t)
#	psi	psi	psi
2	10628	787	393
3	11235	972	453
4	9172	789	434
5	9622	612	409
6	11188	1238	452
7	9886	550	424

The mortar was tested using three different methods: ASTM C39 cylinder compressive testing, ASTM C496 split tensile testing, and a direct tensile test developed in-house at KSU

[12]. The direct tensile test is critical to our experimentation as radial tensile stress is closely related to the tensile capacity of the concrete subjected to radial stress [8]. The direct tension test is conducted with samples cast in an hourglass shape, specialized grips, and a Shimadzu Autograph Tensile Testing Machine with a 50kN capacity. The hourglass shape allows the sample to self-center in the grips, eliminating axial eccentricity. The sample is pulled apart at a

Table 3: Direct Tension Characterization

KSU Direct Tension Comparison					
Experiment	f_t/f_c	f_{st}/f_c	f_{st}/f_t	$3.75 \sqrt{f_c}$	$f_t / 3.75 \sqrt{f_c}$
2	0.037	0.074	2.000	387	1.02
3	0.040	0.087	2.146	397	1.14
4	0.047	0.086	1.818	359	1.21
5	0.043	0.064	1.496	368	1.11
6	0.040	0.111	2.742	397	1.14
7	0.043	0.056	1.298	373	1.14

rate of .002 inches a minute. Table 3 compares direct tension to compressive strength and split tensile strength to better understand the relationship between these properties. The compressive strength ranged from 3% to 5% of f_c . While split tension was generally below the accepted value $.1f_c$. This lower tensile performance is consistent when comparing split tension to direct tension. Values for structural concrete should range from 1.2 to 1.3 times the split tensile values. The mortar mix had a ratio of 1.7 to 2.7. It should be noted that experiment 6 had several samples caught onto the grips of the direct tension apparatus, resulting in lower than expected results. This indicates that the split tensile test is not necessarily a good indicator of direct tensile strength. $3.75\sqrt{f_c}$ was found to be an accurate approximation to compare f_c to f_t for the mortar mix, it also proved to be slightly conservative when compared to other labs.

Chapter 6 - Experimentation Plan, Instrumentation, and Procedure

The small scale allows for more replicates and perturbation of factors. This project aimed to understand the effects of three different variables: radius, concrete strength, and fiber reinforcement. Table 4 details the experimental matrix used for this research.

Wall Variables		Abbreviation	#
14 in Radius	High Strength Mix	HSM	Exp. 4
14 in Radius	Low Strength Mix	LSM	Exp. 7
14in Radius	High Strength Mix +Fibers	HSM/F	Exp. 6
10in Radius	High Strength Mix	HSM	Exp. 1 & Exp. 2
10in Radius	Low Strength Mix	LSM	Exp. 5
10in Radius	High Strength Mix +Fibers	HSM/F	Exp. 3

Table 4: Experimentation Plan

Wall radius was selected as a variable because it is inversely related to radial stress. Per Equation 3, as wall radius increases, so should radial stress. The short and long radii were tested with each mortar variable. High strength and low strength mortar were selected as experimental variables because a large contributing factor to the Crystal River delamination was concrete strength. The final variable includes the steel fibers, two percent by volume of cementitious material, in the high-strength concrete mix. Fibers were not used with a low strength mix because the fibers effectiveness is controlled by mechanical bond with the concrete. Using a lower strength mix would only result in a lower performance concrete.

Instrumentation

Three 20 ton hydraulic rams apply load to the post-tensioning wires by pressing on the bearing plate of the live end anchor block and against the prestressed chucks. The rams were configured in a parallel system with identical diameter lines, ensuring equal force was applied by each ram to each tendon. A pressure transducer recorded the input force placed on the live end

by the hydraulic rams. For experiments 1 and 2, three 20 kip donut load cells attached only to the dead end were used. It was observed that results from lower loads recorded by the 20k load cells were inconsistent. These results proved to be unusable; consequently, load cells were required to be upgraded. Six new 10K load cells were used for experiments 3 through 7. These load cells were made by Futek and had a guaranteed accuracy to within .5%. The additional load cells were placed on the live end to measure force inputs by the hydraulic rams. The load cells on the live end confirmed the accuracy of the pressure transducer. The instrumentation layout is pictured in figure 8 below.



Figure 6: Instrumentation Layout

Seven linear variable differential Transformers (LVDTs) were used to measure through-thickness expansion in the section. Two types of LVDT were used: a .125 inch variant and a .250 inch variant. For experiments 1 and 2, LVDTs were placed at 15°, 45°, and 90°. Data analysis revealed that this placement was detecting a large amount of rigid body motion in the section. The further out the LVDT was placed, the more rigid body motion was detected. It was determined that it was nearly impossible to differentiate between rigid body motion and through-thickness expansion. After consulting with representatives from Seoul National University and reviewing the literature, it was determined that more sensitivity was needed closer to the live

end. There was a general consensus between labs that radial stress peaks at roughly 15° . For experiments 3 through 7, LVDTs were placed at 6° , 15° , and 30° , giving more sensitivity on either side of 15° . Data analysis showed much less rigid body motion in the section. Although it's still generally increasing as the angle is increased. Rigid body motion is allowed in the model to encourage delamination failure. However, distinguishing rigid body motion from through-thickness expansion remains a challenge.

Signal from the sensor inputs travelled to a switch box and then to a large multi-channel multimeter (Keithley 7500). Doughnut load cells run on a millivolt scale, and LVDTs run on a 10-volt scale. All information is fed to a central display that is easily visible from the testing area. All Donut load cells were calibrated using the Keithley cart and a Shimadzu tensile testing machine. The pressure transducer was calibrated using a 400,000 lb actuator called “big purple”. The LVDTs were calibrated using a micrometer and an in-house fabricated jig

Experimental Procedure

Prior to testing, wall section angles were marked and labeled with a paint pen. Donut load cells were placed on their respective wires, and LVDTs were fixed to identical metal rectangular sections, meaning the LVDTs all took readings at the same height (3 in). They were aligned across from each other using the angle markings. A preload of no more than 2100 lbs was placed on the live end anchor block. During preloading, sensor functionality was checked. A minimum of two rounds of preloading allowed slack to be removed from the wires. At this point data recording begins and the sensors are tared. The model was then loaded to failure.

Chapter 7 - Results and Discussion

All experiments completed testing on May 2, 2025. Experiment one was not included in the results due to the irregular cross section. Experiments 2, 3, and 5 all had short radii, and experiments 4, 6, and 7 had long radii. Table 5 gives a summary of the experimental results. It should be noted that all radial stresses and in-plane shears were taken at 15° .

Short Radius Charaterization				Large Radius Charaterization		
Exp #/ Mix	5/LSC	2/HSC	3/HSC+Fibers	7/LSC*	4/HSC	6/HSC+Fibers
f_c	9622	10628	11235	9886.00	9172.00	11188.00
f_{st}	612	787	972	550.24	789.00	1238.03
f_t	409	393	453	424.00	434.00	451.57
f_t/f_c	0.043	0.037	0.040	0.043	0.047	0.040
f_{st}/f_t	1.496	2.000	2.146	1.30	1.82	2.74
μ	0.26	-	0.28	0.26	0.25	0.27
σ_{rt}/f_t	0.69	0.64	0.61	0.38	0.63	0.61
t/t_u	0.32	0.38	0.52	0.39	0.47	0.31
σ_n/f_c	0.15	0.12	0.12	0.11	0.21	0.17
*Failed in shear						

Table 5 Experimental Results Summary

Material Results:

When comparing the short radii, it can be seen that the basic material properties came out as planned with high strength concrete plus steel fibers having the highest compressive, split tensile, and direct tensile strengths. Low strength mortar having the lowest compressive, split tensile, and direct tensile strength. When comparing direct tensile strength to compressive strength, results show that direct tensile strength is roughly 4% of the compressive strength of the mortar. Seoul National University and the University of Texas at Austin used concrete instead of mortar. They recorded that direct tension was roughly 7% to 8% of the material's compressive strength. The higher tensile capacity of the two aforementioned labs is due to the aggregate's contribution to tensile strength. This was well documented by Mhamankar. When comparing split tensile capacity to direct tension, the range for normal strength concrete, based on previous

research, is 1.2 to 1.3 [8]. Once again, because the research uses mortar instead of concrete, there is no additional aggregate contribution to tensile capacity. This explains why the split tensile to direct tensile ratio was between 1.4 and 2.7. One interesting thing to note is the additional capacity that steel fibers give to the mix. The fibers increase direct tensile strength and greatly increase compressive strength. Demonstrating their well-documented ability to arrest cracking.

Experiments 4, 6, and 7 had large radii. Initially it appears that the low strength mortar mix has a higher compressive strength than the high strength mortar mix, this can be attributed to errors in sulfur capping. This error is confirmed when comparing tensile strengths as the high strength mixes split tensile strength is 239 psi higher than the low strength mix. Trends in material testing results are similar enough to the small radius samples that no further explanation is needed. The highest disparity between split tensile capacity compared to direct tensile capacity came from experiment 6 which used high strength mortar and fibers. The ratio was calculated at 2.74, which demonstrates the outsized impact that steel fibers add to compressive strength.

Friction Losses

Friction losses were calculated by graphing (shown in the figures 7 and 8) The live end load versus the dead end load and measuring the slope of each line. The coefficient of friction was found to be in the range of .25 to .28 for all experiments. It should be noted that experiment

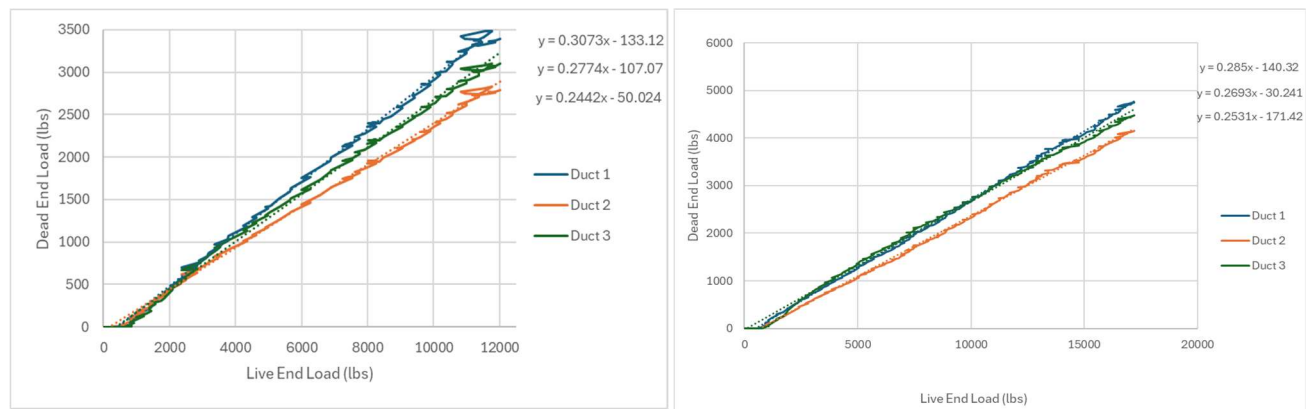


Figure 7: Small Radii Friction Loss Experiments 2, 3, and 5

2 used different load cells than experiments 3 through 7 and the results were not usable. Friction coefficient graphs shown in the figure below are consistent with experiments with shorter radii.

This indicates that the duct material has more of an impact than the tightness of the curve.

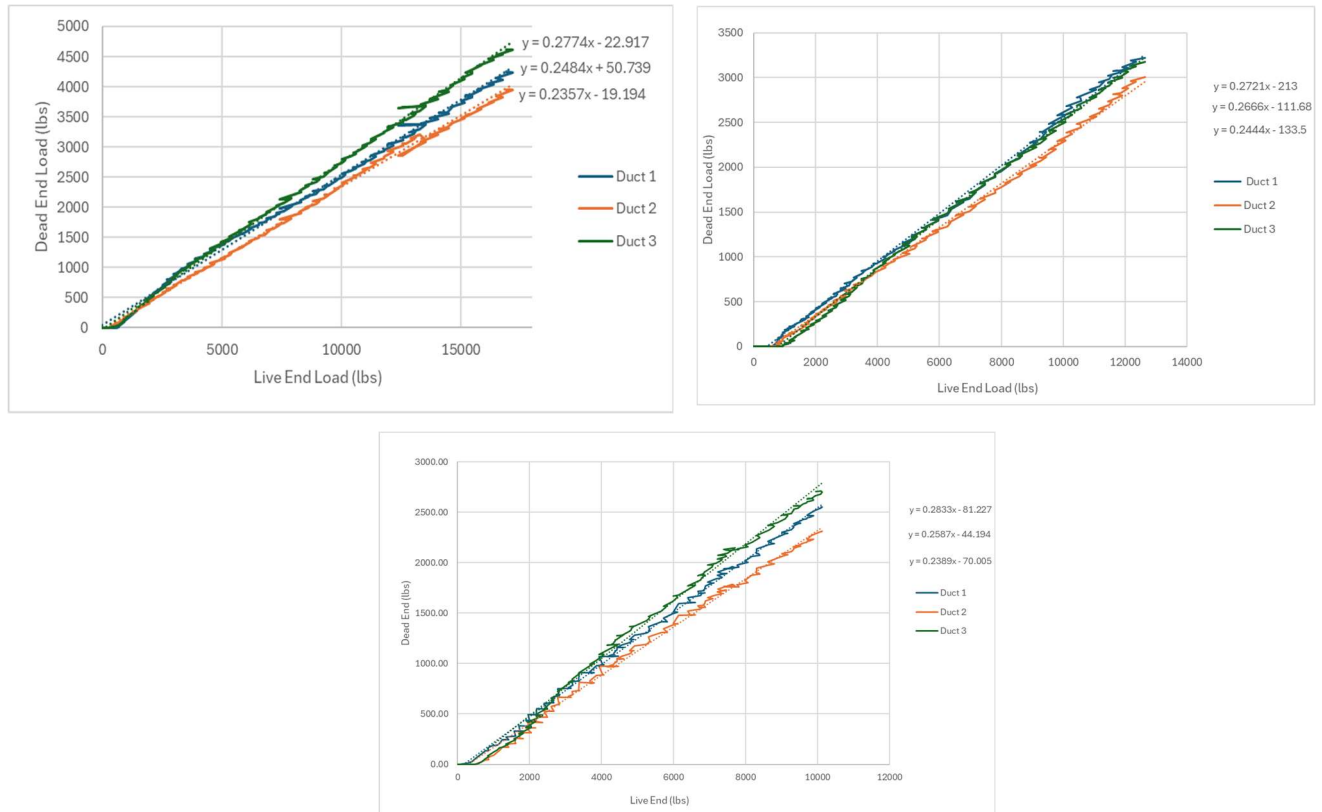


Figure 8: Large Radii Friction Loss Experiments 4, 6, and 7

Through Thickness Expansion and Failure

Radial tensile stress was normalized with direct tensile stress to better compare results between mortar mixes and between other labs. KSU's results ranged from 61% to 69% of the direct tensile capacity of the mix. These results confirm that there is another stress involved in the delamination failure mode, as at least 31% of the section's capacity is unaccounted for. Figures 9 and 10 below shows through-thickness expansion for small radii and large radii, measured by the LVDTs, versus normalized radial tensile stress for all experiments. The figure shows that as the wall angle increases, so does the supposed through-thickness expansion in the section. This additional error was not in fact expansion at all but related to rigid body motion.

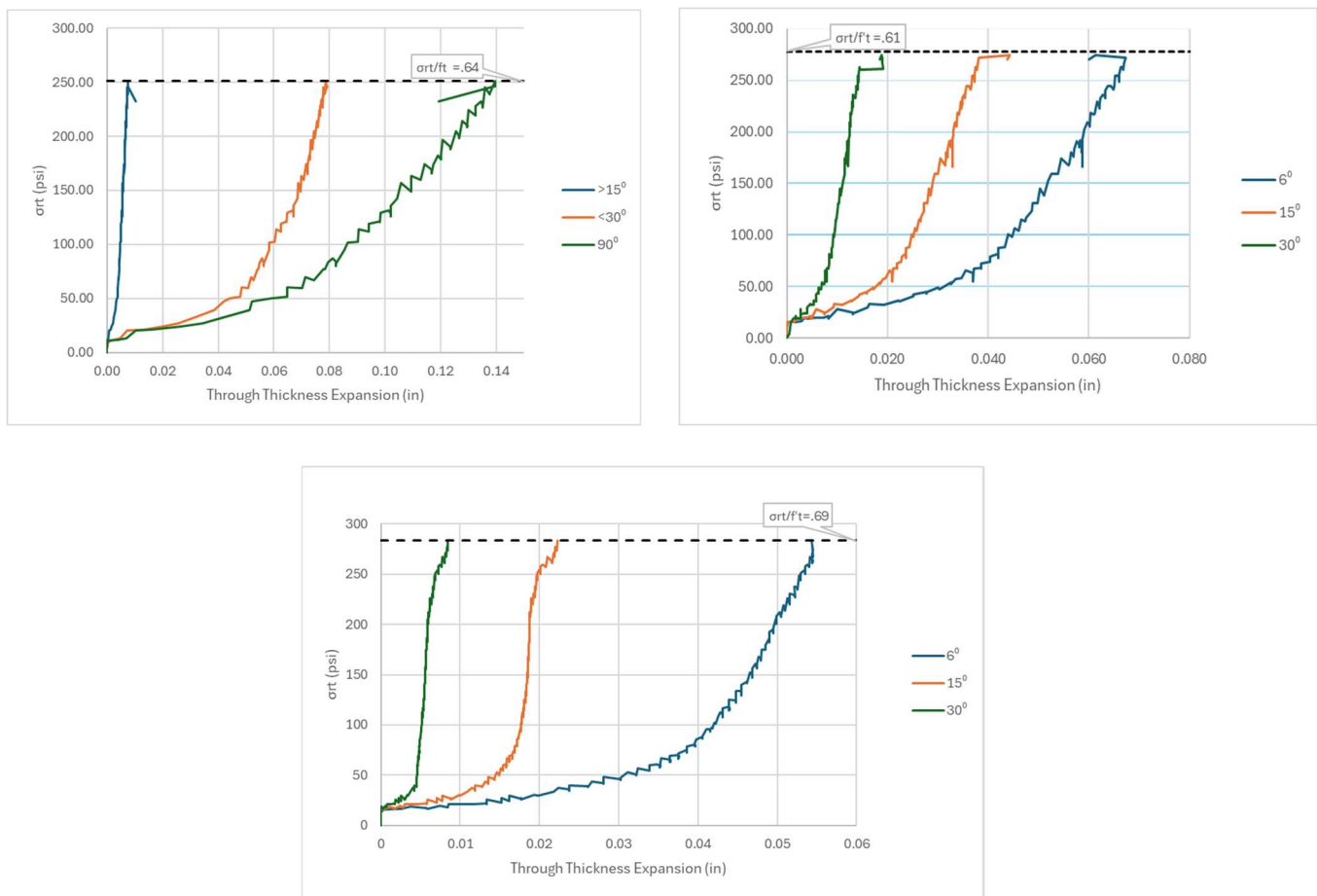


Figure 9: Small Radii Radial Tensile Stress vs Expansion Experiments 2, 3, 5

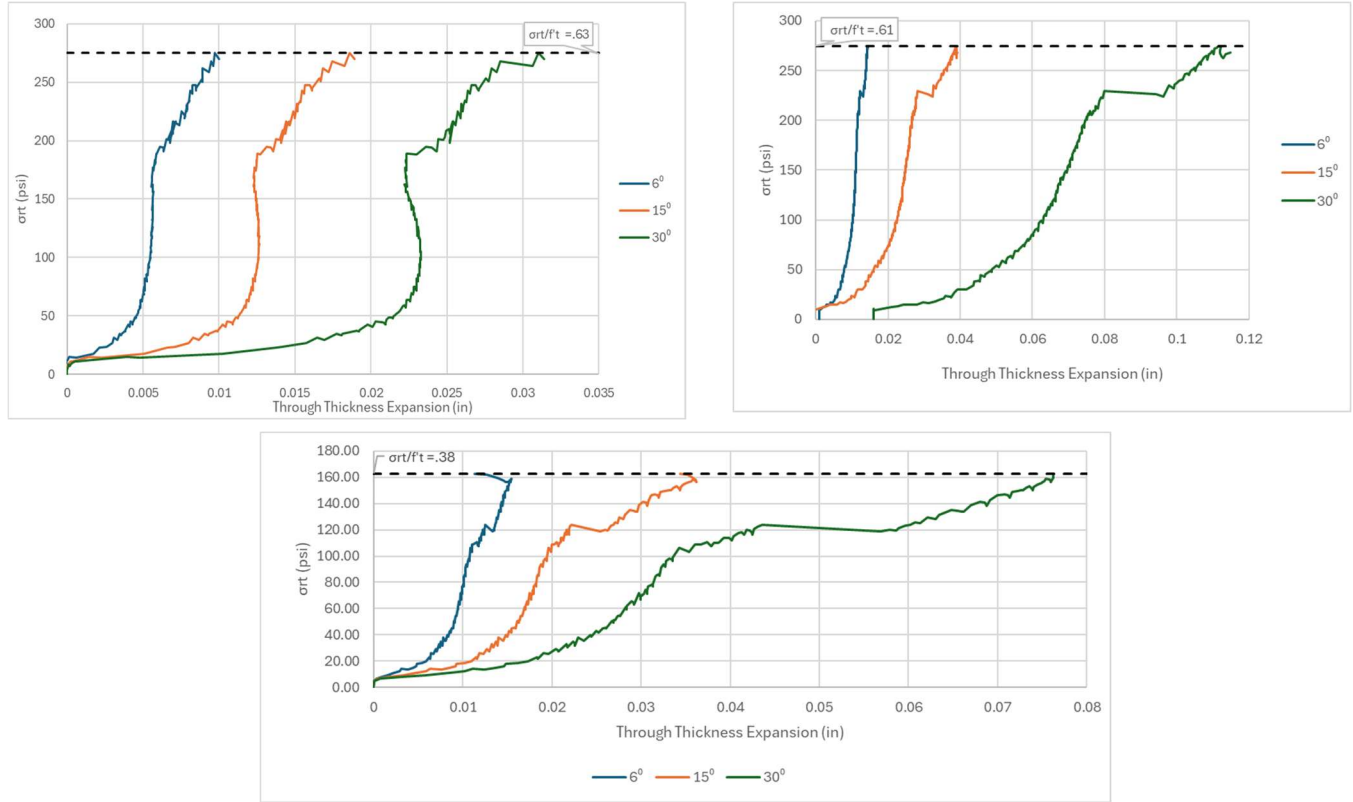


Figure 10: Large Radii Radial Tensile Stress vs Expansion Experiments 4, 6, 7

Normalized radial tensile tests for the experiments with large radii yielded similar results to the experiments with shorter radii. Experiments 4 and 6 gave values of .63 and .61, respectively. Experiment 7's normalized radial tensile stress, when calculated at 15° , came out to .38, a noticeably lower value. This is due to the fact that experiment 7 failed in shear at roughly 75° instead of a delamination failure between 6° and 45° . The shear failure can be attributed to the aforementioned wire geometry. The wire crosses the middle of the through thickness at roughly 75° , coincidentally the same place where shear is maximized. Delamination did occur, but a review of the video footage revealed that Experiment 7 failed in shear, and then delamination followed. Pictures of all sample failures can be found in Appendix A.

Discussion

As the experimental results showed, radial tensile stress is not the sole contributor to delamination failure; 30% or greater of the direct tensile capacity of the mortar is unaccounted for. The main contributor to this missing 30% is in-plane shear. There is a large in-plane shear developed by the inner portion of the containment being in compression and the outer portion being in tension. Chapter 4 mechanics discusses the equations and theory used to determine in-plane shear. Shear stress was determined using $(\frac{VQ}{IB})$. Once this shear stress was calculated, it needed to be normalized in a similar way to radial tension being normalized. The shear force needed to be normalized with the experimental values just as radial stress was normalized using direct tension (ft). Since no other data was available, shear stress was normalized by the maximum allowed by ACI 318.

$$\tau_u = 5\sqrt{f'c} \quad (7)$$

Using this equation resulted in a normalized shear stress of 31% to 52% at 15°. The additional shear stress added to the radial stress leads to 99% to 114 % of the direct tensile capacity of the section being reached, meaning that the estimation is still slightly unconservative and a knockdown factor is needed. This finding indicates a mixed-mode fracture. It also indicates there are more forces at work than just radial tensile stress and in-plane shear.

Another finding was that these wall sections fall well below the $.3f'c$ precompression allowed by code. Experiments failed at $.12f'c$ and $.21f'c$ of the allowable precompression. If observations about cracking loads are accurate the value is even lower at $.08f'c$ to $.14f'c$. Code states that the allowable compression stress for service loads shall not exceed $.3f'c$. This reveals

that $.3f'_c$ according to this research, it is not conservative. However, there is a size effect that presents itself as demonstrated in figure 11. Further research may need to be done to determine if $0.1f'_c$ is a more appropriate precompression limit estimate.

σ_n/f'_c			
Exp #/ Mix	KSU	SNU	UT Austin
2	0.15	0.54	0.72
3	0.12	0.49	0.74
4	0.12	0.60	0.70
5	0.11	0.50	
6	0.21	0.60	
7	0.17		

Figure 11: Normal Stress at Failure vs Compressive Strength

This research validated Dr. Choi's equation regarding radius. The larger radii took significantly more input force to break the wall section. Steel fibers contributed heavily to the compressive and tensile strengths of the mix. They did not, however, show the ability to increase the maximum radial stress that a section could undergo. They did, however, greatly add to the toughness of the section. Sections with steel fibers were able to sustain failure loads significantly longer than fiberless sections. When Section 3 and 6 reached failure loads the failure was not explosive, the section made noise prior to failure, and the section was able to sustain the failure load for an additional 30 seconds prior to the occurrence of delamination. This is a valuable material property and contributes to the safety of the structure. Instead of an explosive and potentially dangerous failure, cracking will be heard and seen, giving an early warning of a potential catastrophe.

Chapter 8 - Conclusion and Recommendations

Two other labs, Seoul National University and the University of Texas at Austin, conducted experiments with similar wall geometries. UT Austin conducted three 90° wall experiments with different radii and cross sections. SNU conducted five 90° wall experiments with identical cross sections and included the use of steel fibers and radial reinforcement in some experiments. The other lab results are similar to this research with regard to radial tensile stress.

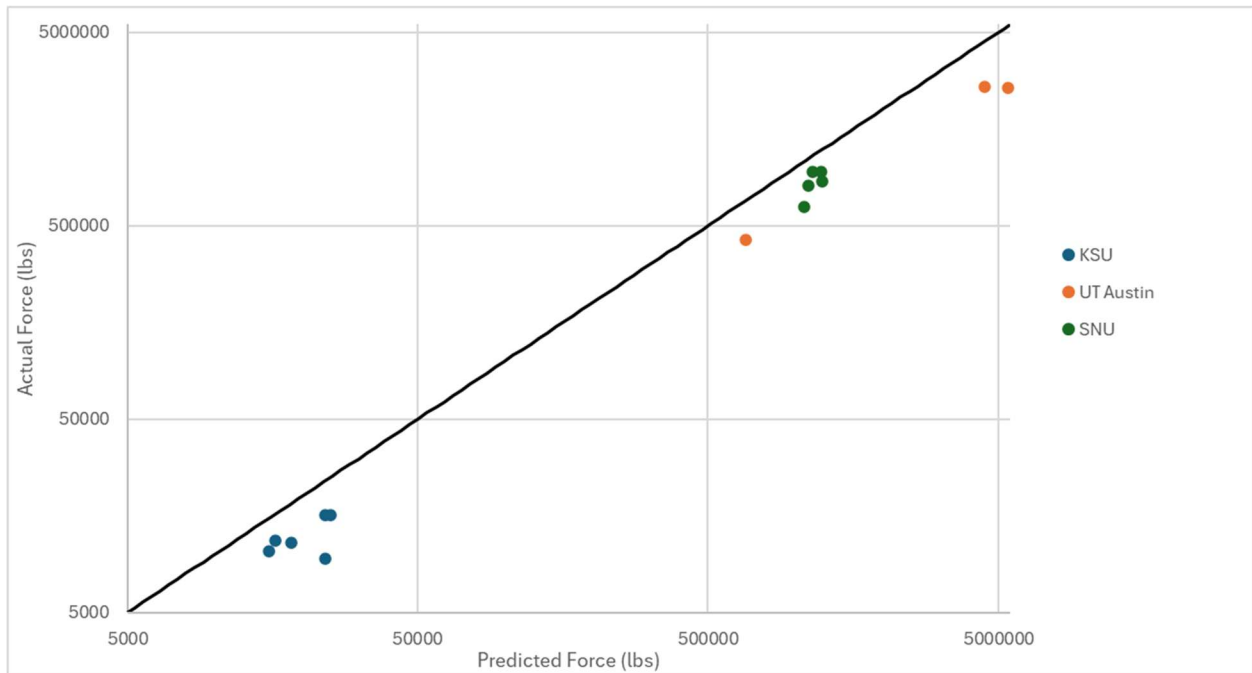


Figure 12: Actual Force vs Predicted Force

Figure 13: Interaction Diagram for Radial Tension vs Shear Figure 14: Actual Force vs Predicted Force

They indicate that the calculated radial tensile stress is between 55% and 71% of direct tensile capacity without the use of radial reinforcement. When using radial reinforcement SNU achieved 76% and 91% of direct tensile capacity. Figure 12 shows the actual vs predicted values for all samples failure loads performed thus far. Predicted force was calculated by substituting direct tensile strength (f_t) for radial tension (σ_{rt}) and solving for the force (F) using Equation 3. It can be seen that radial tensile stress regularly under predicts delamination failure regardless of size

and concrete/mortar strength. These results give further credence that there are other failure mechanisms at work. This is a mixed-mode fracture problem.

There is another component contributing to the delamination failure in these scaled models. The concrete on the outer side of the post-tension ducts is in tension, while the concrete on the inside of the post-tension ducts is in compression. This creates an in-plane shear force along the duct. UT Austin and SNU both had larger models, and it is assumed that their wire placement was more accurate. All shear calculations were done at 15°, as all labs observed failures between 15° and 45°. To compare results between all labs, shear stress was normalized using equation 7. The maximum allowable shear stress allowed by ACI was selected ($V = 5 * \sqrt{f'c}$) was chosen; the lower limit code specifies ($2 * \sqrt{f'c}$), and is very conservative. When plotting the results, the lower limit results in a much lower normalized which moves the data points outside the desired range, whereas the maximum allowable shear stress fit the data points within the failure envelope. Showing the results in an interaction diagram is the best way to illustrate the mixed-mode fracture. Figure 13 shows the interaction diagram with all available specimens plotted. The straight line was plotted using the equations ($\frac{\sigma_{rt}}{f_t} + \frac{\tau}{\tau_u} = 1$) in line the curved was plotted using the equation ($(\frac{\sigma_{rt}}{f_t})^2 + (\frac{\tau}{\tau_u})^2 = 1$). There are two clusters in the interaction diagram with one outlier. The cluster with low shear includes all data points from UT Austin, plus one data point from SNU. All of the experiments in this cluster had no shear reinforcement or fiber reinforcement. The second cluster had much higher shear forces and included shear reinforcement, steel fibers, or radial reinforcement. The outlier was KSU experiment 7, which failed in shear; it was not a true delamination failure. All experiments failed

within the failure envelope. Indicating that an equation or knock-down factor could be designed for the code with additional research.

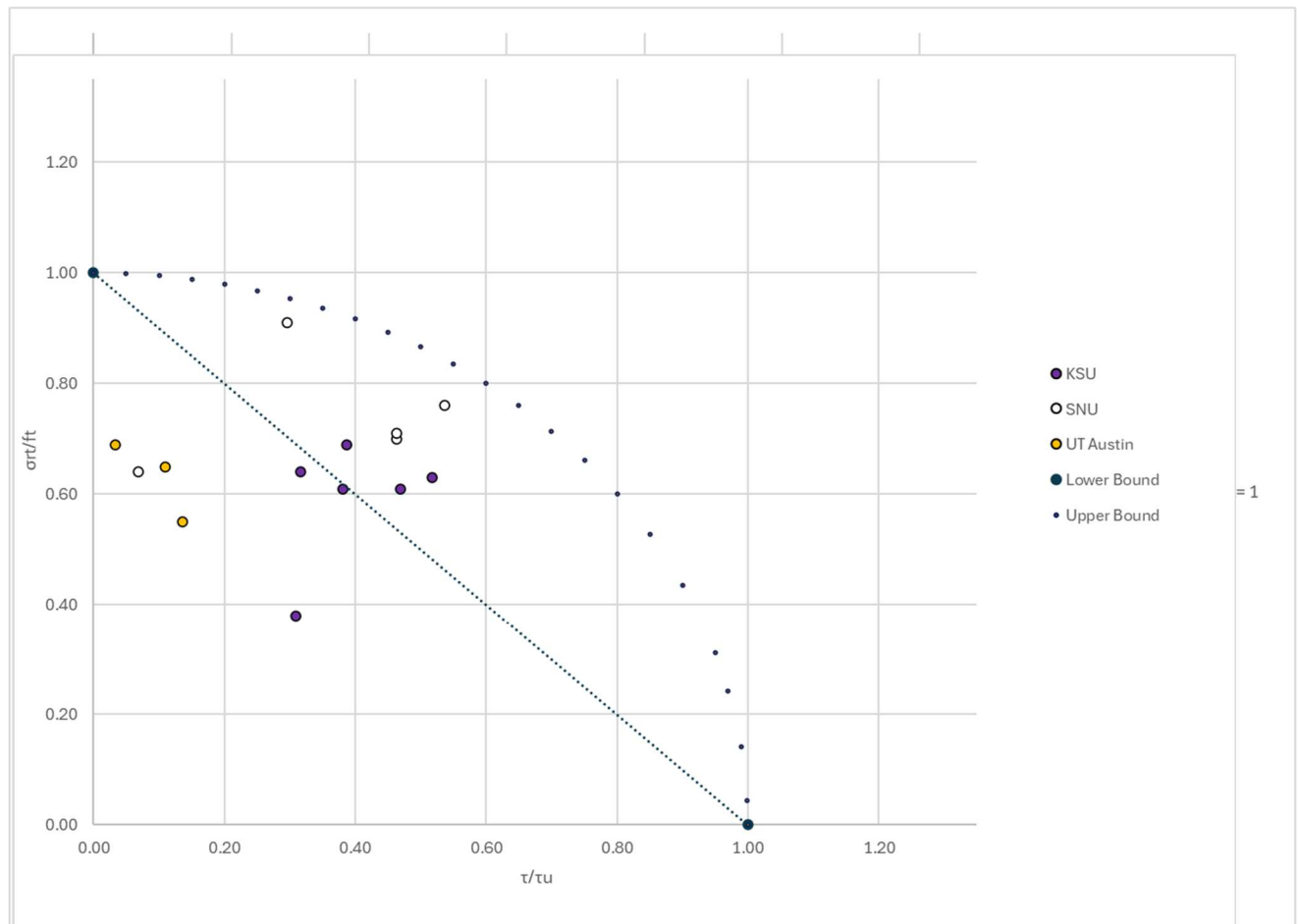


Figure 15: Interaction Diagram for Radial Tension vs Shear

Recommendations

This research shows that high strength concrete doesn't perform better against radial tensile stress alone but does give a much higher resistance to shear. Further research should be done with high strength concretes ability to resist shear forces. The lack of aggregates probably leads to a lower tensile to compressive strength ratio and a lower normalized radial stress. In addition, any further experiments need a torsion test in addition to the other material tests.

Radial reinforcement is currently the recommended method for mitigating radial tension [10]. Radial reinforcement is time-consuming and difficult to place, as each U-shaped bar must

be hand-placed and secured. Fiber reinforcement accomplished similar results without tedious placement requirements. The fibers have been shown to control cracking around the post-tension ducts by this research and through experiments conducted at SNU. The fiber's contribution to direct tension performance in concrete aids its ability to resist radial tensile stresses. Steel fibers contribute to a structure's toughness and allow fiber reinforced specimens to maintain failure loads far longer than their unreinforced counterparts. The steel fibers for experiment 3 were able to maintain the cracking load for 32 seconds after the wall reached its failure load. Experiment 6 was less impressive; it was able to maintain the failure load for an additional 12 seconds. The prevention of explosive failure is a valuable safety consideration.

Current code states that precompression shall not exceed $.3 f'_c$ this research doesn't necessarily prove that the code is unconservative as the other labs specimens met code standards. It is recommended that further research be conducted to establish geometric and material limit states to be applied to the current code.

The wall geometry used by KSU is the current standard for containment vessel testing. Some valid questions have been raised about the wall geometry. Further research should be conducted to determine if:

1. Using the max allowance for shear allowed by Code is a crude way to normalize shear stress. Instead, the direct torsion test created by Mhamankar should be used to normalize shear stress. This would enhance the accuracy of the interaction diagram and allow derivation of a predictive equation.
2. The moment would be the same if both anchor blocks were fixed.
3. The sample will still fail in the same fashion if the loading is switched to the free end.

4. Stress applied to the structure by Meridional reinforcement would affect the failure mode.
5. Poisson's effect contributes to delamination failure.

Finally, this research shows that radial tensile stress alone only accounts for 55% to 91% of the concrete's capacity in delamination. Figure 13 shows that radial tensile stress is not a sufficient explanation for the delamination failure mode. This research proposes that the majority of the missing stress comes in the form of an in-plane shear force. The interaction diagram gives insight into a proposed future solution. Steel fibers greatly assist in adding to the tensile capacity of the concrete and should be required in addition to mix design for all containments. This research also shows that the tensile capacity of concrete can conservatively be estimated at 3.75 f'_c . The equation could be more accurate by including factors and variables related to in-plane shear stress and Poisson's ratio in both the hoop and meridional direction.

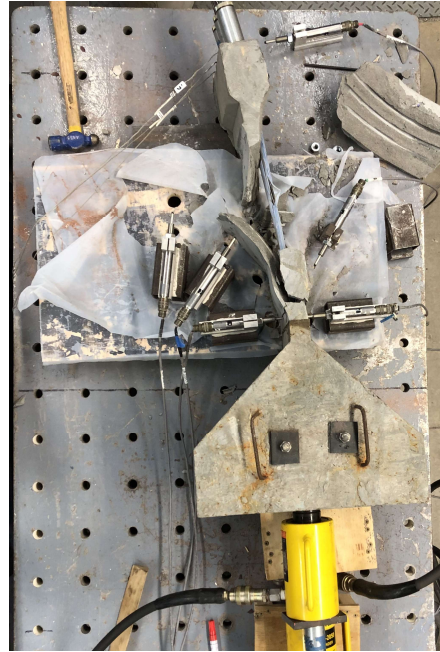
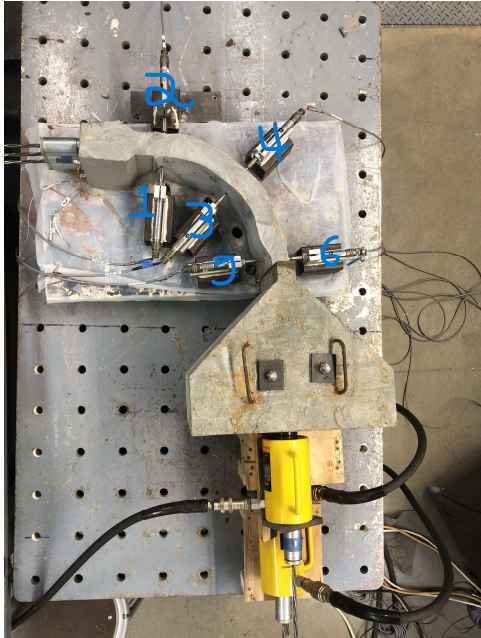
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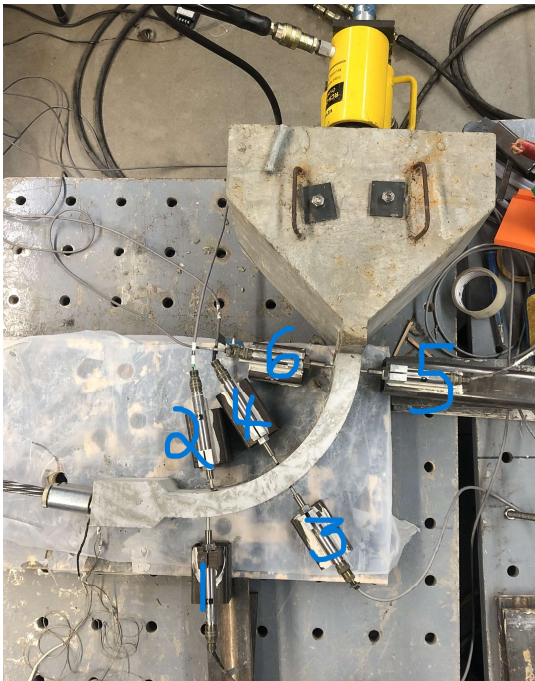
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Appendix A - Experiment Pictures

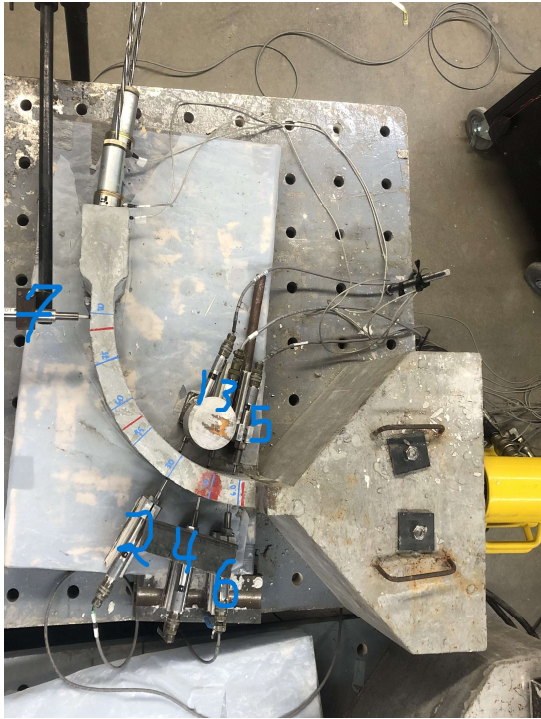
Experiment 1



Experiment 2



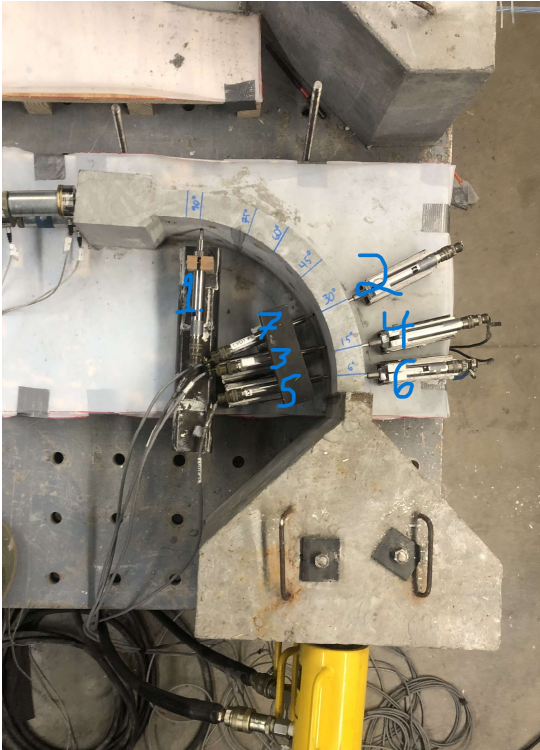
Experiment 3



Experiment 4



Experiment 5



Experiment 6



Experiment 7



Appendix B - Experimental Data

Experiment 2

LVDT 1	LVDT 2	LVDT 3	LVDT 4	LVDT 5	LVDT 6
in	in	in	in	in	in
-0.00000485	0.00000096	0.00000248	0.00000052	-0.0000077	-0.00000023
-0.000003	0.00000214	-0.00000047	0.00000282	-0.00000975	-0.00000078
-0.00000125	0.00000011	0.0000009	0.00000329	-0.00000698	-0.00000085
-0.00000142	-0.00000109	0.00000061	0.00000164	-0.00000692	-0.00000005
-0.00000359	-0.00000113	0.00000048	0.00000336	-0.00000751	-0.00000002
-0.00000302	0.00000066	-0.00000015	-0.00000026	-0.00000755	-0.00000025
-0.00000158	-0.00000247	0.00000161	0.00000189	-0.00000561	0.00000004
-0.00000244	0.0000012	-0.00000148	0.00000002	-0.0000034	-0.00000033
-0.00000151	0.00000262	0.0000016	0.00000381	0.000002	-0.00000044
-0.00000328	0.00000287	0.00000083	0.00000164	-0.00000739	-0.00000091
-0.00000239	0.00000041	-0.00000019	0.00000335	-0.00000402	-0.00000124
-0.0000014	0.0000002	0.00000035	0.00000286	-0.0000036	-0.00000006
0.00000046	-0.00000095	-0.00000134	0.00000239	-0.00000467	-0.00000088
-0.00010871	0.00000186	-0.00000077	0.00002896	-0.00003791	-0.00000213
-0.00120676	0.00076076	-0.00066244	0.00060224	-0.00011882	0.00000482
-0.00214864	0.00159443	-0.00132537	0.0012228	-0.00018456	0.00002425
-0.00380234	0.00301268	-0.00244226	0.00228532	-0.0003301	0.00007784
-0.00557845	0.00466833	-0.00371355	0.0035048	-0.00053757	0.00018151
-0.00824565	0.00733414	-0.00644271	0.0070295	-0.00094126	0.00034013
-0.01355755	0.01300282	-0.01009536	0.00970511	-0.00118038	0.00046816
-0.01777716	0.01669506	-0.01305736	0.01243409	-0.00144088	0.00060671
-0.02140462	0.02077037	-0.01632121	0.01550039	-0.0017214	0.00076721
-0.0257153	0.02544612	-0.01973783	0.01897949	-0.00203104	0.00095038
-0.02580912	0.0262869	-0.02107457	0.02094299	-0.0022647	0.0011304
-0.02979748	0.02939385	-0.02245108	0.02181949	-0.00229866	0.00114073
-0.03269251	0.03215122	-0.02425717	0.02370492	-0.00247658	0.00125635
-0.03269147	0.03217067	-0.02428444	0.02404165	-0.00252946	0.00128704
-0.03556085	0.03455823	-0.02559029	0.02521881	-0.00262124	0.00132789
-0.03615156	0.03528886	-0.02595358	0.02584953	-0.00269685	0.00135091
-0.03802622	0.03635554	-0.02642714	0.02622952	-0.00272669	0.0013626
-0.03992805	0.0378551	-0.02703982	0.02710599	-0.00283576	0.00143142
-0.04040609	0.0380607	-0.02713074	0.02715637	-0.00284241	0.00143747
-0.04101832	0.03859259	-0.02741663	0.02752129	-0.00288343	0.00146235
-0.04195509	0.03938989	-0.02784102	0.0280288	-0.00294046	0.00150647
-0.04253266	0.03983328	-0.02803456	0.02817005	-0.00295593	0.00151837
-0.0425269	0.03985012	-0.02807214	0.02819159	-0.00295916	0.00151861
-0.04252176	0.0398591	-0.02809079	0.02820221	-0.00296357	0.0015207
-0.04252091	0.03986719	-0.02810384	0.02821044	-0.00296587	0.00152151

-0.04251841	0.03987469	-0.02811564	0.02821628	-0.00296438	0.00152211
-0.04251425	0.03988179	-0.02812515	0.02822396	-0.0029654	0.00152145
-0.04251289	0.03988584	-0.02813483	0.02823063	-0.00296673	0.00152202
-0.04251131	0.03988804	-0.0281464	0.02823589	-0.00297038	0.00152253
-0.04251211	0.03989294	-0.02815418	0.02823876	-0.00296706	0.00152316
-0.0425126	0.0398987	-0.02816322	0.02824241	-0.00296775	0.00152311
-0.04251253	0.03991427	-0.02817055	0.02825155	-0.00297086	0.0015231
-0.04251905	0.03993546	-0.02817989	0.02826132	-0.00296967	0.00152289
-0.0440713	0.04143503	-0.02894368	0.02926695	-0.00307421	0.00160073
-0.04467579	0.04182946	-0.02913202	0.02934871	-0.00308582	0.00160741
-0.04663856	0.04372476	-0.02996007	0.03040743	-0.00320794	0.00165352
-0.04662794	0.04379332	-0.03006222	0.03069554	-0.0032536	0.00166665
-0.04855615	0.0457344	-0.03093037	0.03155829	-0.00333207	0.00168191
-0.04854547	0.04578524	-0.03100611	0.03160811	-0.00334552	0.00168622
-0.0504112	0.04770074	-0.03184198	0.03267168	-0.00344823	0.00173355
-0.05040695	0.04778359	-0.03193294	0.03274672	-0.00345844	0.00173383
-0.05054199	0.04795156	-0.03202653	0.03284716	-0.00347349	0.00175146
-0.05177332	0.0495091	-0.03285615	0.03388742	-0.00356421	0.00180607
-0.05222354	0.04992267	-0.03296591	0.03405659	-0.00358838	0.00181226
-0.05219541	0.04994867	-0.03298099	0.03409702	-0.00359494	0.00181348
-0.05217951	0.04996218	-0.03298935	0.03412056	-0.00359495	0.00181259
-0.0521745	0.04997733	-0.03299356	0.03413881	-0.00359907	0.00181303
-0.05217295	0.04999251	-0.03299833	0.03415056	-0.003604	0.00181934
-0.0531408	0.05123196	-0.03339007	0.0350644	-0.00367358	0.00189054
-0.05389246	0.0518858	-0.03338529	0.03542631	-0.00371236	0.00194735
-0.05555878	0.05382653	-0.03336423	0.03632096	-0.00378077	0.00198136
-0.05553945	0.05399912	-0.03336939	0.03656137	-0.00380067	0.00202333
-0.05709643	0.05576073	-0.03335457	0.03741327	-0.00386293	0.00207016
-0.05760127	0.05657315	-0.03335963	0.03817913	-0.00394181	0.0021896
-0.05896988	0.05782264	-0.03335539	0.0386428	-0.00397882	0.00220481
-0.05896313	0.05784617	-0.033353	0.03868552	-0.00398768	0.00220546
-0.0589653	0.05785855	-0.03335258	0.03870833	-0.00399228	0.00220523
-0.0589628	0.05787002	-0.03335447	0.03872359	-0.00399469	0.00220569
-0.05928435	0.05818822	-0.03336311	0.03894817	-0.00400533	0.00224194
-0.06005571	0.05906596	-0.03336241	0.03942804	-0.0040353	0.00228247
-0.06059349	0.05954895	-0.03335686	0.03960282	-0.0040478	0.00228482
-0.06059184	0.05955387	-0.03335952	0.03963179	-0.00405381	0.00228497
-0.06083075	0.05983537	-0.03336368	0.03995201	-0.00407404	0.00234181
-0.06225854	0.06128596	-0.03335224	0.04053352	-0.00411552	0.00235961
-0.06224327	0.0612927	-0.033355	0.04057778	-0.00411875	0.00236009
-0.0631788	0.06241265	-0.0333558	0.04118024	-0.00415308	0.0024193
-0.06371134	0.06298992	-0.03335563	0.04146327	-0.00418153	0.002433
-0.06367979	0.06300844	-0.03335478	0.0415117	-0.00418875	0.00243587
-0.06413914	0.06381201	-0.03336083	0.04211825	-0.00422663	0.00250768

-0.065003	0.06466977	-0.03335705	0.042419	-0.00425195	0.00253708
-0.06491199	0.06469778	-0.03335508	0.04247633	-0.00425969	0.00254314
-0.06503627	0.06512342	-0.03335973	0.04296356	-0.00429407	0.00263157
-0.06628706	0.06635148	-0.03335515	0.04334896	-0.00433228	0.00264928
-0.06619898	0.06636694	-0.03335508	0.04338722	-0.00434128	0.00266777
-0.06707787	0.06744152	-0.03335978	0.04398104	-0.00437489	0.00275313
-0.06743524	0.06781243	-0.03336034	0.04412541	-0.00439936	0.00277029
-0.06738894	0.06783696	-0.03335807	0.04416638	-0.00440971	0.00277556
-0.06734373	0.06784076	-0.03336127	0.04418396	-0.00441721	0.00278037
-0.06766776	0.0682567	-0.03336909	0.04451249	-0.00443687	0.002862
-0.06861812	0.06922736	-0.03336871	0.04485216	-0.00447736	0.00289672
-0.06853888	0.06925281	-0.03336727	0.04489538	-0.00448486	0.00290209
-0.06950923	0.07025385	-0.03337397	0.0453876	-0.00453598	0.00300714
-0.06937955	0.07039082	-0.03338583	0.0455038	-0.00455738	0.00302461
-0.06915887	0.07041853	-0.03339714	0.04555582	-0.00456621	0.00302862
-0.06868506	0.07043115	-0.03347146	0.04565634	-0.00457944	0.00304964
-0.05709393	0.06219856	-0.03276851	0.04425279	-0.00472564	0.00550636

Pressure Transducer	Load Cell 2	Load Cell 3	Load Cell 4	Time
lbs	lbs	lbs	lbs	Seconds
2.43	3.00	0.25	-2.00	2.95
-1.73	4.37	1.07	-2.44	32.63
-2.90	3.66	0.65	-2.72	34.10
-2.81	3.21	1.00	-2.54	35.59
-2.86	3.00	0.82	-2.65	37.14
-2.23	2.78	0.71	-2.61	38.61
0.85	3.24	0.95	-2.67	40.08
1.28	3.21	0.63	-2.46	41.56
-1.10	4.09	0.91	-2.61	43.05
-2.71	3.64	0.86	-2.75	44.53
2.12	3.86	1.13	-2.73	46.01
2.50	3.92	0.96	-2.62	47.48
58.44	3.01	1.15	-2.63	48.95
135.74	3.39	1.79	-2.84	50.50
161.74	-12.01	8.02	-4.12	51.97
178.02	-32.59	10.64	-11.67	53.46
201.38	-32.38	20.87	5.85	54.93
303.70	122.10	127.63	48.51	56.50
313.71	220.79	125.56	100.50	57.99
356.01	270.08	136.13	209.30	59.46
408.29	300.35	158.20	264.44	61.01
490.45	317.04	185.74	321.76	62.49
588.29	305.39	213.39	347.17	63.96
712.62	275.32	251.12	401.18	65.43
749.09	268.14	273.72	445.43	66.92

772.02	255.62	284.80	444.91	68.41
908.85	248.15	306.61	492.96	69.88
890.50	245.91	315.67	493.51	71.35
1049.91	243.81	343.34	542.99	72.82
1001.36	244.12	350.27	563.83	74.37
1152.79	238.56	380.41	588.45	75.85
1155.91	238.08	385.13	595.38	77.32
1254.47	238.74	400.12	614.54	78.79
1303.39	237.39	415.45	630.30	80.28
1261.85	236.72	417.67	627.66	81.76
1245.51	236.78	418.83	626.09	83.24
1230.35	237.41	419.94	625.04	84.71
1218.86	237.60	420.55	624.34	86.18
1215.30	237.79	421.00	623.62	87.73
1208.16	238.09	421.45	622.98	89.20
1203.22	238.31	422.11	622.70	90.68
1198.08	238.16	422.44	622.26	92.15
1198.48	238.48	422.68	621.96	93.64
1235.20	238.54	423.09	621.70	95.12
1242.14	238.97	423.67	622.06	96.60
1233.61	239.11	423.87	622.81	98.07
1426.89	244.94	454.41	688.82	99.56
1524.74	245.33	482.16	750.60	101.11
1539.81	255.97	494.78	760.25	102.60
1709.67	278.85	531.54	841.59	104.07
1672.99	294.45	531.88	834.15	105.62
1788.64	307.08	553.81	892.44	107.09
1820.36	342.45	566.34	910.60	108.57
1805.84	344.48	564.97	908.81	110.04
1940.46	364.02	581.79	942.07	111.52
1977.01	393.88	596.39	979.72	113.01
1929.92	396.79	593.99	972.53	114.49
1914.31	398.01	592.69	968.33	115.96
1902.64	399.29	592.20	965.15	117.43
1892.89	399.83	591.56	962.74	119.00
2041.15	412.97	603.19	1004.68	120.47
2131.73	457.30	616.61	1048.60	121.94
2358.75	522.06	636.12	1142.22	123.41
2238.46	532.50	631.87	1133.93	124.96
2447.76	589.74	654.81	1232.62	126.44
2396.25	607.38	651.81	1223.73	127.91
2615.10	683.80	673.42	1329.75	129.38
2542.64	692.76	671.88	1321.09	130.89
2524.22	696.07	671.12	1314.69	132.37

2505.50	697.87	670.61	1310.33	133.85
2480.74	698.75	670.30	1306.83	135.32
2608.60	729.52	679.05	1350.26	136.81
2738.97	784.24	692.66	1419.44	138.29
2683.68	786.33	692.39	1415.09	139.76
2743.47	789.98	695.00	1430.43	141.24
2951.67	872.48	712.87	1527.56	142.71
2851.38	877.84	712.39	1520.63	144.28
2821.44	879.35	712.36	1533.63	145.75
3069.03	969.55	733.96	1631.23	147.22
3002.58	978.19	733.42	1623.75	148.69
2972.60	979.78	732.73	1618.18	150.25
3209.76	1069.04	753.54	1725.83	151.72
3148.31	1076.33	753.31	1718.60	153.19
3122.71	1078.34	752.97	1712.80	154.66
3366.43	1191.59	773.24	1816.86	156.15
3287.96	1195.75	772.20	1805.57	157.65
3426.16	1229.96	783.44	1864.51	159.12
3485.57	1321.70	793.34	1894.52	160.60
3436.81	1329.41	793.00	1884.12	162.10
3410.12	1333.04	792.81	1876.16	163.57
3397.69	1334.79	792.53	1870.64	165.04
3678.11	1450.17	812.57	1966.82	166.52
3584.79	1461.05	813.28	1956.99	167.99
3600.69	1456.14	816.50	1989.89	169.56
3766.52	1583.14	832.38	2033.87	171.03
3712.83	1587.74	832.17	2021.60	172.50
3692.76	1591.39	831.94	2012.95	173.97
3696.37	1594.70	831.61	2003.79	175.54
3486.27	1573.02	-13.43	11.74	n

Experiment 3

LVDT 1	LVDT 2	LVDT 3	LVDT 4	LVDT 5	LVDT 6	LVDT 7
in	in	in	in	in	in	in
0.2106	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1196	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1196	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126

[illegible]

0.2106	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2106	0.0809	0.1197	0.0730	0.1222	0.1085	0.0126
0.2106	0.0809	0.1197	0.0730	0.1222	0.1085	0.0126
0.2107	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2108	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2108	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2108	0.0809	0.1197	0.0730	0.1223	0.1085	0.0126
0.2108	0.0809	0.1197	0.0730	0.1222	0.1085	0.0126
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1197	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1196	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1197	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1197	0.0730	0.1222	0.1085	0.0125
0.2108	0.0809	0.1197	0.0730	0.1222	0.1085	0.0125
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	-0.0001	0.0000	0.0000	0.0000	0.0000	-0.0008
0.0007	-0.0009	0.0006	-0.0006	0.0002	-0.0002	-0.0023
0.0014	-0.0015	0.0008	-0.0008	0.0003	-0.0003	-0.0030
0.0017	-0.0018	0.0010	-0.0010	0.0003	-0.0004	-0.0036
0.0018	-0.0019	0.0010	-0.0011	0.0004	-0.0004	-0.0039
0.0020	-0.0021	0.0011	-0.0012	0.0004	-0.0005	-0.0048
0.0027	-0.0029	0.0016	-0.0017	0.0006	-0.0006	-0.0060
0.0035	-0.0037	0.0020	-0.0021	0.0008	-0.0008	-0.0068
0.0041	-0.0042	0.0023	-0.0024	0.0009	-0.0009	-0.0077
0.0041	-0.0042	0.0023	-0.0024	0.0009	-0.0009	-0.0077
0.0041	-0.0042	0.0024	-0.0024	0.0009	-0.0009	-0.0077
0.0041	-0.0042	0.0024	-0.0024	0.0009	-0.0009	-0.0078
0.0041	-0.0042	0.0024	-0.0024	0.0009	-0.0009	-0.0078
0.0041	-0.0042	0.0024	-0.0024	0.0009	-0.0009	-0.0078
0.0041	-0.0042	0.0024	-0.0024	0.0009	-0.0009	-0.0078
0.0050	-0.0051	0.0029	-0.0029	0.0011	-0.0012	-0.0124
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133

0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0038	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0065	-0.0066	0.0037	-0.0038	0.0014	-0.0014	-0.0133
0.0078	-0.0082	0.0046	-0.0047	0.0017	-0.0017	Out of Range
0.0081	-0.0082	0.0047	-0.0047	0.0017	-0.0018	Out of Range
0.0096	-0.0097	0.0055	-0.0055	0.0021	-0.0020	Out of Range
0.0096	-0.0098	0.0055	-0.0055	0.0021	-0.0020	Out of Range
0.0110	-0.0112	0.0064	-0.0064	0.0024	-0.0023	Out of Range
0.0111	-0.0113	0.0064	-0.0064	0.0024	-0.0024	Out of Range
0.0125	-0.0127	0.0072	-0.0072	0.0027	-0.0026	Out of Range
0.0125	-0.0127	0.0072	-0.0072	0.0027	-0.0026	Out of Range
0.0138	-0.0140	0.0079	-0.0079	0.0029	-0.0029	Out of Range
0.0138	-0.0140	0.0079	-0.0079	0.0029	-0.0029	Out of Range
0.0138	-0.0140	0.0079	-0.0079	0.0029	-0.0029	Out of Range
0.0148	-0.0151	0.0086	-0.0086	0.0031	-0.0031	Out of Range
0.0150	-0.0152	0.0086	-0.0086	0.0031	-0.0031	Out of Range
0.0150	-0.0152	0.0086	-0.0086	0.0031	-0.0031	Out of Range
0.0150	-0.0152	0.0086	-0.0086	0.0031	-0.0031	Out of Range
0.0161	-0.0164	0.0093	-0.0092	0.0033	-0.0034	Out of Range
0.0162	-0.0164	0.0093	-0.0092	0.0034	-0.0034	Out of Range
0.0162	-0.0164	0.0093	-0.0092	0.0034	-0.0034	Out of Range
0.0167	-0.0169	0.0096	-0.0095	0.0034	-0.0035	Out of Range
0.0172	-0.0174	0.0099	-0.0098	0.0035	-0.0036	Out of Range
0.0176	-0.0179	0.0102	-0.0102	0.0037	-0.0037	Out of Range
0.0184	-0.0186	0.0105	-0.0104	0.0038	-0.0038	Out of Range
0.0184	-0.0186	0.0105	-0.0104	0.0038	-0.0038	Out of Range

[illegible]

[illegible]

0.0295	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0295	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0295	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0295	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0295	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0296	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0296	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0296	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0296	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0296	-0.0291	0.0166	-0.0163	0.0060	-0.0061	Out of Range
0.0297	-0.0293	0.0167	-0.0164	0.0060	-0.0062	Out of Range
0.0298	-0.0293	0.0167	-0.0164	0.0060	-0.0062	Out of Range
0.0301	-0.0296	0.0169	-0.0166	0.0061	-0.0063	Out of Range
0.0303	-0.0298	0.0170	-0.0167	0.0061	-0.0063	Out of Range
0.0303	-0.0298	0.0170	-0.0167	0.0062	-0.0063	Out of Range
0.0303	-0.0299	0.0170	-0.0167	0.0062	-0.0063	Out of Range
0.0305	-0.0300	0.0171	-0.0168	0.0062	-0.0064	Out of Range
0.0308	-0.0303	0.0172	-0.0169	0.0063	-0.0064	Out of Range
0.0308	-0.0303	0.0173	-0.0170	0.0063	-0.0064	Out of Range
0.0309	-0.0304	0.0173	-0.0170	0.0063	-0.0064	Out of Range
0.0311	-0.0306	0.0174	-0.0171	0.0063	-0.0065	Out of Range
0.0313	-0.0307	0.0175	-0.0172	0.0064	-0.0065	Out of Range
0.0314	-0.0308	0.0175	-0.0172	0.0064	-0.0065	Out of Range
0.0314	-0.0308	0.0176	-0.0172	0.0064	-0.0065	Out of Range
0.0314	-0.0308	0.0176	-0.0172	0.0064	-0.0065	Out of Range
0.0315	-0.0309	0.0176	-0.0173	0.0064	-0.0066	Out of Range
0.0317	-0.0311	0.0177	-0.0174	0.0065	-0.0066	Out of Range
0.0319	-0.0312	0.0179	-0.0175	0.0065	-0.0067	Out of Range
0.0320	-0.0313	0.0179	-0.0175	0.0065	-0.0067	Out of Range
0.0320	-0.0313	0.0179	-0.0176	0.0065	-0.0067	Out of Range
0.0322	-0.0315	0.0180	-0.0177	0.0066	-0.0067	Out of Range
0.0326	-0.0318	0.0183	-0.0179	0.0067	-0.0068	Out of Range
0.0329	-0.0320	0.0185	-0.0180	0.0068	-0.0069	Out of Range
0.0330	-0.0320	0.0186	-0.0181	0.0068	-0.0069	Out of Range
0.0331	-0.0321	0.0187	-0.0182	0.0069	-0.0070	Out of Range
0.0335	-0.0323	0.0189	-0.0183	0.0070	-0.0071	Out of Range
0.0336	-0.0324	0.0189	-0.0183	0.0070	-0.0071	Out of Range
0.0336	-0.0324	0.0189	-0.0183	0.0070	-0.0071	Out of Range
0.0336	-0.0325	0.0190	-0.0184	0.0070	-0.0071	Out of Range
0.0337	-0.0325	0.0190	-0.0184	0.0071	-0.0071	Out of Range
0.0340	-0.0327	0.0192	-0.0186	0.0071	-0.0072	Out of Range
0.0341	-0.0328	0.0192	-0.0186	0.0071	-0.0072	Out of Range
0.0341	-0.0328	0.0192	-0.0186	0.0071	-0.0072	Out of Range
0.0342	-0.0329	0.0193	-0.0186	0.0072	-0.0072	Out of Range

0.0344	-0.0330	0.0194	-0.0188	0.0073	-0.0073	Out of Range
0.0349	-0.0331	0.0195	-0.0189	0.0073	-0.0073	Out of Range
0.0486	-0.0211	0.0314	-0.0138	0.0116	-0.0065	0.0302
0.0491	-0.0197	0.0320	-0.0132	0.0119	-0.0064	0.0356
0.0497	-0.0185	0.0328	-0.0127	0.0123	-0.0064	0.0414
0.0507	-0.0157	0.0341	-0.0114	0.0127	-0.0060	0.0523
0.0510	-0.0136	0.0345	-0.0106	0.0128	-0.0057	0.0601
0.0511	-0.0127	0.0347	-0.0103	0.0129	-0.0057	0.0639
0.0511	-0.0123	0.0347	-0.0101	0.0129	-0.0056	0.0660
0.0522	-0.0108	0.0358	-0.0095	0.0135	-0.0056	0.0755
0.0527	-0.0087	0.0362	-0.0087	0.0136	-0.0054	0.0839
0.0527	-0.0074	0.0363	-0.0082	0.0136	-0.0053	0.0865
0.0527	-0.0065	0.0364	-0.0079	0.0136	-0.0053	0.0894
0.0527	-0.0047	0.0367	-0.0071	0.0133	-0.0052	0.0936
0.0527	-0.0018	0.0366	-0.0060	0.0113	-0.0051	0.1032
0.0539	0.0031	0.0358	-0.0045	0.0077	-0.0050	0.1177
0.0544	0.0052	0.0338	-0.0038	0.0043	-0.0050	0.1267
0.0549	0.0064	0.0323	-0.0035	0.0024	-0.0050	0.1317
0.0552	0.0070	0.0316	-0.0033	0.0014	-0.0050	0.1351
0.0555	0.0076	0.0312	-0.0031	0.0006	-0.0050	0.1377
0.0558	0.0082	0.0309	-0.0030	-0.0001	-0.0050	0.1399
0.0562	0.0089	0.0304	-0.0028	-0.0010	-0.0050	0.1436
0.0569	0.0102	0.0298	-0.0024	-0.0027	-0.0051	0.1478
0.0577	0.0115	0.0290	-0.0021	-0.0054	-0.0051	0.1525
0.0585	0.0128	0.0276	-0.0017	-0.0081	-0.0051	0.1566
0.0589	0.0138	0.0267	-0.0014	-0.0099	-0.0051	0.1631
0.0593	0.0146	0.0259	-0.0011	-0.0114	-0.0051	0.1675
0.0597	0.0154	0.0249	-0.0009	-0.0132	-0.0051	0.1694
0.0603	0.0161	0.0240	-0.0007	-0.0151	-0.0051	0.1814
0.0613	0.0182	0.0227	0.0000	-0.0198	-0.0054	0.1965
0.1327	0.1988	0.0011	0.0692	-0.0767	-0.0014	Out of Range
0.1345	0.1976	0.0019	0.0701	-0.0767	-0.0013	Out of Range
0.1349	0.1976	0.0020	0.0702	-0.0766	-0.0013	Out of Range
0.1352	0.1976	0.0021	0.0702	-0.0765	-0.0013	Out of Range

Pressure Transducer	Load Cell 1	Load Cell 2	Load Cell 3	Load Cell 4	Load Cell 5	Load Cell 6
lbs	lbs	lbs	lbs	lbs	lbs	lbs
37.4044	-100.3910	-14.3002	-35.3881	15.0693	3.0995	663.8790
36.5655	-100.4131	-14.2083	-35.5998	14.9233	2.9789	657.8271
32.9828	-99.9395	-14.1646	-35.1729	15.2412	3.0928	667.1758
36.5230	-100.2140	-14.2807	-35.3466	15.1468	3.1343	660.0288
40.5887	-100.2038	-14.0612	-35.3414	15.4201	3.1023	655.6254
38.7420	-100.0552	-14.2485	-35.1863	15.1913	3.0855	656.1787
37.8544	-99.9335	-14.0351	-35.2329	15.5062	3.3567	651.7867
35.4570	-99.8350	-13.9620	-35.2292	15.3711	3.2496	654.5303

33.9097	-99.7968	-14.1027	-35.1472	15.2667	3.3968	654.5303
30.1265	-99.9594	-13.9323	-35.0540	15.3964	3.1578	658.3804
28.7324	-99.8718	-13.9588	-35.2143	15.7841	3.4274	648.4899
28.7061	-99.8445	-14.0976	-34.9936	15.3849	3.2693	645.7349
21.1725	-99.9195	-13.9317	-35.1390	15.4333	3.3166	662.2305
26.2036	-99.8111	-14.0264	-35.0445	15.6912	3.2823	652.3285
33.2183	-99.9550	-13.9621	-35.1996	15.4378	3.3202	660.0288
34.8143	-99.8111	-13.9621	-34.9878	15.3987	3.1861	653.4352
35.7946	-100.0879	-14.0340	-35.1034	15.3042	3.4731	655.0836
34.9610	-99.9456	-14.0100	-35.0534	15.4946	3.2480	657.2853
33.2028	-99.9632	-14.0290	-34.9604	15.5115	3.2290	659.4755
35.6193	-99.9718	-14.0568	-35.0469	15.4124	3.3980	648.4899
36.8514	-100.2727	-13.8152	-35.0104	15.3863	3.2567	649.0317
34.2611	-100.1202	-14.1472	-35.2629	18.0633	4.9939	645.7349
37.5074	-99.9130	-14.0261	-35.3240	17.7877	4.3040	649.5850
37.3338	-99.9657	-14.2053	-34.9797	17.7923	3.6249	649.0317
36.8340	-100.0282	-14.1378	-35.1333	17.8022	3.3976	653.9769
36.4640	-100.1525	-13.9826	-35.1639	17.6280	3.8369	658.9337
31.3653	-99.8584	-13.9607	-35.3037	17.6847	3.8382	656.7320
36.5240	-100.0046	-14.2396	-35.1829	17.8482	3.4331	656.7320
33.9329	-100.0413	-14.0099	-35.1396	17.4904	3.6662	651.2334
34.4496	-100.0492	-13.9513	-35.1456	17.7515	4.3714	655.6254
33.8688	-99.9694	-13.8976	-34.9316	17.4252	3.8702	657.2853
38.5330	-99.8766	-14.0413	-34.9454	17.4376	3.4887	653.4352
42.7131	-100.0650	-13.9177	-35.0103	17.1113	3.4479	653.9769
44.9949	-99.9978	-13.8867	-35.0200	16.9324	3.4559	653.9769
43.6835	-99.8797	-13.8748	-34.9312	17.1151	3.4435	660.0288
37.8917	-99.5016	-13.6676	-34.6773	17.2995	3.6834	660.5821
37.9486	-99.5516	-13.7314	-34.7735	17.3908	3.5938	659.4755
32.6484	-99.4431	-13.5621	-34.3652	17.4869	3.7557	657.2853
29.4224	-99.5893	-13.5356	-34.5218	17.7940	3.7557	660.5821
27.0568	-99.2461	-13.4877	-34.6322	17.5015	3.8796	655.0836
30.3501	-99.1997	-13.3877	-34.4190	17.7735	3.8501	655.6254
27.8515	-99.0746	-13.4217	-34.4317	17.8342	3.7161	657.2853
27.7190	-99.3529	-13.2811	-34.3705	17.7320	3.8953	657.8271
27.5358	-99.3010	-13.2835	-34.2130	17.9640	4.0709	660.5821
34.3036	-99.2940	-13.2721	-34.3345	17.8772	4.2254	659.4755
38.8569	-99.0947	-13.3396	-34.3994	17.8519	3.9741	659.4755
43.3838	-99.1669	-13.3656	-34.3392	17.9370	4.1932	658.3804
43.1671	-99.2552	-13.2382	-34.2766	17.9877	3.9434	652.3285
42.4483	-99.1726	-13.3127	-34.4043	17.9462	3.9870	656.1787
40.2382	-98.8912	-13.1852	-34.2767	17.8464	4.1195	654.5303
39.5961	-99.1359	-13.2351	-34.3491	17.7719	4.0430	655.6254
33.9338	-99.0338	-13.2509	-34.0263	17.8010	4.0845	653.9769

27.3493	-99.0205	-13.3298	-34.4261	18.0106	3.9169	646.8415
32.4622	-98.8925	-13.1341	-34.3005	18.0867	4.1837	645.1816
33.0812	-98.9699	-13.2420	-34.0678	17.9823	4.1021	654.5303
31.1070	-98.8378	-13.1379	-34.1655	17.9746	4.3666	647.9366
37.8267	-99.1372	-13.2350	-34.0648	17.8211	4.1167	650.1383
38.3418	-98.9501	-13.1876	-34.1601	17.9371	4.1183	658.3804
33.6451	-98.8094	-13.0741	-34.0341	17.9332	4.2144	657.2853
37.0180	-99.0480	-12.9263	-33.8756	18.0838	4.3297	645.7349
37.3245	-98.8362	-13.0114	-34.1038	18.1790	4.2212	656.1787
41.9397	-98.8964	-13.0070	-33.8980	18.0761	4.6073	654.5303
36.3322	-98.8675	-12.9704	-33.9867	18.1399	4.3479	658.3804
32.0208	-98.6503	-12.9572	-34.0346	18.0738	4.4236	650.6801
37.6977	-98.7614	-13.1005	-33.9048	18.3648	4.5038	658.9337
32.1275	-98.4334	-12.8074	-33.6714	18.4011	4.5530	660.0288
28.3881	-98.3873	-12.7746	-33.8705	18.4187	4.4029	655.0836
26.6399	-98.6327	-12.8970	-33.9988	18.3888	4.5486	661.1239
24.9770	-98.1674	-12.7112	-33.6768	18.3859	4.6837	657.8271
25.8056	-98.4637	-12.6948	-33.6544	18.5133	4.5482	652.8818
24.6886	-98.3676	-12.7819	-33.7410	18.6439	4.7107	649.5850
25.9720	-98.4121	-12.6406	-33.6403	18.7329	4.5905	653.4352
28.7628	-98.3039	-12.5406	-33.4755	18.7807	4.8524	650.6801
31.9264	-98.2179	-12.5349	-33.5359	18.7132	4.8400	651.2334
-4.2466	-0.0216	0.0272	0.0822	-0.0997	0.0220	4.3919
-4.9346	-0.0998	0.0525	0.0971	-0.0437	-0.0203	8.2421
1.4774	0.0542	0.0083	-0.1385	-0.0890	-0.0735	6.0519
2.5732	-0.2236	-0.1151	0.0137	-0.1606	-0.2421	4.3919
51.1667	-0.2580	-0.0015	-0.0042	15.2709	1.5259	8.2421
141.7246	1.9487	2.9912	0.6284	18.1053	37.6774	19.7925
227.6435	3.6928	32.9119	0.6351	19.4396	63.4659	60.4611
223.3590	15.4878	39.4284	1.0176	25.7013	77.9526	84.6455
233.6255	18.5601	45.5102	1.7308	29.9339	101.3693	107.1816
268.0423	19.0479	55.7238	3.4974	22.9528	102.1903	104.4380
281.7332	18.2986	64.3596	6.1618	22.8829	109.1694	118.1787
272.1860	18.5910	71.9329	11.7944	22.8215	113.5454	117.6254
284.6538	37.3366	87.2593	25.9859	38.7192	128.3725	170.0323
286.4027	60.9559	104.3434	32.9684	61.9957	144.5092	217.1968
306.4543	89.4984	114.9317	48.5448	92.4653	149.8826	213.4247
296.9367	89.4812	114.7141	48.5970	91.1570	148.4067	212.7917
286.2584	85.8931	113.8055	48.8894	90.0928	147.6248	211.5387
274.7634	87.9609	114.8319	48.9207	89.4618	147.3582	214.0578
271.2637	88.5824	114.1909	48.9781	89.6138	146.8395	218.4498
270.1767	88.8177	114.3518	48.9647	89.4257	146.5248	216.5638
275.0433	90.3289	119.4393	60.7736	127.6359	192.4082	282.8152
404.3602	155.8082	180.7044	122.0386	173.6673	232.4450	359.8117

362.6240	156.8276	179.0095	120.0959	170.9868	228.0858	353.6242
353.6823	156.6447	178.5553	119.4836	169.1573	226.5083	352.5045
352.8876	156.3375	178.1073	119.4359	168.1385	225.3402	341.8266
351.4584	155.9355	177.4885	119.0884	167.2606	224.4632	350.2534
346.3622	155.9574	177.6576	119.0228	166.5738	224.1605	346.3288
344.7902	155.8604	177.3966	118.7163	165.9857	223.4941	344.0777
349.9669	155.4547	177.3317	118.5672	165.4987	223.2661	349.1338
344.1640	155.6259	177.3398	118.5015	165.1186	223.0204	344.6316
341.1954	155.2779	177.0788	118.4397	164.7354	222.4265	351.9388
344.1800	155.1028	176.7312	118.2495	164.4707	222.2247	339.0216
339.8404	154.7760	176.7229	118.2115	164.0470	222.0440	358.6920
337.8979	154.8737	176.7506	118.0989	164.0331	221.7903	347.4484
340.1513	154.7698	176.8011	117.9385	163.7660	221.6478	344.6316
336.7612	154.5015	176.2985	117.8081	163.4317	220.9368	341.8266
342.1739	154.5054	176.3856	118.0057	163.2923	220.9917	345.1973
343.7845	154.2723	176.0865	117.7365	163.1172	220.6891	337.8901
347.7938	154.2824	176.0928	117.6098	162.8339	220.3477	336.7705
340.8742	154.1370	175.9888	117.6374	162.7843	220.3258	335.6509
337.9922	154.0650	175.8828	117.2653	162.4536	220.1658	330.5830
343.8231	153.6514	175.6884	117.2585	162.3499	220.0027	328.8976
342.7532	153.8469	175.9697	117.6456	162.4387	219.8753	335.0851
344.0898	153.9446	175.9697	117.5807	162.4852	226.7893	376.6654
430.5908	194.8750	214.9218	156.9891	222.0758	272.1643	427.2499
478.7813	223.8748	240.9288	187.7254	272.2313	329.6417	520.0499
468.8333	242.4477	255.4805	201.3511	277.2519	320.9611	503.8955
463.4780	250.7039	265.9719	223.6483	316.0246	371.7459	594.8722
527.5956	294.4950	301.6542	262.4955	340.7737	385.4625	608.0392
514.9531	305.8207	313.9123	284.1516	388.9637	444.5569	696.0161
583.8848	354.7268	350.5725	311.4284	409.0312	448.8118	685.8490
611.9206	377.4593	373.6607	340.1690	470.6685	523.5575	805.5572
642.7003	418.5190	400.5025	362.8277	480.2485	515.7769	778.6206
621.1061	417.1055	398.7059	361.6719	475.1131	509.8918	778.0181
650.6787	426.7353	408.9409	382.6019	524.3935	576.9573	863.0076
702.4018	487.6389	454.6161	439.2860	558.9967	600.5762	884.5593
686.9367	484.6657	451.4289	437.3178	551.3212	592.1948	873.1873
682.7535	483.4193	450.1504	436.4269	548.0260	588.2428	870.7898
678.8761	482.8177	451.2990	451.4564	600.7365	668.0175	970.7412
778.4681	557.3020	509.7277	515.7538	637.3517	686.6999	995.2804
759.7399	555.0576	506.9657	513.6395	630.0427	678.1607	989.8956
756.9095	553.3510	505.9382	514.7725	662.7734	729.9760	1052.7433
828.6064	600.2000	546.7902	570.9780	717.0572	777.9034	1102.4240
841.3320	631.4210	567.9328	594.3714	720.4007	775.5122	1093.4368
947.9068	715.8943	638.7386	686.5447	824.3909	883.1428	1226.9146
912.3897	713.6596	631.3996	680.2038	807.8503	869.2517	1211.9526

906.1194	711.6548	629.3655	678.0439	802.6050	863.4897	1201.1705
903.0745	710.1667	628.0010	676.6582	799.3144	859.7923	1199.9780
891.1200	709.6154	626.9884	675.9419	796.7677	857.0360	1187.4135
881.3482	709.1198	626.4985	675.2398	794.6372	855.2307	1192.1958
872.3335	708.3923	626.1293	674.4998	792.8943	853.5098	1196.9907
872.2514	707.9912	625.6264	674.1690	791.1492	851.9995	1191.6059
872.7803	707.8042	625.1894	673.6627	789.7187	850.7745	1195.7857
873.3801	707.0950	624.5871	673.5136	788.5217	849.7756	1188.6059
866.1455	706.7955	624.4509	672.8457	787.0091	848.7899	1185.6186
857.0279	706.8804	624.3580	672.8421	786.1051	847.8661	1180.8237
848.9273	706.5977	624.1696	672.5906	784.7638	846.9702	1188.0034
849.6640	706.1085	623.7587	672.5954	783.7163	846.1738	1184.4136
850.9641	705.9736	623.8537	672.2889	782.7119	845.6612	1194.5932
849.2909	705.9200	623.5777	671.9502	781.8146	844.7419	1183.8236
846.2778	705.4047	623.2060	671.9304	780.7305	844.1157	1185.6186
836.9235	705.5877	623.1889	671.9141	779.8237	843.3886	1182.6186
832.7266	705.4361	622.9763	671.8800	778.8285	842.5373	1178.4263
830.7545	705.2317	622.8644	671.6682	777.7750	841.9747	1171.8490
829.6660	705.0544	622.6921	671.4988	776.7078	841.2618	1176.0414
824.2611	704.6223	622.5609	671.3560	775.8816	840.5924	1182.6186
827.2736	704.5540	622.4900	671.1641	774.7929	839.7382	1176.0414
824.6353	704.4988	622.3856	671.2106	773.9494	839.0036	1166.4642
823.0546	704.2514	622.0157	671.0187	772.9498	838.0171	1170.6566
816.1106	704.3310	622.1084	671.0464	772.1415	836.7647	1172.4515
814.4506	703.9278	621.8081	670.8528	771.3175	835.8184	1176.6313
806.9724	703.8622	621.6688	670.5530	770.3022	834.7794	1175.4389
793.5508	703.7699	621.4394	670.4055	769.3354	833.6870	1169.4516
788.6025	703.6070	621.5691	670.5022	768.8192	832.5277	1162.8744
785.5451	703.5330	621.3465	670.4268	767.7650	830.8040	1151.5023
972.6208	757.0838	675.8456	746.6630	908.3023	980.8967	1351.4051
980.1370	779.3215	687.5913	750.1731	892.3825	957.5256	1325.6735
965.9711	777.3343	685.2597	748.5058	885.7020	951.3322	1320.8787
1042.8416	832.2407	738.0935	818.8828	1004.6706	1081.0191	1487.1160
1064.3215	874.7053	759.4179	840.7930	992.6995	1059.9008	1454.2835
1136.7707	924.1592	804.0216	896.8118	1087.1742	1163.0819	1593.8279
1177.4843	975.8389	837.0268	938.0381	1102.4812	1172.6638	1587.3844
1146.0409	974.3473	833.2548	934.8526	1090.6807	1161.6618	1572.1363
1132.7326	972.9050	831.0052	932.8675	1085.0566	1156.1473	1568.0292
1133.4962	971.4877	829.4723	931.6035	1081.2269	1152.4889	1570.9681
1129.2429	970.6594	828.4926	930.6992	1078.6659	1149.7693	1563.9343
1127.1827	970.2308	827.7001	929.7502	1076.8635	1147.6619	1566.8610
1121.6405	969.4157	826.9324	929.1779	1074.7050	1145.6236	1558.6467
1253.9678	1027.7552	896.4019	1006.5027	1216.0202	1300.6270	1767.9756
1265.5212	1068.8118	913.8303	1022.9997	1196.4268	1269.1232	1745.6938

1451.5474	1182.6216	1006.0863	1126.7270	1328.6654	1397.8555	1896.9817
1411.7082	1189.6621	1015.0609	1146.1848	1353.4880	1425.9195	1919.8538
1539.8069	1278.9930	1083.1409	1221.2435	1453.9118	1531.7376	2054.7131
1501.4477	1292.8963	1082.3098	1222.7308	1427.3778	1502.9966	2016.0150
1658.6461	1391.9268	1169.9502	1308.0914	1572.5193	1646.3612	2201.8816
1631.2820	1409.1009	1174.2066	1316.9944	1549.2451	1624.0937	2166.1224
1685.2879	1426.5405	1199.9239	1355.4748	1626.8290	1722.5848	2285.1435
1774.5189	1517.0171	1265.0095	1409.9006	1669.4059	1745.8574	2320.9149
1880.8624	1590.6811	1341.8757	1495.4521	1806.9740	1897.5215	2493.8945
1889.8908	1630.9322	1354.1836	1509.6826	1785.9236	1867.6793	2460.4717
2092.4555	1760.6834	1460.3282	1623.1929	1935.5879	2018.8396	2633.5991
1997.6371	1751.8332	1448.0625	1615.3620	1909.8460	2010.9583	2652.8928
2191.9809	1881.2824	1553.3812	1731.4849	2056.2969	2146.6418	2789.5781
2293.3627	1956.4292	1632.9244	1823.1229	2212.4668	2318.1229	2982.4315
2295.6088	2000.8423	1646.1255	1840.5662	2175.0292	2271.6749	2936.4931
2514.2417	2135.2964	1752.4697	1961.2653	2327.2879	2429.8810	3107.2099
2412.7203	2122.2724	1740.6116	1955.9907	2334.8734	2441.5863	3129.9056
2443.7084	2145.0236	1757.7214	1969.9526	2330.1335	2428.8410	3115.7267
2440.8248	2142.0908	1754.1267	1968.1255	2340.2990	2443.7877	3132.1656
2513.8784	2167.1015	1779.1633	1988.0544	2383.9673	2483.9749	3171.8711
2592.2401	2218.4331	1814.8592	2038.2350	2442.5182	2549.2005	3241.6352
2572.2524	2241.8551	1829.9593	2059.2163	2439.8114	2545.5192	3228.0273
2535.3942	2237.7732	1825.5787	2056.6254	2424.9287	2530.6044	3218.3805
2640.1012	2272.6284	1863.7149	2090.2688	2515.0067	2620.7103	3349.9747
2754.7149	2362.3310	1927.8508	2163.6322	2598.3552	2698.3515	3427.6847
2697.5782	2367.3357	1925.8920	2163.9542	2567.3898	2669.9739	3386.8373
2665.1313	2362.5240	1920.5846	2161.2754	2554.0801	2656.9797	3378.9033
2761.9112	2396.3492	1956.9326	2197.3576	2608.8360	2720.4215	3456.0423
2734.2494	2396.8507	1954.3090	2197.9308	2624.8938	2735.3803	3473.6231
2751.8059	2407.3762	1962.7229	2204.3516	2612.1328	2718.6069	3460.5743
2737.5234	2406.6821	1960.3986	2204.0152	2603.5802	2710.1405	3442.4225
2726.5364	2404.9428	1958.4863	2203.0259	2597.5794	2703.8629	3439.5915
2715.8452	2403.4687	1956.4841	2201.9097	2604.1809	2711.7391	3452.6403
2734.4833	2403.1983	1956.9700	2202.1332	2599.0104	2706.0837	3446.9664
2710.7778	2402.8021	1956.1521	2201.6801	2594.4899	2700.9202	3442.9935
2689.2582	2402.2684	1955.2753	2201.1150	2590.0699	2696.2668	3445.2654
2669.8633	2401.7014	1954.4777	2200.7241	2586.6195	2692.7772	3425.4127
2650.0577	2401.1242	1953.6006	2200.2094	2583.4331	2689.3663	3431.0866
2630.0487	2400.4841	1953.0652	2199.9154	2580.0602	2686.3015	3425.9837
2611.6734	2399.9556	1951.8824	2199.3423	2576.7551	2683.6659	3425.9837
2593.0558	2399.1540	1951.3499	2199.0037	2573.0730	2681.0364	3415.7659
2576.5291	2398.9008	1950.6386	2198.5218	2569.5073	2678.4243	3418.6088
2561.2605	2398.2038	1949.8818	2198.1491	2565.4301	2675.9186	3417.4669
2545.8543	2397.6216	1949.2534	2197.8879	2560.9112	2673.5924	3412.9349

2529.3374	2397.0367	1948.6875	2197.8662	2556.5066	2671.0530	3404.9890
2513.6662	2396.5402	1948.0523	2197.5729	2552.3763	2668.9489	3402.1580
2497.8115	2396.0853	1947.7254	2197.1554	2548.1099	2666.7340	3406.1309
2481.6725	2395.3336	1947.1161	2196.9803	2543.8521	2664.1638	3402.7290
2468.0598	2394.7442	1946.2756	2196.5089	2540.2251	2662.0372	3394.2122
2447.3967	2394.5085	1946.1771	2196.3083	2536.6209	2659.0868	3390.2392
2435.2384	2394.1805	1945.7178	2195.9488	2533.1863	2655.7400	3383.4353
2426.9471	2393.4902	1945.0698	2195.6109	2530.0646	2652.4523	3380.0333
2409.9561	2393.2143	1944.7095	2195.3910	2527.3393	2648.6845	3384.5772
2398.6591	2392.6619	1944.3331	2195.1543	2526.8259	2651.7416	3385.7073
2790.4874	2393.9468	1949.1724	2198.0042	2657.6554	2775.2750	3521.2625
2830.7497	2450.3627	1994.7816	2237.0867	2682.8812	2786.8488	3536.5833
2902.8209	2481.6642	2034.8761	2288.9340	2777.9900	2901.5317	3679.7296
3021.3765	2577.3668	2101.7475	2355.3800	2858.4612	2955.0719	3737.7695
2993.0029	2597.0187	2108.7381	2362.2434	2833.7612	2931.1513	3711.5409
2959.6300	2592.4823	2103.3471	2359.2895	2817.8720	2916.1619	3693.6807
2995.5746	2591.0571	2102.7560	2361.1480	2868.0474	2978.7646	3767.9071
3145.6080	2696.8934	2194.2090	2464.7810	2992.5442	3092.6832	3892.9169
3117.9981	2728.6598	2206.5368	2474.5370	2971.8184	3065.8262	3873.3830
3139.6586	2725.9231	2203.5198	2474.6334	2997.5452	3103.2004	3911.9007
3198.8913	2764.9283	2240.1099	2512.7731	3054.4212	3165.6800	3987.8008
3303.2686	2854.6618	2307.6436	2592.8866	3126.1800	3230.9445	4068.1600
3251.2407	2861.9658	2307.7182	2592.7113	3106.5578	3202.4371	4033.0014
3213.0642	2858.0143	2302.3263	2589.8551	3092.1089	3188.3359	4007.8847
3234.0862	2855.2362	2298.6813	2587.5652	3097.4561	3195.2391	4026.8685
3273.9372	2861.8584	2311.2606	2594.7151	3145.5075	3238.9404	4087.1321
3353.1570	2918.8595	2363.2065	2641.7114	3208.0209	3308.5493	4163.5940
3402.6275	2974.0938	2402.6517	2696.3887	3257.9102	3363.8168	4219.9602
3384.2294	2993.1318	2415.5143	2709.0910	3244.6216	3342.1888	4195.4053
3348.2737	2989.4063	2409.8519	2704.6937	3229.7517	3326.1087	4180.3423
3462.3201	3013.9687	2444.9137	2719.8746	3319.6860	3408.2276	4296.4220
3520.8359	3087.2367	2496.0446	2779.5647	3379.7874	3469.4924	4368.4130
3525.1979	3120.3118	2524.8416	2807.0934	3384.5169	3464.6833	4378.4549
3470.3573	3117.6016	2519.6164	2800.7291	3364.4103	3437.4951	4351.1145
3517.9302	3115.9323	2523.1111	2799.4445	3406.3087	3485.1174	4427.0146
3663.6099	3220.3827	2609.9421	2872.5268	3519.5104	3615.4986	4556.4836
3667.3368	3247.7075	2630.9726	2898.2846	3520.1495	3610.0202	4553.6981
3608.4868	3246.4367	2625.1390	2897.1947	3499.8051	3586.4488	4534.7260
3579.5947	3243.1737	2620.2203	2895.0923	3499.2117	3600.3287	4556.4836
3689.3165	3279.0191	2658.4025	2913.0455	3575.5258	3660.8539	4617.3207
3786.5397	3339.5930	2705.6377	2963.9270	3641.2647	3746.7386	4707.1719
3788.8709	3380.2300	2737.4122	3001.4140	3653.8892	3751.6924	4709.9574
3743.6922	3376.8993	2729.5298	3000.3044	3633.7785	3727.8836	4692.6590
3763.3405	3374.0860	2727.4382	3000.4929	3667.5853	3759.4471	4746.2396

3843.8023	3416.0747	2765.1049	3025.9847	3738.1286	3831.3256	4819.5381
3919.7143	3487.5508	2827.5020	3098.6208	3801.6483	3914.5205	4902.8824
3849.7336	3482.4851	2811.0685	3081.3018	3605.8066	3657.4159	4583.8357
3604.2273	3422.9318	2769.1123	3042.9670	3555.5057	3610.0177	4534.7260
3646.8566	3396.8811	2749.9116	3027.3326	3578.4605	3640.7358	4622.3417
3798.9250	3383.5103	2742.9013	3024.7634	3660.0801	3774.8797	4757.9553
3826.8559	3355.4770	2740.3894	3023.5639	3681.8446	3779.3448	4760.7525
3757.3211	3331.9718	2734.3239	3016.6970	3655.7521	3750.9588	4713.8665
3726.4806	3322.0314	2729.3920	3011.9808	3639.8777	3731.9783	4687.6380
3784.0777	3316.4821	2726.8443	3011.2290	3719.3718	3823.1776	4850.9213
3954.0786	3357.7709	2756.9710	3060.8226	3793.9875	3887.8761	4908.2964
3888.2172	3367.9468	2765.1795	3069.4724	3753.3936	3856.1140	4864.4507
3892.7753	3366.1409	2764.4116	3069.1631	3743.0508	3849.6150	4857.9584
3958.3619	3371.0494	2769.5501	3076.1049	3807.2393	3911.6767	4948.8847
4008.3042	3388.7846	2791.2548	3105.5021	3839.4303	3960.0224	4978.6562
3998.8425	3397.5399	2801.8463	3120.3098	3838.4735	3948.5097	4966.2050
3920.2949	3378.6409	2793.1123	3106.4385	3788.2549	3902.6470	4913.1657
3866.5710	3356.4866	2782.0464	3091.8924	3753.2374	3867.5161	4866.0851
3831.4354	3344.0226	2775.1956	3083.3799	3730.7762	3846.3837	4837.9367
3808.6597	3334.0310	2770.3267	3077.4221	3713.7067	3831.1119	4827.6535
3796.3334	3326.4765	2766.3670	3073.1474	3697.9636	3819.3188	4804.9191
3786.0403	3320.6742	2763.0387	3069.4974	3685.5037	3809.2342	4787.5311
3773.9250	3315.5036	2759.7506	3065.7783	3671.6218	3795.8590	4769.1208
3759.3037	3309.1613	2756.3325	3062.4664	3653.7881	3780.3393	4747.3515
3737.1981	3301.8099	2752.7206	3058.9317	3634.6560	3764.1901	4734.5123
3727.7905	3294.3669	2749.0368	3055.5098	3620.1284	3749.6630	4721.1230
3715.6055	3286.5511	2745.4324	3051.7286	3609.4506	3739.5664	4703.8245
3700.2487	3280.3038	2742.1704	3048.6462	3600.2093	3730.4569	4692.0972
3689.6322	3274.5089	2738.9250	3045.6525	3590.0359	3716.2087	4685.9643
3734.0582	3269.6202	2736.8750	3043.8638	3616.5693	3746.8900	4726.7057
3827.9334	3278.1293	2737.3007	3045.5302	3634.7132	3770.1709	4733.4004
488.7237	231.1279	231.4950	209.5715	248.6654	250.9479	344.6316
501.2866	209.9250	232.9078	222.5066	257.7176	261.1533	340.1412
509.1198	190.1677	233.5525	227.5082	261.6639	265.5706	350.8191
504.6147	192.9781	234.1542	229.9683	263.4891	268.0983	349.1338

Experiment 4

LVDT 1	LVDT 2	LVDT 3	LVDT 4	LVDT 5	LVDT 6	LVDT 7
in	in	in	in	in	in	in
0.0515	0.2330	0.1272	0.0707	0.1038	0.0456	0.0627
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0627
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0627
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0627

0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0627
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0707	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0708	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0708	0.1038	0.0456	0.0628
0.0515	0.2330	0.1271	0.0708	0.1038	0.0456	0.0628
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001
0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001
0.0000	0.0000	0.0001	0.0000	0.0001	-0.0001	0.0001
0.0000	0.0000	0.0001	0.0000	0.0001	-0.0001	0.0001
0.0000	0.0000	0.0001	-0.0001	0.0002	-0.0002	0.0000
0.0000	0.0000	0.0001	-0.0001	0.0003	-0.0003	-0.0002
0.0000	0.0000	0.0002	-0.0001	0.0003	-0.0003	-0.0003
0.0001	0.0000	0.0004	-0.0003	0.0009	-0.0008	-0.0015
0.0001	0.0000	0.0007	-0.0007	0.0019	-0.0021	-0.0047
0.0004	-0.0002	0.0012	-0.0011	0.0024	-0.0024	-0.0050
0.0011	-0.0007	0.0027	-0.0024	0.0052	-0.0051	-0.0110
0.0012	-0.0009	0.0034	-0.0032	0.0069	-0.0068	-0.0148
0.0015	-0.0011	0.0037	-0.0034	0.0071	-0.0070	-0.0151
0.0017	-0.0013	0.0042	-0.0039	0.0080	-0.0078	-0.0170
0.0017	-0.0013	0.0043	-0.0040	0.0083	-0.0082	-0.0180
0.0019	-0.0015	0.0045	-0.0042	0.0086	-0.0084	-0.0185
0.0019	-0.0015	0.0047	-0.0044	0.0089	-0.0088	-0.0195
0.0020	-0.0016	0.0048	-0.0045	0.0091	-0.0089	-0.0199
0.0020	-0.0016	0.0048	-0.0045	0.0092	-0.0090	-0.0200
0.0021	-0.0017	0.0051	-0.0048	0.0096	-0.0094	-0.0212
0.0022	-0.0017	0.0051	-0.0048	0.0097	-0.0095	-0.0214
0.0022	-0.0017	0.0051	-0.0048	0.0097	-0.0095	-0.0214
0.0022	-0.0018	0.0053	-0.0050	0.0100	-0.0098	-0.0222
0.0023	-0.0018	0.0054	-0.0050	0.0102	-0.0099	-0.0226
0.0023	-0.0018	0.0054	-0.0051	0.0103	-0.0100	-0.0230

0.0024	-0.0019	0.0056	-0.0052	0.0105	-0.0103	-0.0236
0.0024	-0.0019	0.0056	-0.0052	0.0106	-0.0103	-0.0238
0.0024	-0.0019	0.0056	-0.0053	0.0106	-0.0103	-0.0239
0.0024	-0.0019	0.0056	-0.0053	0.0106	-0.0103	-0.0239
0.0024	-0.0019	0.0056	-0.0053	0.0106	-0.0103	-0.0239
0.0024	-0.0019	0.0057	-0.0053	0.0107	-0.0104	-0.0240
0.0025	-0.0020	0.0057	-0.0054	0.0107	-0.0104	-0.0243
0.0025	-0.0020	0.0058	-0.0054	0.0108	-0.0105	-0.0246
0.0025	-0.0020	0.0058	-0.0054	0.0109	-0.0106	-0.0248
0.0025	-0.0020	0.0058	-0.0054	0.0109	-0.0106	-0.0249
0.0025	-0.0021	0.0058	-0.0055	0.0109	-0.0106	-0.0250
0.0025	-0.0021	0.0059	-0.0055	0.0110	-0.0107	-0.0252
0.0026	-0.0021	0.0059	-0.0056	0.0111	-0.0108	-0.0255
0.0026	-0.0021	0.0059	-0.0056	0.0111	-0.0108	-0.0256
0.0026	-0.0022	0.0060	-0.0056	0.0112	-0.0108	-0.0259
0.0026	-0.0022	0.0060	-0.0057	0.0112	-0.0109	-0.0261
0.0026	-0.0022	0.0060	-0.0057	0.0113	-0.0109	-0.0263
0.0026	-0.0022	0.0061	-0.0057	0.0113	-0.0110	-0.0264
0.0026	-0.0022	0.0061	-0.0057	0.0113	-0.0110	-0.0266
0.0027	-0.0023	0.0061	-0.0058	0.0114	-0.0111	-0.0271
0.0027	-0.0022	0.0062	-0.0058	0.0114	-0.0111	-0.0271
0.0027	-0.0023	0.0062	-0.0058	0.0115	-0.0111	-0.0273
0.0027	-0.0023	0.0062	-0.0059	0.0115	-0.0112	-0.0275
0.0027	-0.0023	0.0062	-0.0059	0.0116	-0.0112	-0.0278
0.0027	-0.0023	0.0062	-0.0059	0.0116	-0.0112	-0.0278
0.0027	-0.0023	0.0063	-0.0059	0.0116	-0.0112	-0.0280
0.0028	-0.0024	0.0063	-0.0059	0.0116	-0.0113	-0.0284
0.0028	-0.0024	0.0063	-0.0059	0.0117	-0.0113	-0.0284
0.0028	-0.0024	0.0063	-0.0059	0.0117	-0.0113	-0.0285
0.0028	-0.0023	0.0063	-0.0059	0.0117	-0.0113	-0.0285
0.0028	-0.0023	0.0063	-0.0059	0.0117	-0.0113	-0.0286
0.0028	-0.0024	0.0064	-0.0060	0.0117	-0.0114	-0.0290
0.0028	-0.0024	0.0064	-0.0060	0.0117	-0.0114	-0.0292
0.0028	-0.0025	0.0064	-0.0061	0.0118	-0.0114	-0.0296
0.0028	-0.0025	0.0064	-0.0060	0.0118	-0.0114	-0.0296
0.0029	-0.0025	0.0064	-0.0061	0.0118	-0.0114	-0.0300
0.0029	-0.0025	0.0064	-0.0061	0.0118	-0.0114	-0.0302
0.0029	-0.0025	0.0064	-0.0061	0.0118	-0.0114	-0.0302
0.0029	-0.0026	0.0065	-0.0061	0.0118	-0.0114	-0.0307
0.0029	-0.0026	0.0065	-0.0061	0.0118	-0.0115	-0.0307
0.0029	-0.0026	0.0065	-0.0061	0.0118	-0.0115	-0.0309
0.0029	-0.0026	0.0065	-0.0061	0.0118	-0.0114	-0.0312
0.0029	-0.0026	0.0065	-0.0061	0.0118	-0.0114	-0.0313
0.0029	-0.0027	0.0065	-0.0062	0.0118	-0.0114	-0.0316

0.0029	-0.0026	0.0065	-0.0061	0.0118	-0.0114	-0.0317
0.0029	-0.0026	0.0065	-0.0062	0.0118	-0.0114	-0.0318
0.0029	-0.0027	0.0065	-0.0062	0.0118	-0.0114	-0.0321
0.0029	-0.0027	0.0065	-0.0061	0.0118	-0.0114	-0.0322
0.0029	-0.0026	0.0065	-0.0062	0.0118	-0.0114	-0.0323
0.0029	-0.0027	0.0065	-0.0062	0.0117	-0.0113	-0.0325
0.0029	-0.0027	0.0065	-0.0061	0.0117	-0.0113	-0.0326
0.0029	-0.0027	0.0065	-0.0061	0.0117	-0.0113	-0.0327
0.0029	-0.0026	0.0065	-0.0061	0.0117	-0.0113	-0.0327
0.0029	-0.0026	0.0065	-0.0061	0.0117	-0.0113	-0.0327
0.0029	-0.0027	0.0065	-0.0062	0.0117	-0.0113	-0.0330
0.0029	-0.0027	0.0065	-0.0061	0.0117	-0.0113	-0.0331
0.0029	-0.0027	0.0065	-0.0061	0.0117	-0.0112	-0.0332
0.0029	-0.0027	0.0065	-0.0061	0.0117	-0.0112	-0.0334
0.0029	-0.0027	0.0065	-0.0061	0.0116	-0.0112	-0.0335
0.0029	-0.0027	0.0065	-0.0061	0.0116	-0.0112	-0.0336
0.0029	-0.0027	0.0064	-0.0061	0.0116	-0.0111	-0.0339
0.0029	-0.0027	0.0064	-0.0060	0.0116	-0.0111	-0.0339
0.0029	-0.0027	0.0064	-0.0060	0.0116	-0.0111	-0.0339
0.0029	-0.0027	0.0064	-0.0060	0.0116	-0.0111	-0.0340
0.0029	-0.0027	0.0064	-0.0060	0.0115	-0.0110	-0.0342
0.0029	-0.0027	0.0064	-0.0060	0.0115	-0.0110	-0.0343
0.0029	-0.0027	0.0064	-0.0060	0.0115	-0.0110	-0.0343
0.0029	-0.0027	0.0064	-0.0060	0.0114	-0.0109	-0.0346
0.0029	-0.0027	0.0064	-0.0060	0.0114	-0.0109	-0.0347
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0109	-0.0347
0.0029	-0.0027	0.0064	-0.0060	0.0114	-0.0109	-0.0348
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0108	-0.0349
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0109	-0.0350
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0109	-0.0351
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0109	-0.0351
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0109	-0.0353
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0109	-0.0354
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0109	-0.0354
0.0029	-0.0027	0.0064	-0.0059	0.0114	-0.0109	-0.0355
0.0029	-0.0028	0.0064	-0.0060	0.0114	-0.0108	-0.0356
0.0029	-0.0028	0.0064	-0.0060	0.0114	-0.0109	-0.0356
0.0029	-0.0028	0.0064	-0.0060	0.0115	-0.0109	-0.0356
0.0030	-0.0028	0.0064	-0.0060	0.0114	-0.0108	-0.0358
0.0030	-0.0028	0.0065	-0.0060	0.0115	-0.0109	-0.0359
0.0030	-0.0028	0.0065	-0.0060	0.0115	-0.0109	-0.0359
0.0030	-0.0029	0.0065	-0.0061	0.0115	-0.0108	-0.0360
0.0030	-0.0029	0.0065	-0.0061	0.0116	-0.0109	-0.0360
0.0030	-0.0029	0.0066	-0.0061	0.0119	-0.0111	-0.0359

0.0031	-0.0030	0.0068	-0.0063	0.0122	-0.0114	-0.0356
0.0032	-0.0032	0.0070	-0.0065	0.0125	-0.0116	-0.0354
0.0032	-0.0032	0.0070	-0.0065	0.0126	-0.0116	-0.0354
0.0032	-0.0032	0.0070	-0.0065	0.0126	-0.0116	-0.0353
0.0032	-0.0032	0.0070	-0.0065	0.0126	-0.0117	-0.0353
0.0033	-0.0033	0.0071	-0.0066	0.0127	-0.0117	-0.0352
0.0033	-0.0034	0.0072	-0.0068	0.0129	-0.0118	-0.0350
0.0033	-0.0034	0.0073	-0.0068	0.0130	-0.0118	-0.0349
0.0034	-0.0035	0.0073	-0.0069	0.0131	-0.0119	-0.0348
0.0034	-0.0035	0.0074	-0.0069	0.0132	-0.0119	-0.0347
0.0034	-0.0035	0.0074	-0.0069	0.0132	-0.0120	-0.0346
0.0034	-0.0035	0.0075	-0.0070	0.0133	-0.0120	-0.0346
0.0035	-0.0037	0.0076	-0.0070	0.0134	-0.0120	-0.0344
0.0035	-0.0033	0.0075	-0.0066	0.0133	-0.0118	-0.0342
0.0035	-0.0033	0.0075	-0.0066	0.0133	-0.0118	-0.0342
0.0035	-0.0033	0.0075	-0.0066	0.0133	-0.0118	-0.0342
0.0035	-0.0034	0.0076	-0.0068	0.0134	-0.0120	-0.0342
0.0036	-0.0037	0.0077	-0.0069	0.0135	-0.0121	-0.0341
0.0037	-0.0039	0.0077	-0.0071	0.0136	-0.0122	-0.0341
0.0037	-0.0040	0.0078	-0.0072	0.0137	-0.0122	-0.0339
0.0037	-0.0040	0.0078	-0.0072	0.0137	-0.0122	-0.0339
0.0038	-0.0041	0.0079	-0.0073	0.0137	-0.0122	-0.0338
0.0038	-0.0041	0.0079	-0.0073	0.0138	-0.0122	-0.0337
0.0038	-0.0041	0.0079	-0.0073	0.0138	-0.0122	-0.0337
0.0038	-0.0041	0.0079	-0.0072	0.0138	-0.0122	-0.0336
0.0038	-0.0042	0.0080	-0.0074	0.0139	-0.0123	-0.0335
0.0038	-0.0042	0.0080	-0.0073	0.0140	-0.0123	-0.0334
0.0039	-0.0042	0.0081	-0.0074	0.0140	-0.0123	-0.0333
0.0039	-0.0043	0.0081	-0.0075	0.0142	-0.0123	-0.0332
0.0039	-0.0043	0.0082	-0.0075	0.0142	-0.0124	-0.0331
0.0040	-0.0045	0.0083	-0.0077	0.0144	-0.0125	-0.0328
0.0040	-0.0045	0.0084	-0.0077	0.0145	-0.0125	-0.0327
0.0041	-0.0045	0.0084	-0.0077	0.0146	-0.0125	-0.0326
0.0041	-0.0044	0.0084	-0.0077	0.0146	-0.0125	-0.0326
0.0042	-0.0047	0.0086	-0.0080	0.0148	-0.0127	-0.0323
0.0042	-0.0047	0.0087	-0.0080	0.0149	-0.0128	-0.0322
0.0042	-0.0047	0.0088	-0.0081	0.0150	-0.0129	-0.0320
0.0044	-0.0050	0.0090	-0.0083	0.0153	-0.0130	-0.0316
0.0044	-0.0050	0.0091	-0.0084	0.0154	-0.0131	-0.0314
0.0047	-0.0049	0.0097	-0.0086	0.0168	-0.0139	-0.0292
0.0047	-0.0050	0.0098	-0.0087	0.0170	-0.0140	-0.0284
0.0049	-0.0051	0.0101	-0.0088	0.0173	-0.0141	-0.0273
0.00488949	-0.00504905	0.01108727	0.05900856	1.24688E+36	1.23888E+36	1.22566E+36
-0.08218607	2.75096E+36	1.20565E+36	0.20499634	1.24688E+36	1.23888E+36	1.22566E+36

-0.08220223	2.75096E+36	1.20565E+36	0.20503911	1.24688E+36	1.23888E+36	1.22566E+36
-0.0822015	2.75096E+36	1.20565E+36	0.20508101	1.24688E+36	1.23888E+36	1.22566E+36
-0.08220157	2.75096E+36	1.20565E+36	0.20511454	1.24688E+36	1.23888E+36	1.22566E+36
-0.08219869	2.75096E+36	1.20565E+36	0.20514017	1.24688E+36	1.23888E+36	1.22566E+36
-0.08219933	2.75096E+36	1.20565E+36	0.20515614	1.24688E+36	1.23888E+36	1.22566E+36
-0.0821993	2.75096E+36	1.20565E+36	0.20516933	1.24688E+36	1.23888E+36	1.22566E+36

Pressure Transducer	Load Cell 1	Load Cell 2	Load Cell 3	Load Cell 4	Load Cell 5	Load Cell 6	Time
lbs	lbs	lbs	lbs	lbs	lbs	lbs	Seconds
87.1	-62.4	10.4	51.1	-4.3	-1.3	585.3	46.1
87.5	-63.3	10.0	51.0	-4.8	-1.6	597.9	58.1
84.2	-63.2	9.9	50.9	-4.9	-1.6	605.1	60.1
85.0	-63.1	10.0	50.9	-5.1	-1.8	603.4	62.1
90.5	-63.5	10.0	50.7	-4.9	-1.6	599.6	64.1
92.8	-63.6	10.0	50.9	-4.8	-1.7	607.3	66.1
95.6	-64.0	9.9	50.9	-5.0	-1.7	608.4	68.1
98.6	-63.8	10.1	51.0	-4.8	-1.7	604.0	70.1
99.5	-64.0	10.1	51.1	-4.8	-1.8	605.6	72.1
99.7	-63.9	9.9	50.8	-5.0	-1.7	605.6	74.1
101.0	-63.7	9.9	50.8	-5.2	-1.6	601.8	76.1
101.2	-64.0	9.9	50.8	-5.0	-1.6	598.5	78.1
95.6	-64.0	10.0	51.0	-4.9	-1.6	591.9	80.1
97.4	-64.0	9.8	50.7	-4.9	-1.4	603.4	82.1
100.2	-64.2	9.9	51.1	-4.9	-1.7	602.9	84.1
-5.9	0.3	0.0	-0.1	0.2	0.3	-1.6	86.1
-6.0	0.1	0.2	0.1	0.1	0.2	-3.3	88.1
-1.9	-0.1	0.2	-0.1	0.1	0.2	-1.6	90.1
-5.7	0.0	0.2	0.0	0.1	0.3	-3.9	92.1
-6.3	0.3	0.2	0.1	0.4	0.3	6.0	94.1
12.0	0.1	0.2	0.5	0.6	28.2	33.0	96.1
80.3	0.5	0.6	1.2	2.9	56.9	75.9	98.1
122.3	0.3	7.5	8.0	18.5	57.5	70.4	100.1
141.2	0.3	22.0	8.7	26.1	76.6	74.2	102.1
172.0	0.4	38.4	11.4	32.3	99.5	77.0	105.1
148.7	0.3	39.7	12.9	35.1	113.5	90.7	107.1
170.1	0.4	53.2	18.7	51.4	119.3	82.4	109.1
197.3	1.2	72.9	24.9	77.8	137.5	84.1	111.1
231.2	20.4	94.8	45.7	116.2	165.1	118.7	113.1
221.1	22.8	95.3	46.8	117.5	176.1	132.5	115.1
261.0	63.4	123.5	81.0	157.0	200.9	161.0	117.1
308.5	101.6	157.1	123.2	196.2	246.2	227.2	119.1
295.6	103.5	158.9	134.3	229.5	296.2	322.8	121.1
371.9	175.1	209.8	204.5	266.8	319.7	332.9	123.1
475.7	284.6	282.5	294.9	375.9	424.4	468.9	125.1

485.4	308.2	306.3	330.8	439.7	497.2	575.0	127
551.8	381.9	344.8	372.8	472.9	513.6	584.0	129
654.4	472.2	405.8	451.9	572.1	605.2	684.5	131
610.7	469.8	403.2	447.3	563.5	597.0	685.1	133
716.6	552.1	465.7	524.5	667.4	697.1	795.3	135
689.2	550.1	462.7	517.8	657.1	687.8	777.9	137
717.3	572.7	484.7	559.9	721.8	760.1	878.5	139
782.4	635.9	523.1	598.2	755.8	780.5	879.1	141
768.4	632.4	520.5	593.7	748.3	773.4	863.5	143
789.6	637.2	528.0	617.5	798.1	825.3	947.9	145
880.3	720.8	586.9	686.4	859.9	873.7	971.2	147
841.2	716.4	582.4	677.5	846.8	861.9	946.7	149
939.9	779.2	629.5	747.3	933.2	944.0	1060.4	151
933.2	806.0	647.8	767.0	953.7	955.5	1044.9	153
918.2	801.5	644.8	762.0	945.2	947.7	1023.3	155
903.7	799.8	643.3	759.6	941.2	943.7	1022.7	157
893.3	798.6	642.4	757.9	938.3	940.9	1018.5	159
917.4	799.3	643.5	759.7	955.3	972.4	1057.4	161
964.2	828.6	667.7	800.9	1002.1	1004.1	1112.5	163
1012.6	867.9	699.4	843.9	1047.6	1046.7	1149.6	165
1017.2	888.3	712.3	854.3	1051.4	1046.3	1130.4	167
993.2	884.7	709.5	849.6	1043.4	1038.8	1128.6	169
1038.4	910.3	729.6	878.9	1085.2	1076.6	1176.5	171
1053.3	921.7	737.9	891.7	1102.3	1096.2	1191.5	173
1075.7	939.7	755.2	919.6	1131.4	1129.1	1234.0	175
1104.6	975.5	781.5	946.5	1154.2	1143.6	1220.2	177
1133.8	985.9	791.3	959.3	1187.8	1175.9	1268.1	179
1179.8	1018.8	815.8	996.5	1217.6	1205.1	1305.2	181
1221.0	1042.7	838.9	1028.5	1252.1	1239.3	1329.1	183
1225.8	1062.1	852.8	1039.2	1258.4	1242.7	1319.6	185
1193.4	1058.2	849.6	1034.3	1248.5	1232.9	1315.4	187
1322.4	1116.0	901.4	1115.5	1349.9	1340.1	1448.2	189
1330.5	1149.2	926.7	1135.5	1363.1	1344.0	1421.3	191
1297.0	1144.0	922.9	1129.2	1367.3	1357.9	1442.9	193
1393.1	1183.7	953.3	1165.1	1417.2	1395.1	1472.2	195
1449.5	1226.5	998.0	1227.0	1472.2	1461.1	1540.8	197
1418.2	1232.4	1000.7	1226.1	1461.7	1443.6	1523.8	199
1484.3	1251.2	1017.7	1247.2	1510.0	1486.1	1570.1	201
1555.4	1290.9	1052.2	1293.3	1562.4	1543.6	1627.0	203
1557.8	1317.6	1077.9	1321.7	1573.5	1553.5	1641.0	205
1525.5	1311.4	1073.1	1314.9	1561.6	1541.3	1615.8	207
1509.9	1307.9	1070.6	1311.2	1555.8	1534.6	1609.4	209
1497.7	1305.9	1069.0	1308.7	1551.7	1530.0	1592.4	211
1714.1	1390.6	1153.1	1422.2	1705.2	1683.3	1768.3	213

1653.2	1394.6	1155.9	1415.8	1676.2	1656.6	1724.9	215
1775.9	1446.2	1212.1	1485.3	1798.6	1776.8	1862.1	217
1796.5	1481.5	1247.5	1517.7	1800.3	1779.2	1849.8	219
1763.4	1474.5	1243.2	1513.0	1833.4	1817.4	1905.5	221
1965.9	1571.1	1345.1	1629.9	1940.7	1915.6	1995.8	223
1905.3	1563.5	1336.5	1616.0	1915.0	1892.3	1948.3	225
1949.9	1563.8	1343.2	1637.4	1979.3	1960.4	2050.9	227
2076.9	1655.8	1432.6	1725.3	2048.4	2025.3	2089.0	229
2046.1	1647.4	1438.5	1751.8	2093.4	2069.9	2149.4	231
2187.6	1708.9	1494.1	1808.7	2170.8	2151.8	2233.3	233
2181.2	1735.8	1520.9	1822.6	2158.8	2138.9	2202.8	235
2266.0	1757.3	1548.6	1868.6	2226.7	2216.6	2307.1	237
2336.0	1822.7	1614.6	1933.1	2294.7	2275.7	2339.4	239
2288.7	1817.3	1611.6	1925.1	2273.2	2257.6	2325.3	241
2392.0	1842.7	1643.7	1975.9	2354.1	2340.3	2429.7	243
2473.6	1910.4	1712.3	2041.5	2419.3	2401.0	2477.2	245
2422.6	1905.3	1707.2	2032.2	2396.5	2380.6	2442.6	247
2529.2	1933.7	1738.5	2069.4	2465.4	2461.3	2559.3	249
2632.1	2008.2	1813.5	2150.2	2546.7	2528.7	2603.1	251
2554.1	1996.7	1805.3	2139.1	2525.0	2509.2	2584.4	253
2519.6	1990.7	1801.6	2133.7	2514.5	2498.2	2565.7	256
2494.2	1987.1	1799.2	2130.2	2508.0	2491.1	2561.6	258
2470.0	1984.3	1797.1	2127.6	2503.8	2517.0	2616.7	260
2770.8	2093.8	1907.5	2254.9	2672.9	2656.7	2749.5	262
2754.7	2090.9	1911.7	2261.0	2715.7	2700.6	2795.4	264
2760.2	2116.4	1935.9	2279.2	2723.3	2726.9	2827.7	266
2878.1	2171.4	1995.2	2358.0	2808.4	2791.7	2897.5	268
2832.2	2178.6	2002.1	2354.4	2782.2	2769.2	2865.2	270
2980.1	2227.4	2057.0	2419.5	2896.3	2880.7	3003.6	272
3027.3	2278.3	2106.8	2472.2	2928.9	2913.6	3028.5	274
2959.2	2270.7	2101.5	2463.3	2908.0	2894.9	2997.9	276
2933.6	2265.2	2098.0	2457.9	2898.9	2897.2	3022.3	278
3086.7	2305.5	2144.8	2514.7	3011.8	3002.2	3132.9	280
3141.5	2359.9	2196.7	2573.0	3061.6	3047.8	3178.8	282
3103.9	2363.2	2202.4	2573.7	3037.2	3025.6	3148.2	284
3152.1	2360.4	2209.3	2590.3	3103.2	3096.7	3238.4	286
3269.6	2448.5	2292.3	2671.5	3186.3	3173.3	3338.2	288
3243.3	2463.4	2310.6	2689.5	3173.6	3161.2	3314.4	290
3252.7	2456.1	2306.1	2685.3	3192.9	3185.9	3350.1	292
3337.0	2495.7	2353.6	2734.8	3265.4	3255.7	3425.0	294
3392.8	2547.1	2400.1	2783.4	3307.6	3294.1	3480.0	296
3383.0	2559.7	2415.5	2797.4	3309.2	3292.8	3463.0	298
3341.0	2554.4	2411.7	2791.0	3294.4	3293.5	3485.7	300
3453.2	2596.2	2460.0	2843.6	3388.3	3373.7	3562.3	302

3539.9	2646.2	2507.4	2895.0	3456.2	3437.9	3644.9	304
3504.1	2660.5	2524.9	2911.3	3440.3	3423.1	3623.0	306
3541.4	2655.6	2524.8	2918.4	3472.9	3466.6	3685.7	308
3650.7	2723.9	2595.7	2988.8	3555.2	3536.8	3764.4	310
3693.0	2761.2	2633.1	3026.5	3588.2	3564.3	3790.6	312
3630.1	2755.9	2629.3	3019.9	3572.5	3561.4	3800.1	314
3730.3	2777.2	2664.7	3071.4	3655.5	3642.5	3902.8	316
3822.4	2843.1	2722.7	3125.2	3716.5	3694.4	3966.4	318
3790.8	2860.5	2740.9	3142.4	3710.0	3686.5	3948.5	320
3749.1	2853.0	2735.3	3136.8	3736.9	3724.4	4012.2	322
3930.8	2927.6	2816.3	3229.5	3843.7	3821.0	4128.2	324
3933.9	2964.4	2847.2	3257.7	3854.5	3824.4	4122.7	326
3928.2	2955.2	2838.7	3249.3	3887.6	3868.6	4192.4	328
4065.6	3031.4	2920.9	3325.4	3987.9	3952.1	4287.9	330
4051.9	3063.5	2947.8	3348.4	3988.2	3947.4	4270.6	332
4006.4	3054.3	2940.5	3340.8	3969.6	3930.0	4247.7	334
3986.6	3048.2	2935.6	3335.1	3958.9	3918.7	4237.1	336
3981.6	3043.8	2932.1	3331.2	4002.1	3977.0	4324.7	338
4204.5	3117.4	3021.7	3415.7	4143.1	4101.7	4470.9	340
4182.9	3161.9	3051.1	3443.7	4118.7	4074.2	4430.7	342
4228.7	3155.3	3051.9	3451.0	4166.8	4130.2	4516.1	344
4350.0	3221.7	3126.9	3521.7	4247.2	4203.9	4594.8	346
4377.2	3260.5	3157.1	3550.3	4267.6	4216.2	4608.8	348
4300.4	3257.7	3153.2	3548.3	4245.6	4195.5	4589.8	350
4431.7	3290.3	3204.4	3605.9	4346.4	4311.1	4760.0	352
4510.6	3373.1	3109.3	3669.6	4409.0	3994.7	4770.1	354
4187.9	3366.0	2860.3	3654.9	4377.9	3973.6	4739.4	356
4155.3	3357.7	2864.2	3648.5	4364.1	3964.2	4713.7	358
4134.0	3352.1	2866.0	3644.5	4357.0	3977.1	4719.8	360
4515.8	3369.3	3084.9	3688.8	4432.8	4231.6	4843.5	362
4444.6	3382.8	3080.1	3698.2	4412.1	4206.4	4808.6	364
4689.9	3466.7	3203.8	3796.9	4577.3	4395.4	5003.7	366
4610.8	3486.6	3198.4	3806.3	4541.7	4365.2	4965.3	368
4573.8	3478.1	3192.6	3800.5	4536.0	4381.4	5011.9	370
4830.8	3560.1	3308.1	3915.8	4695.7	4539.7	5148.3	372
4737.7	3576.4	3303.8	3916.3	4658.9	4510.7	5106.0	374
4698.3	3567.3	3294.7	3910.0	4641.8	4494.4	5091.4	376
4808.7	3564.8	3334.3	3953.8	4758.2	4632.4	5283.6	378
4889.0	3676.5	3397.5	4029.9	4790.9	4657.4	5261.9	380
4860.0	3665.3	3385.1	4022.4	4810.1	4678.0	5319.3	382
5061.3	3735.6	3478.5	4122.4	4948.0	4817.9	5447.5	384
5013.1	3767.3	3474.7	4141.1	4908.4	4769.6	5399.4	387
5166.2	3824.7	3547.0	4224.7	5053.3	4926.3	5597.9	389
5157.0	3868.2	3547.6	4255.5	5043.3	4884.7	5559.3	391

5102.3	3857.3	3534.3	4246.0	5021.3	4863.0	5523.3	393
5062.9	3850.0	3526.5	4239.1	5008.0	4848.8	5501.1	395
5101.5	3845.0	3526.0	4243.6	5106.5	4987.4	5696.7	397
5286.0	3954.2	3633.3	4353.1	5155.4	5005.2	5687.8	399
5230.2	3946.3	3623.9	4346.6	5134.2	4984.3	5659.7	401
5466.1	4034.3	3744.6	4452.5	5293.3	5167.4	5884.8	403
5388.3	4052.4	3733.7	4456.9	5254.6	5131.1	5847.3	405
5586.6	4116.8	3826.3	4536.7	5392.5	5306.4	5983.6	407
5502.0	4147.4	3838.8	4528.8	5350.3	5261.0	5938.9	409
5730.9	4233.2	3947.0	4608.4	5489.7	5434.3	6146.4	411
5631.6	4244.2	3943.6	4617.0	5448.3	5391.1	6085.1	413
287.0818595	4.9381728	8.27318559	69.91267187	86.85814687	63.26247178	83.55043228	414.9
258.2112861	16.36575245	6.6940599	63.06602556	88.05659231	64.0543366	81.90201729	416.4
262.7640639	16.50278046	6.9729533	62.04354816	87.81393078	65.01376323	88.49567723	418.0
259.7553944	16.40819525	6.9231119	61.14045852	87.75788692	65.28184654	83.55043228	419.5
260.4258937	16.39646414	7.03730356	60.59830578	87.77477653	65.72622212	88.49567723	421.1
265.3036046	15.9587216	7.10355334	60.12102089	87.33408575	66.07735326	87.94236311	422.7
267.2822025	15.67025829	7.24045804	60.09342874	86.98322826	66.1261615	90.69740634	424.2
270.1808452	15.37163349	7.17736733	59.69520409	86.65540184	66.30755505	86.84726225	425.8

Experiment 5

LVDT 1	LVDT 2	LVDT 3	LVDT 4	LVDT 5	LVDT 6	LVDT 7
in	in	in	in	in	in	in
0.00000231	-0.00002325	0.00000119	0.00002603	-0.00000185	-0.00002396	-0.00000193
-0.00000236	-0.00001932	-0.00000059	0.00002733	-0.00000238	-0.00002444	-0.00000264
0.00000228	-0.00001765	0.00000059	0.00002525	-0.00000218	-0.00002389	-0.00000105
-0.00000122	-0.00002116	-0.00000143	0.00002399	-0.0000023	-0.00002388	-0.000001
-0.00000144	-0.0000205	0.00000148	0.00002685	-0.00000251	-0.00002406	-0.00000232
0.00000079	-0.00002149	-0.00000137	0.00002501	-0.00000244	-0.00002372	-0.00000058
-0.00000012	-0.00002043	0.00000052	0.00002477	-0.00000252	-0.0000236	-0.00000285
-0.00000155	-0.00001766	-0.00000234	0.00002304	-0.00000255	-0.00002407	-0.00000239
0.00000342	-0.00001741	0.00000072	0.0000266	-0.00000233	-0.00002387	-0.00000304
-0.00000307	-0.00002074	-0.0000014	0.00002458	-0.00000262	-0.00002432	-0.00000203
-0.00000211	-0.00001863	0.00000223	0.00002677	-0.0000025	-0.0000243	-0.0000028
-0.00000168	-0.00001535	-0.00000009	0.00002615	-0.00000304	-0.00002432	-0.00000195
-0.00000269	-0.00001796	-0.00000082	0.0000262	-0.00000265	-0.00002431	-0.00000082
-0.00000116	-0.00001895	0.00000022	0.00002725	-0.00000257	-0.00002469	-0.00000011
-0.00000229	-0.00001797	-0.0000025	0.00002491	-0.0000027	-0.00002399	-0.00000131
-0.00000078	-0.00001859	0.00000043	0.00002705	-0.00000252	-0.00002419	-0.00000013
-0.00000037	-0.00001594	-0.00000067	0.00002685	-0.0000032	-0.00002427	-0.00000126
-0.00000218	-0.00001723	0.00000119	0.00002675	-0.00000254	-0.00002429	-0.00000046
-0.00000059	-0.00001758	0.00000077	0.00002538	-0.00000253	-0.00002394	-0.00000125
-0.00000061	-0.00001827	0.00000152	0.00002611	-0.00000218	-0.00002403	-0.00000062

-0.00000133	-0.00002006	-0.00000053	0.00002479	-0.00000274	-0.00002416	-0.00000228
-0.00000002	-0.00001741	0.000002	0.00002349	-0.00000263	-0.0000239	-0.00000145
0.00000068	-0.00001913	-0.00000089	0.00002739	-0.00000297	-0.00002427	-0.00000061
-0.0000012	-0.00001815	-0.000001	0.00002627	-0.00000316	-0.00002409	-0.00000089
-0.00000096	-0.00001612	-0.00000138	0.00002646	-0.00000341	-0.00002363	-0.00000158
0.00000126	-0.00001907	0.00000023	0.00003075	-0.00000853	-0.00000749	-0.00000182
0.00000892	-0.00001758	0.00000279	0.00002941	-0.00000878	-0.00000628	-0.00000134
0.00001261	-0.00001527	-0.00000045	0.00002952	-0.00000825	-0.00000567	0.00000108
0.00001539	-0.00001485	-0.00000027	0.00003307	-0.00000886	0.00000112	-0.00000145
0.00012275	-0.00002158	-0.0000001	0.00003962	-0.00002686	0.00003437	0.00000417
0.00013706	-0.00002756	0.00000005	0.0000406	-0.00002785	0.00003734	0.00000926
0.0016181	-0.00061292	0.00028925	-0.00020209	0.00001756	0.00006818	0.00065758
0.00185741	-0.00070425	0.00033536	-0.00023945	0.00003323	0.00005835	0.00070705
0.00268533	-0.00107789	0.0005636	-0.00044637	0.00011788	0.00001202	0.00145422
0.00406013	-0.00168489	0.00090604	-0.00073169	0.00021261	-0.00005002	0.00179591
0.00412561	-0.00171683	0.00092356	-0.0007504	0.00022004	-0.00005576	0.0018239
0.00522755	-0.00226774	0.00131925	-0.001132	0.00037551	-0.00017893	0.00275365
0.00591655	-0.00248957	0.00149496	-0.00125672	0.00042332	-0.00021187	0.0028933
0.00595171	-0.00249826	0.00151378	-0.00127536	0.00043048	-0.00021837	0.00292079
0.00596882	-0.00250869	0.00152253	-0.00128401	0.00043476	-0.00022197	0.00293743
0.006012	-0.00255501	0.00160223	-0.0014119	0.00049692	-0.0002874	0.0034281
0.0082532	-0.00322687	0.00240084	-0.0020537	0.00075959	-0.00049696	0.00446005
0.00825407	-0.00322258	0.00242269	-0.00208188	0.00076998	-0.00050887	0.00448076
0.0098144	-0.00354624	0.00309613	-0.00265293	0.00102645	-0.00070995	0.00560025
0.00981445	-0.00354435	0.00311335	-0.00267774	0.00103752	-0.000721	0.00560829
0.00981326	-0.00354451	0.00311842	-0.0026839	0.00104188	-0.00072544	0.00561002
0.00981026	-0.0035472	0.00313322	-0.00275893	0.00111184	-0.00079755	0.00637527
0.01140614	-0.00378749	0.00380383	-0.00326087	0.0013146	-0.00093172	0.0067293
0.01140259	-0.00378533	0.00380614	-0.00327258	0.00132213	-0.00093724	0.00672971
0.01139988	-0.0037832	0.00380663	-0.00327991	0.00132508	-0.00094016	0.00683161
0.01234778	-0.00389326	0.0041446	-0.00356813	0.00146617	-0.00104063	0.00730717
0.01234278	-0.00388685	0.00414727	-0.00357693	0.00147166	-0.00104443	0.00762829
0.01383752	-0.00388294	0.00473846	-0.00409044	0.00172385	-0.00123034	0.00830507
0.01383754	-0.0038514	0.00473942	-0.00410243	0.00173151	-0.00123553	0.00830238
0.01383412	-0.00383954	0.00474035	-0.00410756	0.00173528	-0.00123797	0.00830352
0.0138308	-0.00383392	0.00473991	-0.00411179	0.00173764	-0.00123948	0.00830178
0.01383248	-0.00383049	0.00473608	-0.00411618	0.00173919	-0.00124216	0.00830238
0.01383017	-0.0038267	0.00473954	-0.00411766	0.00174044	-0.0012425	0.00830315
0.01382895	-0.00382481	0.00474034	-0.00412521	0.00174387	-0.00125427	0.00830205
0.01382567	-0.00382439	0.00473947	-0.00412631	0.0017447	-0.00125451	0.00830401
0.01382739	-0.00382447	0.00473773	-0.00412697	0.00174493	-0.00125456	0.00830224
0.0138262	-0.00382106	0.00473648	-0.00412739	0.00174505	-0.00125454	0.0083031
0.01382493	-0.00382343	0.00473578	-0.00412862	0.00174527	-0.00125449	0.00830446
0.01382623	-0.00382243	0.00473612	-0.00412737	0.00174524	-0.00125441	0.00830475

0.01382575	-0.00382381	0.00473737	-0.00413028	0.00174607	-0.00125469	0.00830379
0.01382472	-0.00381992	0.00473783	-0.00413062	0.00174662	-0.00125503	0.00830359
0.01382555	-0.00382378	0.00473781	-0.00413228	0.0017471	-0.00125493	0.00830346
0.01382474	-0.00382554	0.00473781	-0.00413568	0.00174675	-0.00125459	0.00830266
0.01382639	-0.00382371	0.00473791	-0.00413372	0.00174684	-0.0012548	0.00830202
0.01382726	-0.00382417	0.00473935	-0.00413207	0.00174705	-0.00125525	0.00830263
0.01382528	-0.00382337	0.00473784	-0.0041347	0.00174691	-0.00125478	0.00830261
0.01539718	-0.00394998	0.00536606	-0.00457955	0.00198167	-0.00140063	0.0094342
0.01591041	-0.00393933	0.00539538	-0.00459549	0.00199457	-0.00140694	0.00943661
0.01772228	-0.00405092	0.0060403	-0.00489946	0.0022539	-0.00151971	0.01055146
0.0182562	-0.00409717	0.00638883	-0.00508195	0.00247062	-0.00158559	0.01166897
0.01962805	-0.00412911	0.00672533	-0.00513919	0.00256874	-0.0016046	0.01170196
0.01962495	-0.00412643	0.00672711	-0.00513782	0.00257488	-0.0016044	0.01169855
0.01962238	-0.00412432	0.00672529	-0.0051399	0.00257886	-0.00160495	0.01169504
0.01961979	-0.00412792	0.0067239	-0.00514053	0.00258171	-0.00160494	0.01169089
0.01961956	-0.00412482	0.0067248	-0.00514151	0.00258379	-0.001619	0.01211945
0.02186599	-0.00426143	0.0074888	-0.00529559	0.00289245	-0.00161935	0.01299087
0.0218517	-0.00424724	0.00749044	-0.00529078	0.00290336	-0.00160553	0.01298609
0.02183879	-0.00424261	0.00749022	-0.00529012	0.00290843	-0.00160054	0.01298
0.02237245	-0.00426963	0.00784713	-0.00530236	0.00311421	-0.0014334	0.01402177
0.0239098	-0.00421991	0.00830288	-0.00525983	0.00326691	-0.00125838	0.01433675
0.02390556	-0.00420452	0.00830525	-0.00524847	0.00327697	-0.0012354	0.01433739
0.02390121	-0.00419481	0.00832306	-0.00524714	0.00336486	-0.0011533	0.01526384
0.02611899	-0.00416216	0.00914653	-0.005171	0.00365217	-0.00088067	0.0157388
0.02611156	-0.00414937	0.00914823	-0.00515613	0.00366144	-0.00086489	0.01573401
0.02610204	-0.00414137	0.00914773	-0.00515237	0.0036665	-0.00085839	0.01572851
0.02703523	-0.00414853	0.00952905	-0.00515127	0.00387258	-0.0007053	0.01681237
0.02806207	-0.00412964	0.00985687	-0.00508085	0.00398618	-0.00058587	0.01688772
0.0280556	-0.00412138	0.00985918	-0.00506451	0.00399496	-0.00057195	0.01687836
0.02829968	-0.00413889	0.01010267	-0.00505962	0.00416016	-0.00045278	0.01762826
0.02977788	-0.00410993	0.01047471	-0.00497199	0.00428807	-0.00031735	0.01785416
0.02976451	-0.00409732	0.01047476	-0.00495378	0.00429881	-0.00028323	0.01801459
0.03063507	-0.00410825	0.01077107	-0.00493865	0.00444032	-0.00020167	0.01836451
0.03116031	-0.00411416	0.01096192	-0.00490777	0.00454505	-0.00012473	0.01858325
0.03114683	-0.0041013	0.01096466	-0.00488437	0.00455606	-0.00010174	0.01857731
0.03113113	-0.00409773	0.01096516	-0.00487416	0.00456224	-0.00009251	0.01856792
0.03111641	-0.00409664	0.01096413	-0.00486783	0.00456678	-0.00008706	0.01856011
0.03110088	-0.00409577	0.01096476	-0.00486405	0.00456947	-0.00008342	0.01855243
0.03125551	-0.00412447	0.01108333	-0.00486495	0.00465377	-0.00002815	0.01909691
0.03244913	-0.00412182	0.01143374	-0.00482163	0.00477955	0.00007825	0.01932383
0.03244394	-0.00411273	0.01143971	-0.00480318	0.00479159	0.00009495	0.0193196
0.03243689	-0.00410655	0.01143741	-0.00479615	0.00479615	0.00010255	0.01931222
0.03242769	-0.00410128	0.01143746	-0.00479017	0.00479992	0.00010773	0.01930225
0.03238559	-0.00409656	0.01143885	-0.00478494	0.00480252	0.00011131	0.01929462

0.03234566	-0.00409578	0.01143716	-0.00478364	0.00480556	0.00013649	0.01946292
0.03338017	-0.00413273	0.01179448	-0.00478442	0.00496729	0.00018983	0.01987992
0.03346131	-0.00412666	0.01182157	-0.00476798	0.00499056	0.0002119	0.01988893
0.0334546	-0.00412123	0.01182306	-0.00475844	0.00499819	0.000221	0.01988851
0.0334445	-0.00411417	0.01182325	-0.00474888	0.00500143	0.00022657	0.01988447
0.03342928	-0.00411026	0.01182414	-0.00474386	0.00500444	0.0002353	0.01988048
0.03341603	-0.00410614	0.01182402	-0.00473799	0.00500831	0.00023624	0.01987547
0.0334019	-0.00410734	0.01182354	-0.00473641	0.00500939	0.00024016	0.01987435
0.03422448	-0.00413786	0.01208767	-0.00473879	0.00512665	0.00028078	0.02038756
0.03450809	-0.00413335	0.01216537	-0.00473116	0.00516478	0.00030404	0.02045382
0.03451348	-0.00412739	0.01217044	-0.00471876	0.0051731	0.00031438	0.02045297
0.0345088	-0.00412334	0.0121697	-0.00471098	0.00517619	0.00032968	0.02047382
0.03525204	-0.00414037	0.01239969	-0.00471182	0.00529148	0.00036016	0.02087047
0.03546734	-0.00413686	0.0124613	-0.00470514	0.00533016	0.00038391	0.02092164
0.03550946	-0.00413526	0.01247528	-0.00469525	0.00534335	0.00039297	0.02092116
0.03549515	-0.00413012	0.0124769	-0.00468674	0.00534713	0.00040197	0.02091929
0.0356681	-0.00413309	0.0125047	-0.00468641	0.00536703	0.00041359	0.02100577
0.03628975	-0.00414237	0.01269164	-0.0046876	0.00545247	0.00043927	0.02132074
0.0364312	-0.00414304	0.01273312	-0.00468227	0.00548167	0.00045519	0.02135705
0.0364279	-0.00413942	0.01273556	-0.00466825	0.00548974	0.00046418	0.02135572
0.03695388	-0.00414666	0.01286597	-0.00466847	0.00555807	0.0004879	0.0216438
0.03740832	-0.00414386	0.0129815	-0.00466536	0.00562229	0.00050474	0.02176999
0.03740186	-0.00413967	0.01298605	-0.00464729	0.00563093	0.0005152	0.02176838
0.03737527	-0.00413181	0.01298634	-0.00463698	0.00563382	0.00051975	0.02176178
0.03769398	-0.00413902	0.01303914	-0.00463401	0.00566491	0.00053138	0.02184632
0.03769172	-0.00413623	0.01304203	-0.00463243	0.00567089	0.00053143	0.02184472
0.03767891	-0.00413287	0.01304146	-0.00463189	0.00567354	0.00053201	0.02184287
0.0379402	-0.00413495	0.01308589	-0.00463171	0.00569983	0.00053952	0.02193848
0.03809514	-0.00413882	0.0131248	-0.00462936	0.00572124	0.00053995	0.02198946
0.03810648	-0.00413567	0.01312948	-0.00463054	0.00572809	0.00054008	0.02199201
0.03837795	-0.00414392	0.01317708	-0.00463042	0.00575723	0.00054511	0.02210491
0.03865224	-0.00414764	0.01324359	-0.00463286	0.00579457	0.00054848	0.02225022
0.03900396	-0.00415115	0.01332022	-0.00462738	0.00583033	0.00055026	0.02233622
0.03900539	-0.00415306	0.01332442	-0.00462752	0.00583644	0.00055075	0.02233408
0.0390003	-0.00414967	0.01332486	-0.00462459	0.00584037	0.00055442	0.02236743
0.03971315	-0.00418189	0.01345763	-0.0046266	0.00590876	0.00055679	0.02257517
0.03977652	-0.0041834	0.01347247	-0.0046252	0.00592241	0.00055578	0.02257556
0.03976933	-0.0041863	0.0134739	-0.00462566	0.00592599	0.00055622	0.02257416
0.03975029	-0.00418538	0.01347363	-0.0046223	0.00592733	0.00055596	0.02257086
0.03973214	-0.00418066	0.01347594	-0.00462121	0.00593189	0.00055643	0.02259345
0.04057709	-0.00422493	0.01360841	-0.00462302	0.00599926	0.00055748	0.02281704
0.04056968	-0.00422239	0.01361301	-0.00462391	0.00600458	0.00055717	0.02281729
0.04054404	-0.00421804	0.01361355	-0.00462024	0.00600615	0.00056099	0.02281536
0.04056782	-0.0042156	0.01361372	-0.00461871	0.00600986	0.00056089	0.02281467

0.04059676	-0.00421693	0.01361293	-0.00461922	0.00601989	0.00056141	0.02285974
0.04122401	-0.00424136	0.01370446	-0.00462053	0.00606245	0.00056227	0.02298131
0.04122447	-0.00424034	0.01370516	-0.00462095	0.00606786	0.00056288	0.02298119
0.04121174	-0.00424443	0.01370685	-0.00462004	0.00606969	0.00056259	0.02298144
0.04119069	-0.0042412	0.01370825	-0.00461803	0.00607331	0.0005624	0.02298249
0.0419013	-0.00427978	0.01380276	-0.00462254	0.00612189	0.00056249	0.02316239
0.04191353	-0.00428156	0.01380846	-0.00461992	0.00612787	0.00056256	0.02316492
0.04224049	-0.00429631	0.01385001	-0.00462032	0.00616179	0.00056181	0.0232893
0.04254861	-0.00430657	0.0138955	-0.00462028	0.0061819	0.00056122	0.02331896
0.04254283	-0.00430047	0.01389559	-0.00461916	0.00618458	0.0005606	0.02332039
0.04252406	-0.00430375	0.01389603	-0.00461896	0.00618532	0.00056012	0.02331829
0.04251685	-0.00430307	0.01389671	-0.00461609	0.00618866	0.00055859	0.02331632
0.0429374	-0.00431721	0.01392904	-0.00462052	0.00621703	0.00055681	0.02339771
0.04310355	-0.00432384	0.01394908	-0.00461851	0.00622814	0.00055588	0.02341281
0.04309317	-0.00431912	0.01394936	-0.00461807	0.00623131	0.00055533	0.02341305
0.04334084	-0.00432894	0.01396613	-0.00461853	0.00624972	0.00055349	0.02345049
0.04362471	-0.00434428	0.01400582	-0.00461934	0.00627321	0.00054743	0.02351348
0.04362309	-0.00434551	0.01400624	-0.00461798	0.00627517	0.00054606	0.02351224
0.04364839	-0.00434656	0.01400593	-0.00461615	0.00628053	0.00054419	0.02352269
0.04417589	-0.00436685	0.01405561	-0.00461945	0.00631423	0.0005361	0.02360529
0.0441594	-0.00436891	0.01405792	-0.00462017	0.00631812	0.00053299	0.02360541
0.04460531	-0.00438616	0.01409379	-0.00462001	0.00635107	0.00052297	0.02368359
0.04465459	-0.00438839	0.01410118	-0.00462046	0.0063584	0.00051756	0.0236816
0.04462797	-0.00438653	0.01410144	-0.00461979	0.00636303	0.00051154	0.0236834
0.04507984	-0.00439678	0.01412005	-0.00462217	0.00638594	0.00050451	0.02371809
0.04507519	-0.0043972	0.01412086	-0.00462105	0.00639013	0.00049985	0.02372084
0.04504898	-0.00439961	0.0141221	-0.0046232	0.00639193	0.00049496	0.02372051
0.04541293	-0.00440973	0.01412933	-0.00462335	0.00641276	0.00048873	0.02374415
0.04552792	-0.00441506	0.0141391	-0.00462161	0.00642141	0.00048244	0.02375033
0.0455091	-0.00441853	0.01413811	-0.00462097	0.00642295	0.00047734	0.02375049
0.04589941	-0.00443921	0.01415993	-0.00462372	0.00645208	0.00046589	0.02380004
0.04594231	-0.00453341	0.01420788	-0.00463749	0.00649506	0.00044081	0.02388448
0.04591994	-0.00459854	0.01424499	-0.00464591	0.00651655	0.00042617	0.02390096
0.04609802	-0.00463725	0.01427262	-0.00465391	0.00654831	0.00041185	0.02397093
0.04632158	-0.00468492	0.0142965	-0.00466561	0.00656111	0.00040197	0.02398577
0.04630599	-0.00470251	0.01429747	-0.00466626	0.00656429	0.0003935	0.02398782
0.04651977	-0.00472798	0.01431213	-0.00467745	0.00659086	0.00037833	0.0240356
0.04670769	-0.00480111	0.01435242	-0.00472963	0.00664104	0.00032658	0.02407667
0.04668552	-0.00489674	0.01441222	-0.00478278	0.00667339	0.0002909	0.02411963
0.0466868	-0.00492311	0.01442368	-0.00480038	0.00669758	0.00026707	0.02416423
0.04711819	-0.00506284	0.01452167	-0.00488552	0.00675641	0.00021418	0.02427482
0.0470834	-0.00512589	0.01454611	-0.00492274	0.00677491	0.0001857	0.02430632
0.04705775	-0.00514265	0.01455022	-0.00493305	0.00678927	0.00016877	0.02431841
0.04732701	-0.00521965	0.01459502	-0.00497827	0.00682601	0.00014174	0.02438232

0.04732406	-0.00524561	0.01460108	-0.00498801	0.00683317	0.00013113	0.02438289
0.04746312	-0.0052824	0.01462294	-0.00501871	0.00687052	0.00010016	0.02443801
0.04762923	-0.00535349	0.01466071	-0.00505795	0.00690507	0.00007182	0.02446933
0.04759902	-0.00537212	0.01466585	-0.00506782	0.00692816	0.00005494	0.02446983
0.04794998	-0.00549785	0.01476625	-0.00517152	0.00710907	-0.00004254	0.02462949
0.04793623	-0.00561481	0.01484499	-0.00524861	0.00717058	-0.00008437	0.02472158
0.04789517	-0.00566298	0.01486627	-0.00527419	0.0071964	-0.00010878	0.02477397
0.04793851	-0.00585253	0.0150194	-0.00542731	0.00728998	-0.00018867	0.02503034
0.04793352	-0.00607942	0.01521373	-0.00558128	0.00736834	-0.00024993	0.02529794
0.04793384	-0.00621789	0.01534427	-0.00568532	0.00743958	-0.00030852	0.02550788
0.0479853	-0.00651767	0.01561247	-0.0058878	0.00757128	-0.00039718	0.02580796
0.04784875	-0.00659409	0.01568022	-0.00593585	0.00760902	-0.0004241	0.02586038
0.04776037	-0.00662508	0.01570568	-0.00595949	0.00763309	-0.00044335	0.02589001
0.04776494	-0.00669132	0.01577674	-0.00601585	0.00768084	-0.00048158	0.02597944
0.04773626	-0.0067557	0.01583587	-0.00606157	0.00771752	-0.00050664	0.02604167
0.04766296	-0.00679626	0.01588455	-0.00610806	0.00776802	-0.00054683	0.0261239
0.04759953	-0.00693031	0.01600938	-0.00620145	0.00783645	-0.00058893	0.02632599
0.04734035	-0.00697118	0.01604281	-0.00622908	0.00786394	-0.00061165	0.02643557
2.63418E+36	0.10827518	0.10175247	0.0266661	0.09249441	-0.01559869	0.10997867
2.63418E+36	0.1115112	0.10236498	0.02693097	0.09209296	-0.01557415	0.11031863
2.63418E+36	0.11265643	0.10160846	0.02730093	0.09171493	-0.0156313	0.10830417
2.63418E+36	0.11287877	0.10160285	0.02737957	0.09167901	-0.01563071	0.1083849
2.63418E+36	0.11305841	0.10154098	0.02782576	0.09095918	-0.01530871	0.10788707
2.63418E+36	0.11459614	0.10077498	0.02828492	0.09076281	-0.01523724	0.10787461
2.63418E+36	0.11477001	0.10077126	0.02836728	0.0907468	-0.01520416	0.10788978
2.63418E+36	0.11490746	0.10074607	0.02844804	0.09070719	-0.0151622	0.1078919
2.63418E+36	0.11504443	0.10071002	0.02852214	0.09066067	-0.01512416	0.10788416
2.63418E+36	0.11514351	0.10069182	0.02856861	0.09063557	-0.01509943	0.10788898

Pressure Transducer lbs	Load Cell 1 lbs	Load Cell 2 lbs	Load Cell 3 lbs	Load Cell 4 lbs	Load Cell 5 lbs	Load Cell 6 lbs	Time Seconds
9.10984972	-1.2377147	-0.840361	-1.46396338	-1.39809193	-1.19837746	39.50107808	24.1
16.4336478	-1.80656954	-1.19807712	-1.81536067	-1.84343055	-1.54367746	33.51378408	63.236
6.98214474	-1.56891432	-1.28892784	-1.58865224	-1.82270071	-1.4628137	31.11635608	65.252
8.97392025	-1.66819912	-1.06558688	-1.76240975	-1.83575212	-1.58010259	29.92391807	67.251
5.46546105	-1.24056791	-0.97599807	-1.77135895	-1.81502438	-1.46354214	37.10365008	69.251
10.37836872	-1.76444563	-1.01258934	-1.58420162	-1.71445536	-1.50506532	37.10365008	71.269
1.71995777	-1.56587659	-1.11101086	-1.9548382	-1.8864312	-1.44459967	36.50115509	73.267
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1.95476319	-1.56354409	-1.20438475	-1.79898312	-1.99468685	-1.50870749	36.50115509	77.347
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4.78342893	-1.51742639	-1.22015742	-1.68935905	-1.76359336	-1.41400202	31.71885107	81.363
4.74510652	-1.54558704	-0.95391439	-1.79003787	-1.75054194	-1.58884233	32.32134606	83.362
-2.69163815	-1.50180183	-1.15075742	-1.73037903	-1.99392047	-1.20856381	25.12906207	85.364

0.13646399	-1.51747655	-1.13940069	-2.05479256	-1.83192837	-1.52473353	37.10365008	87.381
1.70405422	-1.5159156	-1.232775	-1.6252376	-1.83039351	-1.50943495	31.11635608	89.381
-3.6204954	-1.45415661	-1.15264975	-1.80720391	-1.65918411	-1.62818095	20.94925304	91.379
3.0565384	-1.3689527	-1.08451167	-1.78408642	-1.60390459	-1.65877811	25.12906207	93.397
4.11926893	-1.38588623	-1.08135002	-1.56572282	-1.72832464	-1.45770171	21.53919606	95.396
-3.90917998	-1.2889345	-1.0636846	-1.81704567	-1.90030258	-1.56333516	32.91128908	97.395
2.57247581	-1.7071844	-1.00879537	-1.88714663	-1.89646234	-1.73089138	22.74418605	99.412
16.70529517	-1.5700895	-1.08449749	-1.72396727	-1.48191354	-1.63909109	25.12906207	101.411
22.18587533	-1.65609897	-1.03844097	-1.79332381	-1.51723169	-1.53054341	23.93662406	103.412
28.27881039	-1.51742639	-1.33748701	-1.94485237	-1.40978359	-1.5043083	21.53919606	105.428
76.79735471	-1.45410644	-1.16840232	-1.97841197	0.08581794	-1.43218575	26.33405206	107.426
69.39777582	-1.41737004	-1.0434814	-1.93292136	0.35069678	-1.62451263	22.14169105	109.427
174.6626152	-1.28556117	-0.83023993	-1.88729471	19.72289493	-1.66968801	37.10365008	111.443
161.9576385	-1.28633329	-0.72740121	-2.03271967	18.56741178	-1.32073264	38.89858309	113.442
153.8361358	-1.35826243	-0.70910494	-1.91563529	18.14590997	-1.50431685	38.89858309	115.444
214.7152189	0.82335883	0.14072237	-2.24959437	34.22202427	-1.19179663	86.78438318	117.46
205.8487986	6.81871912	1.03409032	-2.02437483	34.53603804	-1.19033952	76.60472817	119.459
236.1333024	28.75114368	4.45235832	-3.07589318	70.00196516	-1.35643886	127.4778993	121.458
241.6450526	49.49528574	11.10908565	-1.40987176	76.23387501	-1.33604075	128.0803943	123.731
241.0462634	49.55581938	11.68695124	-1.25461307	73.49354326	-0.94338667	141.8499153	125.73
277.0706306	71.0894786	26.77132065	-0.10466115	103.6420932	-1.00968053	151.4270753	127.731
255.5042742	73.63749221	29.17498115	0.18109378	100.595302	-0.87491777	153.8119513	129.747
247.2328719	73.47487938	29.25132108	0.2213613	104.3649208	-0.98929244	168.7739104	131.746
289.690573	97.78138591	49.21444003	0.19153188	114.4884599	-0.99949149	178.9535654	133.747
270.458721	97.58906416	50.06364352	0.36454497	112.3934634	-0.90260047	169.9789004	135.826
268.9513431	97.09733684	49.96585345	0.39884899	111.4845402	-0.87783127	173.5687664	137.827
265.105137	97.27106377	50.18903243	0.62419268	110.9957166	-0.7722093	168.1839674	139.843
312.5659445	115.2452537	63.9692368	2.28050442	138.407996	-0.77876569	213.0698445	141.844
312.4323946	130.6865423	75.21004901	3.98827423	137.106554	-0.87201357	208.2875404	143.842
309.3501474	132.3892816	79.1895389	4.91833762	150.335753	-0.49757669	247.1861235	145.858
329.7274788	158.0003952	97.5399552	14.22303808	155.3162001	-0.34240667	238.8014015	147.858
315.9148927	157.0826113	97.22197938	14.96207787	153.8815979	-0.51141792	238.2114585	149.859
315.6744182	156.8746601	96.85639036	15.64750031	153.1689004	-0.43566615	240.0063915	151.873
378.3043207	185.0827435	117.9625211	32.50956432	180.9828311	-0.48228984	279.5074696	153.876
340.8206326	183.3386483	116.5821039	34.5745348	179.2052716	-0.28851012	278.9049746	155.876
335.382308	182.6913531	116.1379602	34.9138491	178.5944137	-0.1639375	266.9429386	157.889
400.0226038	200.4120435	129.7375617	37.06609059	189.0339359	-0.1879911	293.2769906	159.89
359.8352046	200.3643565	127.0901484	41.86942549	187.8772889	-0.44369188	293.8669336	161.891
437.7368258	219.7499287	147.3477453	67.39619555	226.3272031	-0.01316936	336.3679347	163.906
392.5847428	220.2036794	146.4983347	68.1061423	221.4701926	0.02544058	335.1754967	165.907
381.507851	219.8116982	145.9635019	68.12180349	219.8235884	0.07497788	330.3806407	167.907
388.3237635	219.0544297	145.0033497	68.01665403	218.7263526	223.5396933	-117.5212009	169.922
392.4193269	218.5833214	145.0658396	67.91381594	217.8751563	222.9226784	-123.7087334	171.924
382.7764229	218.4147857	144.9672718	67.87951192	217.1768559	222.5654923	-118.0869182	173.922

387.8261765	218.4359417	144.8353826	67.58187999	216.9391194	221.4680781	-125.3940994	175.938
393.6590881	218.2407124	144.8280808	67.80187457	216.7544798	221.9219394	-127.6333969	177.939
395.2321012	218.0393847	144.6455492	67.74669033	216.0128535	221.8606896	-127.6333969	179.939
397.8598135	218.1627189	144.5513574	67.88158511	215.8237277	221.4311318	-141.1281106	181.953
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592.1100047	324.2080445	252.124341	195.6984558	420.3439607	415.3595685	89.18181118	220.114
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651.6064522	382.4571193	309.52664	246.7597786	495.0362265	503.7878761	174.1712614	228.146
624.0927187	383.737249	312.9050013	247.2732523	481.0204165	490.8109207	153.2220083	230.146
617.5768065	381.6540896	311.8189319	245.4633075	475.6048538	486.0884845	158.6068073	232.146
715.415885	433.7362418	362.2598436	290.6841194	554.7206157	577.0260919	240.5963345	234.161
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1422.380219	987.309174	882.532699	929.9053719	1287.764967	1292.776994	1207.286492	318.592
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1855.246843	1338.241877	1217.562013	1335.998022	1745.074869	1678.660307	1795.984989	364.738
1989.844628	1403.330239	1277.790289	1406.531883	1863.844371	1790.913473	1952.548244	366.735
1982.015469	1421.575787	1294.243898	1423.35338	1854.783303	1775.835011	1929.676138	368.752
1950.682964	1415.438776	1289.765705	1418.56149	1839.519601	1763.31902	1909.152727	370.752
1922.883466	1412.277142	1287.349899	1416.535255	1831.39752	1756.417721	1900.938443	372.751
2083.264566	1461.477642	1338.447585	1487.843272	1972.41132	1885.254427	2085.280265	374.768
2121.09593	1514.927457	1381.965211	1523.158691	1979.120947	1889.151529	2083.579282	376.768
2102.141379	1511.922728	1383.864717	1536.062451	2033.356711	1936.639677	2151.071437	378.768
2257.893334	1609.596261	1469.264266	1621.616843	2105.382429	2013.162773	2247.504095	380.784
2220.767057	1615.488735	1472.801691	1621.286017	2084.344242	1996.193418	2213.472537	382.784
2183.31869	1610.639996	1469.037327	1617.400359	2071.224234	1983.652969	2202.12472	384.784
2185.296478	1607.472835	1466.189701	1615.525773	2077.418391	1998.600456	2222.548412	386.799
2322.212627	1648.359882	1505.20241	1664.726816	2171.085945	2078.015797	2333.147999	388.801
2391.485043	1719.051462	1567.905179	1723.002027	2215.477726	2128.455728	2389.863297	390.799
2325.03249	1715.651481	1562.728673	1717.800394	2191.308931	2105.940927	2354.130756	392.815
2390.269214	1739.693472	1582.938593	1742.72555	2256.89997	2173.042601	2447.149553	394.815
2492.866382	1800.495786	1639.519764	1814.057559	2340.423385	2244.312191	2543.011252	396.817
2473.176414	1822.336616	1655.426158	1822.137986	2316.010904	2227.097214	2519.756552	398.833
2436.406348	1817.076533	1650.074168	1818.389074	2309.676056	2236.645577	2543.011252	400.833
2601.516842	1891.89793	1716.97487	1902.86816	2453.07816	2355.309514	2696.159206	402.834
2598.659774	1927.043751	1744.017065	1929.723588	2437.776488	2339.105996	2664.958656	404.911
2662.585163	1949.72649	1774.887562	1966.573294	2526.736173	2437.430208	2823.20956	406.911
2767.230987	2035.205534	1836.931572	2035.984439	2567.05411	2461.654936	2831.143517	408.927
2710.535131	2030.545239	1829.187229	2029.113291	2542.236748	2439.139631	2804.486851	410.944
2860.847637	2106.860515	1898.525205	2099.149885	2673.254082	2574.937617	2993.367347	412.944
2891.975607	2151.024232	1925.833542	2130.662049	2679.852359	2572.200906	2976.91658	414.959
2843.47105	2149.676751	1920.490186	2125.538455	2657.046495	2551.859135	2950.259914	416.961
2874.042065	2154.706304	1943.234337	2139.508196	2745.629644	2670.205236	3100.4709	418.977
3044.011442	2275.419513	2022.167975	2226.63423	2802.606104	2696.880756	3130.60855	420.991
2977.471826	2275.783499	2015.040622	2221.582335	2774.187587	2671.218992	3106.603765	422.993
3089.809839	2313.077046	2070.410332	2268.029201	2876.517671	2788.543935	3236.084475	424.993
3150.907666	2393.821973	2111.022458	2317.828964	2912.305253	2808.395039	3274.590444	427.007
3082.549125	2393.194855	2105.692868	2313.693833	2880.071761	2783.116977	3241.667255	429.009
3109.612618	2391.721429	2107.131735	2322.987329	2942.46627	2848.23561	3322.588309	431.009
3257.802363	2490.806313	2201.851608	2410.860583	3026.509706	2925.871623	3416.898673	433.023
3193.613241	2491.978162	2199.708642	2409.28125	2993.284759	2896.8385	3376.157252	435.025
3174.858707	2485.617608	2194.94248	2405.612532	3033.294224	2943.938245	3463.222876	437.024
3359.113191	2585.583503	2297.449948	2506.240092	3139.003946	3040.596236	3556.421365	439.041

3304.659038	2586.695436	2295.83114	2505.886143	3105.474455	3010.76374	3520.150849	441.04
3269.493793	2579.513791	2290.503418	2500.556324	3102.393495	3016.468202	3555.87128	443.04
3426.831353	2664.553679	2370.501567	2584.673326	3241.598392	3148.460844	3705.435954	445.056
3405.435052	2686.807127	2392.549952	2602.231095	3222.429965	3126.340884	3669.153734	447.056
3370.441898	2678.692291	2386.920816	2597.014456	3224.469187	3131.316867	3686.463864	449.056
3528.290716	2738.635976	2442.829214	2661.473994	3337.00168	3237.386035	3824.862977	451.07
3516.719246	2783.915289	2483.356549	2694.338514	3337.620819	3236.432524	3817.056448	453.072
3482.361015	2777.421922	2479.57475	2689.975813	3353.805057	3265.46051	3885.138278	455.071
3692.425283	2869.572059	2566.132106	2783.536429	3459.067621	3342.933537	3964.385669	457.087
3617.553935	2864.525656	2563.632947	2779.208736	3427.770143	3316.66175	3939.269009	459.089
3724.563795	2901.210056	2607.365559	2828.522667	3554.183337	3446.918782	4103.90836	461.088
3773.139404	2954.535555	2655.161106	2873.882994	3553.393407	3432.291572	4078.791701	463.103
3718.702268	2944.825209	2650.304932	2868.797765	3529.964243	3412.146447	4045.306723	465.102
3831.20374	2986.663365	2695.506	2911.862714	3633.222344	3531.324858	4214.405276	467.102
3856.12952	3028.033673	2736.113699	2942.510755	3653.294227	3536.652375	4191.524069	469.121
3815.497095	3020.525732	2735.475879	2944.689584	3627.471515	3512.340157	4149.108984	471.119
3966.006673	3068.806811	2801.720697	3001.221294	3733.042147	3635.380662	4308.35481	473.12
3916.060886	3081.277151	2815.970917	3006.185181	3709.937811	3613.065049	4269.389661	475.134
3871.279108	3074.357408	2812.052043	3002.170187	3693.13518	3596.763996	4247.340168	477.135
3957.362477	3080.492575	2833.040533	3014.355446	3772.227199	3677.689537	4350.032651	479.134
4031.954866	3114.089447	2879.207141	3068.55485	3809.982669	3701.407774	4386.296458	481.214
3968.339597	3121.358003	2882.117757	3071.053336	3785.690806	3680.735475	4347.331309	483.216
4119.883897	3174.767284	2953.579051	3123.049923	3892.73078	3809.401984	4516.732664	485.231
4063.025283	3194.380187	2962.515541	3130.177293	3862.543556	3777.600772	4473.976556	487.246
4213.388292	3218.46657	3005.113922	3174.936197	3683.936307	3578.735815	4304.030394	489.246
359.9352203	83.41526688	23.43557525	221.2960661	244.0243399	58.31055976	-304.2960356	491.2
351.9989967	82.80785462	23.42295748	189.9818314	238.0215149	55.16424433	-298.6378735	493.182
360.9904601	83.3730507	24.6494079	157.8116192	232.5125962	56.41650794	-307.4350626	495.168
352.9682976	83.69121889	25.64558231	156.1817173	230.006607	56.49299826	-315.6123599	497.165
368.3625683	83.8417898	26.17439037	136.0377759	224.1802004	64.28513251	-303.0298735	499.167
352.9673105	84.05755242	26.04253412	137.1165028	221.1369796	62.75094524	-308.6880356	501.15
354.041726	83.84022942	26.10688439	137.0722899	219.7593665	62.31676451	-313.7263059	503.15
354.8908245	83.61255982	26.16311001	137.1975636	219.0699565	61.69626481	-316.245441	505.151
350.9429345	83.58675703	26.08487903	136.7569242	218.5517283	61.27301541	-314.359387	507.134
359.4367875	83.65311471	26.38080891	136.6404066	218.1272475	61.25270408	-307.4350626	509.136

Experiment 6

LVDT 1	LVDT 2	LVDT 3	LVDT 4	LVDT 5	LVDT 6	LVDT 7
in	in	in	in	in	in	in
0.00000733	-0.00000175	0.00000474	-0.00000451	0.0000005	0.00000043	0.00000364
0.00005229	-0.00005107	0.00002154	-0.00002186	0.00000847	0.000003	0.00003897
0.00005432	-0.00005091	0.00002117	-0.00002385	0.00000846	0.00000321	0.00003897
0.00005423	-0.00005425	0.00002399	-0.00002303	0.00000871	0.00000318	0.00003812

0.00005244	-0.0000509	0.00002067	-0.000023	0.00000844	0.00000307	0.0000378
0.00005398	-0.00005601	0.00002338	-0.00002053	0.00000847	0.00000332	0.00003698
0.00005444	-0.00005583	0.00002235	-0.00002069	0.00000841	0.00000384	0.00003886
0.00005593	-0.00004928	0.00002137	-0.00002132	0.00000824	0.00000371	0.00004067
0.00005414	-0.0000524	0.00002135	-0.00002253	0.00000857	0.00000427	0.00003902
0.00005805	-0.00005076	0.00002315	-0.0000219	0.00000855	0.00000421	0.00003798
0.0000579	-0.0000527	0.00002082	-0.00002107	0.00000837	0.00000445	0.00003854
0.00005719	-0.00004936	0.00002154	-0.00002196	0.0000087	0.00000422	0.00003915
0.00006034	-0.00005073	0.0000208	-0.00002203	0.00000859	0.00000423	0.0000372
0.00006252	-0.00005222	0.00002033	-0.00002424	0.00000819	0.0000045	0.00003928
0.00006378	-0.00005299	0.00001958	-0.00002232	0.00000865	0.0000046	0.00003893
0.00005939	-0.00005345	0.0000221	-0.0000218	0.00000643	0.00000477	0.00004804
-0.00028728	-0.00005349	-0.00003768	-0.00002202	0.00003371	0.00000627	-0.00039946
-0.00044898	-0.00005449	-0.00076539	-0.000023	0.00049334	0.00000712	0.00940966
-0.00042983	-0.00005891	-0.00085941	-0.00002196	0.00063966	0.00000704	0.01468925
-0.00040612	-0.00007026	-0.00087243	-0.0000275	0.00072695	0.0000069	0.01494717
-0.00032803	-0.00008084	-0.00083	-0.00003553	0.00087558	0.00000474	0.01495312
0.00008242	-0.00009909	-0.00077298	-0.00004966	0.00087779	-0.00001563	0.01523286
0.00006909	-0.00009963	-0.00080134	-0.00005103	0.00090592	-0.00001473	0.01565166
0.00008241	-0.00009528	-0.00073493	-0.00005065	0.00086111	-0.00001498	0.01587381
0.00007957	-0.0000981	-0.00073593	-0.0000507	0.00086099	-0.00001414	0.01587509
0.00008075	-0.00009377	-0.00073195	-0.00005302	0.00085962	-0.00001401	0.01587611
0.00008227	-0.00009803	-0.00073315	-0.00005506	0.00085875	-0.00001478	0.01587656
0.00009695	-0.0001065	-0.00072658	-0.00006113	0.00085801	-0.00002019	0.01588307
0.00009974	-0.00010312	-0.00072833	-0.00006117	0.00085738	-0.00002061	0.01588206
0.00010123	-0.00010697	-0.00072672	-0.00005818	0.00085646	-0.00002025	0.01588156
0.00010185	-0.00010625	-0.00072653	-0.00005925	0.00085643	-0.00002058	0.01588152
0.00010369	-0.00010548	-0.00072512	-0.00005944	0.00085646	-0.00002052	0.01588194
0.00010157	-0.00010453	-0.00072678	-0.00005785	0.00085615	-0.00002016	0.0158796
0.00009951	-0.00010616	-0.00072762	-0.00005849	0.00085564	-0.00001995	0.01587715
0.00010568	-0.00010894	-0.00072791	-0.0000629	0.00085559	-0.00002311	0.01587308
0.00010854	-0.00011129	-0.00072795	-0.00006153	0.00085532	-0.00002299	0.01587421
0.00010987	-0.00011457	-0.00072858	-0.00006571	0.00085476	-0.00002548	0.01587032
0.00011204	-0.00011353	-0.00072931	-0.00006619	0.00085532	-0.0000262	0.01587083
0.00011455	-0.00011013	-0.00072848	-0.00006228	0.00085533	-0.00002655	0.01586924
0.00011528	-0.00011295	-0.00072817	-0.00006563	0.00085624	-0.0000265	0.01586683
0.00011345	-0.00011206	-0.00072962	-0.00006649	0.00085592	-0.00002645	0.01586591
0.00013713	-0.00010871	-0.00072721	-0.00006731	0.00085192	-0.00002639	0.01585777
0.00011794	-0.00011086	-0.00073108	-0.00006808	0.00085243	-0.00002656	0.01585669
0.00011696	-0.00011088	-0.00073264	-0.00006808	0.00085228	-0.00002657	0.01585617
0.00011569	-0.00011392	-0.00073126	-0.00006625	0.00085238	-0.00002668	0.01585665
0.00011732	-0.00011536	-0.00073164	-0.0000654	0.00085268	-0.00002633	0.0158569
0.00011846	-0.00011191	-0.00073218	-0.00006559	0.00085307	-0.00002699	0.01585446
0.00012067	-0.0001128	-0.00073332	-0.00006669	0.00085284	-0.0000263	0.01585507

0.00011886	-0.00011135	-0.0007345	-0.00006596	0.00085305	-0.00002616	0.01585143
0.00011566	-0.00011288	-0.00073403	-0.00006661	0.00085352	-0.00002666	0.01585101
0.00011678	-0.00011419	-0.00073188	-0.00006794	0.00085324	-0.00002637	0.01584984
0.00011852	-0.00011066	-0.00073343	-0.00006825	0.00085359	-0.00002624	0.01585134
0.00011577	-0.00011401	-0.00073215	-0.00006474	0.00085356	-0.00002607	0.01584954
0.0001189	-0.00011434	-0.00073189	-0.00006964	0.0008534	-0.00002604	0.01584887
0.00012092	-0.00011319	-0.00073177	-0.00006708	0.00085365	-0.00002576	0.01584828
0.00011868	-0.00011707	-0.00073254	-0.00006912	0.00085346	-0.00002593	0.01584805
0.00006168	-0.00011559	-0.00074223	-0.0000661	0.00084865	-0.00002568	0.01581886
0.00006052	-0.0001155	-0.00074205	-0.00006628	0.0008487	-0.00002552	0.01581818
0.00006441	-0.00012181	-0.00074447	-0.00007049	0.00085009	-0.00002513	0.01580982
0.00006721	-0.00012079	-0.00074493	-0.00006932	0.00085019	-0.00002516	0.01580929
0.00006657	-0.00011983	-0.00074279	-0.00006843	0.00085019	-0.00002558	0.01581064
0.00006408	-0.00011697	-0.00074371	-0.00006651	0.00085043	-0.00002501	0.01580936
0.00006121	-0.00011747	-0.00074487	-0.00006936	0.00085018	-0.00002485	0.01581009
0.00006367	-0.00011967	-0.00074277	-0.00007173	0.00085033	-0.00002528	0.01580882
0.00006669	-0.00011574	-0.00074289	-0.00006781	0.00085008	-0.00002524	0.01580904
0.00006894	-0.00011933	-0.00074485	-0.00007006	0.00085029	-0.0000247	0.01580967
0.0000678	-0.00012319	-0.00074564	-0.00007016	0.00084991	-0.00002483	0.01580808
0.00006741	-0.00012117	-0.000747	-0.00006981	0.00085032	-0.00002488	0.01580716
0.00009232	-0.00011981	-0.00074729	-0.00006999	0.00085008	-0.00002467	0.01580149
0.00011128	-0.00012038	-0.0007472	-0.00006677	0.00085028	-0.00002353	0.01579931
0.00012263	-0.00012853	-0.0007461	-0.00007241	0.00085168	-0.0000222	0.01579897
0.00008884	-0.00012926	-0.00074562	-0.00007249	0.00085218	-0.00002375	0.01580017
0.00007944	-0.00012817	-0.00074711	-0.00007132	0.00085172	-0.00002372	0.01580035
0.00007727	-0.0001258	-0.00074656	-0.00007328	0.00085168	-0.00002387	0.0157993
0.00007998	-0.00012719	-0.00074711	-0.00007344	0.00085303	-0.00002353	0.01579862
0.00008093	-0.00012861	-0.00074603	-0.00007371	0.00085283	-0.00002345	0.01579997
0.00008117	-0.00013177	-0.00074628	-0.0000739	0.00085318	-0.00002354	0.01579966
0.00007965	-0.00013314	-0.0007455	-0.00007221	0.00085255	-0.0000237	0.01579952
0.00011149	-0.00013312	-0.00074216	-0.00007348	0.00085315	-0.00002197	0.01580057
0.00045456	-0.00035302	-0.00066966	-0.00019491	0.00090267	-0.00005092	0.0159148
0.00499861	-0.00277132	0.00038802	-0.00159031	0.00136386	-0.00068725	0.0180363
0.00553445	-0.00308454	0.00066635	-0.00236918	0.00166014	-0.0011018	0.01947425
0.00861336	-0.00460384	0.00120116	-0.00260605	0.00171342	-0.001157	0.01959449
0.01031047	-0.00547731	0.00157991	-0.00309825	0.00187663	-0.00137259	0.02032335
0.012562	-0.00662929	0.00209723	-0.0037517	0.00209011	-0.00166506	0.02137589
0.01436541	-0.00756216	0.00250892	-0.00427328	0.00225691	-0.00189641	0.02221341
0.01576094	-0.00827595	0.00283672	-0.00468247	0.00239385	-0.00208483	0.02288801
0.01760935	-0.00921696	0.0032677	-0.00520657	0.00257065	-0.00231428	0.0237881
0.01864172	-0.00976064	0.00352377	-0.00551388	0.00267539	-0.00244993	0.02433565
0.019239	-0.01036385	0.00384859	-0.00592547	0.00281304	-0.0026419	0.02508556
0.02013304	-0.01062646	0.00391861	-0.00599383	0.00283358	-0.00267037	0.02517662
0.02152069	-0.01134471	0.00425582	-0.00638446	0.00296531	-0.00282477	0.02590183

0.02152547	-0.01142063	0.00428343	-0.00642279	0.00297877	-0.00283942	0.02593798
0.02151799	-0.0114503	0.0042954	-0.00643981	0.00298623	-0.0028475	0.02595651
0.02159397	-0.01153018	0.0043752	-0.00671175	0.00309898	-0.00303394	0.02678731
0.02331485	-0.01228957	0.00470014	-0.00690161	0.00313647	-0.00305093	0.02692017
0.02560012	-0.01347868	0.00525642	-0.00753116	0.00334446	-0.00329651	0.02810753
0.02557856	-0.0135346	0.00527099	-0.00755523	0.00335234	-0.00330393	0.02813431
0.02781351	-0.01441734	0.00569479	-0.00802476	0.00350219	-0.00348095	0.02915569
0.02784067	-0.01452745	0.00573653	-0.00806745	0.00351685	-0.00350422	0.02924577
0.02963988	-0.01523655	0.00605822	-0.00843477	0.00363479	-0.00364411	0.03000713
0.02968246	-0.01532336	0.00609075	-0.00847399	0.0036489	-0.00365744	0.03005429
0.02967624	-0.01535497	0.00609943	-0.00848762	0.00365233	-0.0036766	0.03036558
0.03161995	-0.01604027	0.0063911	-0.00882758	0.00374931	-0.00379158	0.03080187
0.03162269	-0.01609932	0.00640782	-0.00885418	0.00375882	-0.00381004	0.03085505
0.03329281	-0.01667812	0.00669088	-0.00916413	0.00385926	-0.00391741	0.03160542
0.03357897	-0.01690773	0.00677463	-0.0092494	0.00388444	-0.00393466	0.03170967
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0.03703321	-0.03309057	0.018671	-0.01775088	0.00672429	-0.00727811	0.07223389	
0.03617482	-0.03307301	0.01885512	-0.01775695	0.00674148	-0.00729877	0.07266411	
0.03462642	-0.03304129	0.01905207	-0.01775583	0.00675251	-0.00730807	0.07306832	
0.03255938	-0.03297343	0.01925365	-0.01775442	0.00675903	-0.00732352	0.073506	
0.03035842	-0.03289622	0.01938334	-0.01774999	0.00675435	-0.00732615	0.0737456	
0.02851523	-0.03282584	0.01942469	-0.01773667	0.00674022	-0.00732599	0.0738684	
0.02692806	-0.03279571	0.01953543	-0.01773677	0.00673662	-0.00732627	0.07433569	
0.02449302	-0.03273349	0.01968271	-0.0177354	0.00673484	-0.00732599	0.07485823	
0.02163311	-0.0326518	0.01987152	-0.01773089	0.00673273	-0.00732851	0.07549303	
0.01709222	-0.03248779	0.02001295	-0.01770921	0.00671322	-0.00732738	0.07593374	
0.0143832	-0.03237355	0.02008674	-0.01769253	0.00670436	-0.00732608	0.07615257	
0.01257441	-0.03231052	0.02021039	-0.01768049	0.00670383	-0.00732355	0.07661303	
0.00822203	-0.03196106	0.02046885	-0.01763278	0.00675776	-0.00739851	0.07723811	
0.00340017	-0.03190622	0.02063942	-0.01763698	0.00678039	-0.00739805	0.07786023	
-0.00131508	-0.03178407	0.02081101	-0.01763147	0.00680864	-0.0073993	0.07829596	
-0.00437964	-0.03169107	0.02093792	-0.01761802	0.00682856	-0.00740093	0.07880947	
-0.00864665	-0.03158076	0.02114581	-0.0176158	0.00686618	-0.00740515	0.07944568	
-0.01584403	-0.0313535	0.02128674	-0.01758285	0.00686984	-0.00740455	0.08018184	
-0.02856415	-0.03097065	0.0214887	-0.01757348	0.00696782	-0.00746451	0.08114753	
-0.04586001	-0.03009443	0.02143238	-0.01749413	0.00677822	-0.00752651	0.0818341	
-0.06667961	-0.02938566	0.02142484	-0.01745329	0.00670993	-0.00750058	0.08267609	
-0.08258878	-0.0288917	0.02144949	-0.01746754	0.00670467	-0.00749098	0.08353223	
-0.09737788	-0.02838114	0.02151998	-0.01747999	0.00677069	-0.00749541	0.08442903	
-0.1073476	-0.02808067	0.02152614	-0.01752166	0.00672065	-0.00749624	0.08552235	
-0.12372347	-0.02739658	0.02165652	-0.01755977	0.00674946	-0.00750041	0.08740381	
Pressure Transducer	Load Cell 1	Load Cell 2	Load Cell 3	Load Cell 4	Load Cell 5	Load Cell 6	Time
lbs	lbs	lbs	lbs	lbs	lbs	lbs	Seconds
-6.46457134	-0.107894	-0.24289554	0.01491259	0.18042042	-0.12311589	0	1114.72
-5.97354085	-1.41725241	-1.12114441	-1.06378166	-1.13037024	-1.19697191	20.88760807	1154.19
-13.04678904	-1.31249704	-1.13817917	-1.10851999	-1.30541756	-1.34048489	20.88760807	1156.191
-10.41847762	-1.67054892	-1.2933808	-1.06750403	-1.15186607	-1.51386637	19.23919308	1158.207
-16.96246092	-1.41179857	-1.28833402	-1.08317683	-1.01981947	-1.21154154	17.5907781	1160.223
-4.18102679	-1.75576954	-1.24480235	-1.08839596	-0.99141302	-1.36744062	19.23919308	1162.223
-12.67574894	-1.44860186	-1.17919253	-1.15256137	-1.12272229	-1.4993026	11.55043228	1164.24
-19.31770344	-1.47988443	-1.29843264	-1.11154541	-1.08356622	-1.49711703	16.49567723	1166.24
-20.561248	-1.5689985	-1.20821362	-1.01608997	-1.13039913	-1.43446732	17.03746398	1168.239

-25.05873042	-1.57290868	-1.23218793	-1.21819163	-1.18798164	-1.22393156	11.55043228	1170.257
-27.30482784	-1.52880517	-1.26817569	-0.99767118	-1.06452986	-1.41920757	12.09221902	1172.256
-11.61423483	-1.67732902	-1.32180259	-1.02153298	-1.19197863	-1.51172583	26.93948127	1174.255
-9.43787329	-1.37615259	-1.12999618	-1.07438	-0.89325244	-1.29024665	15.94236311	1176.273
-16.06724368	-1.30736209	-1.05050303	-1.10943257	-1.02300041	-1.17587298	24.73775216	1178.27
-16.5100407	-1.30033	-0.99372209	-1.02591159	-0.98538073	-1.39005069	17.03746398	1180.271
-20.54795858	-1.23106954	-1.13060138	-0.68264691	-0.79328705	-1.22245755	21.99423631	1182.287
-24.88780363	-1.35537636	-0.61073994	-0.89443489	3.73335574	-0.17634116	13.74063401	1184.287
-27.7235491	-1.12319226	-0.87003958	-0.95707933	3.57519776	0.00359697	13.74063401	1186.287
-29.87841994	-1.25609155	-0.7880231	-0.71172785	3.76329881	0.2498287	19.7925072	1188.303
-31.43793243	-1.09926067	-0.67191158	-0.46689673	5.81025929	0.39701883	15.38904899	1190.319
-14.46177716	-1.01796694	-0.73121591	-0.75176742	-1.16855	-0.00656643	9.90201729	1192.319
-7.03060187	-1.11490195	-0.82143493	-0.66899125	-1.27066169	0.170457	13.19884726	1194.414
-16.23515061	-0.98670168	-0.82522043	-0.64065457	-1.09561834	0.3401946	17.03746398	1196.415
-13.90733192	-1.16024754	-0.79304446	-0.49896348	-1.25146903	0.3263541	20.88760807	1198.432
-12.03685729	-1.36005865	-0.79685453	-0.53050216	-1.04356919	0.35108912	15.38904899	1200.448
-2.43273397	-1.13725587	-0.71042184	-0.64609758	-0.92456744	0.21850387	15.38904899	1202.446
-6.52429644	-1.1782219	-0.74892364	-0.47472543	-1.09818937	0.07205265	21.44092219	1204.463
-8.64686643	-1.05705314	-0.658074	-0.71933266	-1.22870807	-0.07000395	18.68587896	1206.463
-16.55043705	-1.21574714	-0.87258074	-0.47472543	-1.08513602	-0.11080018	17.5907781	1208.462
-20.99631328	-0.6917685	-0.72620046	-0.50818498	-0.9184655	0.12160475	14.84726225	1210.479
-22.60712634	-1.05059192	-0.64481459	-0.35904199	-1.14495205	0.01378773	17.03746398	1212.478
-23.24258712	-0.88877658	-0.72746257	-0.3993137	-0.82019336	0.22723819	17.03746398	1214.48
-21.84287395	-0.8119466	-0.4896011	-0.45588254	-0.75255666	0.09393939	10.99711816	1216.495
-17.88727606	-0.75018761	-0.40506118	-0.43276499	-0.79017634	0.46401425	15.38904899	1218.494
-5.04510671	-0.83853015	-0.43786781	-0.46035686	-0.76944616	0.10486712	14.29394813	1220.494
-14.29893456	-0.53129558	-0.40506118	-0.22096931	-0.66273154	0.14347585	12.09221902	1222.512
-20.68491633	-0.40341419	-0.32365163	-0.19018314	-0.44530135	0.4086816	16.49567723	1224.512
-6.44160018	-0.65514916	-0.43342797	-0.05893032	-0.54895056	0.39338279	9.90201729	1226.512
-12.53509024	-0.63403732	-0.34825655	-0.22970234	-0.48522419	0.29430793	10.44380403	1228.528
-18.4340485	-0.41949141	-0.42966532	-0.04124039	-0.54142266	0.51646541	10.44380403	1230.542
-10.69744493	-0.74704955	-0.32682848	-0.10314058	-0.67040385	0.3678541	9.90201729	1232.543
-16.51596254	-0.65211202	-0.28016482	-0.24429479	-0.59455118	0.36636451	11.55043228	1234.624
-8.10994086	-0.72560154	-0.4050832	-0.20849796	-0.61297367	0.53100377	7.70028818	1236.622
-16.44480475	-0.54656781	-0.31549567	-0.1495836	-0.47938558	0.33212493	20.34582132	1238.623
-17.63033963	-0.39646629	-0.34451676	0.08607388	-0.5269847	0.41663203	8.79538905	1240.703
-22.13985428	-0.5113918	-0.27259382	-0.03548493	-0.47784863	0.45815551	6.59365994	1242.704
-19.2701983	-0.54035801	-0.27007295	-0.24878562	-0.56308385	0.42318481	4.94524496	1244.718
-21.33475902	-0.59508549	-0.48962651	-0.13692797	-0.42335191	0.37364637	6.59365994	1246.72
-24.56022698	-0.45280489	-0.2744891	0.00700413	-0.60761302	0.57179806	-8.24207493	1248.719
-25.20679143	-0.36867468	-0.14260666	0.14967106	-0.53835272	0.59878507	-7.14697406	1250.736
-22.96599331	-0.62353157	-0.21452875	0.01468871	-0.54372582	0.56964576	-7.14697406	1252.734
-26.4919423	-0.26000914	-0.0997048	0.07882166	-0.58288245	0.4705709	-9.89048991	1254.734
-20.45328944	-0.32042572	-0.10283088	0.0872989	-0.15812497	0.56604293	0.55331412	1256.75

-25.23371062	-0.20863827	0.05426179	0.00601124	-0.19881402	0.55147324	1.10662824	1258.752
-24.24412946	-0.06088654	0.14511143	0.17230838	-0.29401225	0.81300185	-9.89048991	1260.749
-28.7186173	-0.12121893	-0.10532211	0.37247323	-0.05195457	0.62582484	-11.5389049	1262.765
-23.67495027	-0.02975505	-0.12803431	0.41125587	-0.02892519	0.85238474	-5.49855908	1264.767
-28.07276947	-0.04383538	0.22400439	0.33593215	-0.14792298	0.76715231	-11.5389049	1267.021
-29.05139958	-0.13451041	0.03536725	0.3195305	0.04861677	0.87278382	-10.44380403	1269.037
-28.89627661	0.32230498	-0.01824527	0.49043839	0.07020773	0.75697327	-6.59365994	1271.055
-23.68677054	-0.27573404	0.10351739	0.4285382	0.16080303	0.74386002	-2.74351585	1273.055
-20.92734126	-0.25646802	0.10476512	0.33071302	-0.15099292	0.82178899	-2.20172911	1275.072
-18.25744654	-0.08604291	0.28204661	0.32176381	-0.05809785	0.66807746	1.10662824	1277.07
-4.85053938	-0.33698962	0.04861568	0.35308631	0.17913491	0.51800976	-3.29682997	1279.071
-12.44479183	-0.01648029	0.04861484	0.29863857	-0.06654883	1.03742114	-0.54178674	1281.087
-1.14839337	-0.26663816	-0.00374911	0.37396229	-0.1179841	0.83198759	0	1283.103
0.9287337	-0.02195142	-0.06936232	0.46494341	-0.00896632	0.74820961	-9.89048991	1285.102
-7.42504794	-0.03814628	0.16723448	0.44491565	0.15463936	0.8698847	-8.79538905	1287.119
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-3.98452077	0.22374213	0.19751772	0.58362092	0.15310637	0.95803182	1.10662824	1291.118
-2.30870148	0.17906774	0.55147963	0.55486013	4.25305135	2.02603399	1.64841498	1293.134
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9.79249832	0.14439513	0.54204043	0.73706275	2.23637576	2.39103497	0.55331412	1299.149
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175.5077951	0.21004757	0.68335873	1.23371261	2.66706643	6.01522943	33.53314121	1307.175
225.3889228	0.65407547	0.87010143	2.69609507	18.35802796	15.0229109	70.36311239	1309.183
196.3762687	1.34512202	1.46187403	2.99289252	24.07150699	25.77896762	93.44092219	1311.262
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283.2944279	51.944887	25.59277396	17.36915594	57.92171786	54.44332987	117.0835735	1315.293
316.319467	71.2879127	39.70151502	27.12314709	75.92985512	78.0173515	141.2680115	1317.292
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346.1310236	165.7093863	100.3016048	62.7619898	221.9177926	191.8424986	213.5027688	1325.406
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482.7198036	298.5670384	191.5737974	200.1957884	361.9327993	294.244658	308.0211864	1335.438
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635.4134683	408.4266456	298.3777021	362.8505293	527.8985985	465.424541	487.3988647	1343.468
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628.5554917	419.3811908	304.1298241	368.3334138	542.593066	502.8854255	556.2213659	1347.468
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1651.470482	1272.617484	1064.887356	1358.655489	1543.166834	1488.845589	1588.295567	1405.916
1682.936894	1291.245438	1085.296443	1374.903092	1582.382189	1528.823884	1627.005991	1407.918
1685.675822	1305.738257	1098.270732	1391.085797	1604.586933	1552.35739	1663.355424	1410.013
1708.744267	1324.947041	1116.337288	1414.150261	1625.992211	1572.653855	1699.704857	1412.013
1742.194275	1340.062337	1128.719442	1431.238818	1641.076713	1586.168872	1717.891871	1414.028
1766.48317	1353.266427	1139.93237	1444.64399	1658.982792	1602.310687	1733.717892	1416.045
1789.91601	1371.221078	1155.169386	1462.776658	1670.618914	1612.204666	1739.583481	1418.043
1746.219298	1370.791782	1154.570481	1462.353535	1658.085146	1601.141462	1731.369198	1420.126
1802.294915	1386.411542	1171.919705	1474.244243	1699.295724	1643.791213	1759.516644	1422.124
1845.729736	1411.94323	1194.685791	1502.087972	1730.135307	1673.057439	1791.771233	1424.139
1880.207981	1434.4715	1214.877509	1528.347159	1750.161923	1689.904096	1812.294644	1426.139
1884.193423	1444.896009	1223.732507	1540.462875	1770.133499	1708.718396	1842.778488	1428.141
1907.288893	1458.322506	1234.253306	1553.561599	1782.151183	1720.311719	1853.32917	1430.156
1898.782619	1471.195262	1245.506369	1566.036044	1789.350016	1727.779893	1850.992772	1432.172
1863.308009	1472.770229	1246.869976	1566.846312	1780.03986	1741.068809	1868.57724	1434.188

2017.288611	1545.130712	1316.455429	1646.020604	1894.696422	1835.66706	1978.228084	1436.268
2072.971275	1582.780063	1345.643437	1680.582704	1911.360281	1852.70889	1994.066403	1438.27
2030.97648	1579.750144	1341.136891	1678.201028	1900.75454	1858.13216	1996.402801	1440.285
2161.445434	1644.583216	1404.714154	1746.48466	1997.384827	1949.507228	2085.530233	1442.3
2208.705726	1692.902365	1441.522016	1790.992678	2034.682782	1982.216402	2117.194573	1444.3
2171.214932	1692.765005	1440.534809	1791.086749	2013.660094	1965.6128	2109.570538	1446.316
2269.388204	1727.967975	1478.096053	1826.864186	2086.542296	2040.383233	2175.838161	1448.315
2308.078231	1766.271287	1511.092645	1866.096328	2123.923208	2078.962193	2218.053183	1450.317
2358.226636	1800.538628	1540.357897	1900.113326	2153.620127	2108.105982	2247.959076	1452.333
2306.706217	1805.048049	1542.622954	1903.765141	2133.298581	2089.930009	2236.818147	1454.348
2359.264472	1830.788103	1573.28588	1929.816234	2194.271964	2155.177903	2306.590368	1456.347
2425.3364	1875.457961	1612.248421	1976.635601	2237.566014	2194.876177	2360.536566	1458.442
2433.17954	1893.4416	1624.416003	1991.785556	2242.843116	2199.419578	2355.839177	1460.442
2422.494733	1898.985704	1627.711675	1995.338246	2248.103519	2204.909336	2358.187871	1462.459
2424.070092	1906.501615	1636.551032	2001.188266	2260.447038	2218.042222	2365.221659	1464.459
2422.6431	1914.503505	1642.968405	2008.698596	2255.337962	2214.265205	2375.784637	1466.459
2385.490749	1914.377546	1641.796849	2008.847463	2253.690354	2216.124992	2369.919048	1468.474
2432.500053	1919.774865	1649.060016	2015.371889	2280.408623	2242.99453	2394.549601	1470.477
2482.34012	1944.611898	1674.781073	2041.986922	2309.572121	2272.038629	2422.684751	1472.475
2501.569831	1968.287666	1696.294165	2064.237364	2329.329493	2290.463427	2440.281516	1474.491
2487.696151	1976.516795	1701.616288	2071.774557	2333.716369	2295.646581	2456.107538	1476.491
2521.179221	1988.651102	1712.024258	2084.201415	2354.122564	2313.170454	2477.221197	1478.491
2523.886741	2001.067816	1721.408384	2094.759984	2365.750714	2323.748143	2486.60368	1480.506
2530.027486	2012.797348	1731.747635	2104.944346	2376.999285	2335.311766	2500.671254	1482.523
2549.317396	2021.813214	1739.407503	2112.747356	2380.52579	2339.993272	2498.912808	1484.523
2536.319682	2025.814346	1741.927032	2116.557562	2379.700595	2339.219488	2495.986162	1486.604
2502.29174	2026.436572	1742.917506	2117.385473	2371.476725	2331.62308	2494.805666	1488.602
2485.474011	2025.522636	1741.18718	2117.182364	2378.177741	2338.349209	2499.503056	1490.602
2562.921607	2030.946983	1747.987372	2123.019963	2400.816595	2362.263249	2529.69259	1492.684
2603.126553	2047.292552	1765.430172	2138.966028	2428.590589	2393.187562	2556.908319	1494.683
2624.838395	2075.145494	1792.386494	2164.903531	2451.529308	2417.198359	2573.930046	1496.699
2669.296598	2098.965197	1814.198276	2190.109042	2477.456297	2442.343157	2613.635511	1498.699
2698.180863	2125.316387	1833.451562	2213.06869	2512.823559	2472.929973	2649.927116	1500.7
2714.807569	2143.353137	1848.142406	2227.29898	2517.127938	2476.548705	2644.824167	1502.731
2665.89845	2143.188871	1846.607048	2227.142506	2502.768117	2464.176073	2647.667069	1504.731
2773.847618	2170.566862	1880.881846	2255.766146	2567.881902	2535.156674	2708.355291	1506.732
2814.781588	2203.300569	1909.540605	2283.703708	2598.970853	2568.014039	2737.283899	1508.811
2841.399159	2219.077255	1920.702429	2300.659818	2618.072828	2584.7649	2765.641548	1510.812
2868.661846	2243.347242	1939.469984	2321.985581	2645.288848	2607.009598	2781.521355	1512.826
2870.281286	2257.467884	1949.643553	2331.371643	2646.851687	2609.897949	2775.847446	1514.842
2834.919497	2260.578504	1951.83055	2332.427969	2638.95501	2603.306362	2769.043514	1516.842
2876.63842	2263.094468	1957.88844	2334.130555	2681.953499	2652.0346	2811.579987	1518.922
2960.333888	2322.092234	2017.098705	2391.719785	2738.802168	2703.667532	2878.513077	1520.924
2968.479681	2350.690507	2038.735124	2418.026223	2771.224695	2733.197446	2912.544635	1522.939

2979.100969	2373.242042	2056.509984	2435.297427	2783.396645	2744.241296	2925.022476	1524.954
2975.799518	2379.895182	2062.054958	2438.862796	2778.48495	2741.518884	2921.04955	1526.956
2933.884829	2378.956501	2061.083972	2437.51799	2786.117438	2755.439594	2930.125425	1529.052
3058.676652	2427.413094	2110.4441	2476.140618	2864.147399	2826.948646	3006.70535	1531.052
3098.983223	2457.598638	2135.765662	2507.891744	2886.137686	2849.350862	3037.894005	1533.068
3112.937341	2482.233989	2156.011108	2530.608115	2910.186282	2870.929256	3061.148705	1535.083
3113.642274	2498.269683	2169.812703	2542.824072	2919.031385	2879.475601	3067.952637	1537.084
3089.54183	2499.783801	2169.76999	2542.765082	2902.615027	2865.631473	3053.773813	1539.178
3164.289509	2509.291929	2184.790518	2548.6546	2959.788107	2925.302468	3102.555154	1541.178
3208.030897	2560.646947	2231.434466	2594.133627	3008.224893	2973.533148	3167.216302	1543.195
3236.795661	2593.631299	2259.732435	2626.88712	3037.621442	3001.251524	3202.948842	1545.196
3243.035175	2607.71474	2271.379729	2639.77404	3049.38523	3013.54987	3220.529633	1547.196
3239.271659	2620.10157	2282.019491	2648.30737	3049.798208	3015.121436	3204.649825	1549.291
3207.957828	2620.648302	2281.630235	2648.16013	3036.23372	3003.60581	3191.601025	1551.29
3267.504448	2622.689931	2285.085517	2649.131326	3076.625036	3047.984328	3221.100592	1553.305
3330.672591	2666.197233	2327.325778	2681.746693	3124.825727	3092.084635	3278.386849	1555.323
3371.410582	2701.589951	2358.945576	2719.189259	3162.097286	3129.093014	3329.440132	1557.323
3394.060587	2729.163668	2383.717793	2747.551995	3190.210528	3158.476789	3358.356845	1559.338
3387.432833	2745.089018	2396.84513	2760.430759	3182.147919	3151.842228	3347.579987	1561.338
3349.801842	2743.295289	2394.712782	2758.797956	3168.697061	3139.594423	3343.618956	1563.34
3450.58898	2763.721309	2419.026967	2772.562307	3228.335584	3199.805375	3399.204229	1565.418
3474.637301	2792.342555	2441.721376	2795.722308	3254.71618	3224.890957	3428.132837	1567.417
3494.943478	2815.505976	2461.16997	2819.191178	3278.875507	3249.025027	3464.995401	1569.433
3545.109779	2841.010351	2486.959369	2848.908788	3309.530341	3281.488269	3505.830891	1571.434
3529.380015	2861.019958	2503.863676	2865.490088	3305.600429	3280.402147	3491.652067	1573.434
3553.810683	2861.396676	2505.462453	2868.22838	3338.414762	3314.185698	3532.487556	1575.45
3574.188618	2895.306731	2537.774373	2891.34378	3372.738436	3347.618462	3568.791056	1577.451
3622.357016	2928.551717	2566.805481	2919.299093	3416.193473	3387.346266	3605.455939	1579.45
3637.726677	2964.182101	2597.037908	2952.221403	3437.898486	3410.419989	3633.908222	1581.466
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3610.42348	2980.347364	2612.752002	2970.938852	3428.535072	3410.048693	3645.635572	1585.482
3667.878632	2989.462792	2624.710847	2983.790039	3477.796953	3455.67472	3693.071648	1587.5
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3769.604739	3092.95332	2716.442686	3062.442454	3583.935967	3557.842265	3787.943801	1593.514
3740.6343	3107.052383	2729.063723	3077.299338	3573.760117	3552.055382	3779.013694	1595.531
3820.35318	3121.023179	2748.249512	3100.729364	3628.849837	3610.203183	3856.037335	1597.531
3859.129039	3169.63475	2788.649909	3134.365323	3676.7434	3651.029871	3888.398735	1599.626
3896.698745	3203.607057	2815.618181	3154.475059	3704.976672	3679.55095	3918.536385	1601.625
3925.098604	3224.264626	2836.656619	3174.151952	3726.932241	3705.721402	3949.235825	1603.641
3912.74346	3236.106033	2846.801668	3187.50648	3710.921796	3692.819573	3938.070264	1605.659
3902.063413	3234.774662	2845.57622	3186.968847	3727.543132	3713.766347	3967.646126	1607.658
3981.463848	3255.844166	2871.388303	3215.378342	3768.653376	3752.326467	4005.602009	1609.673
4044.903761	3295.239559	2903.06602	3247.865658	3822.981175	3800.976413	4059.732741	1611.674

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4079.785456	3373.246023	2972.378802	3302.573638	3855.409166	3844.518271	4090.982266	1615.689
4034.910328	3369.078007	2966.98447	3299.903408	3837.982638	3827.870196	4078.70483	1617.688
4029.796919	3365.912576	2963.173712	3297.818489	3834.984698	3839.132462	4099.912373	1619.691
4103.389484	3380.994197	2982.209641	3318.223905	3898.958226	3893.291818	4156.840347	1621.705
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4169.429716	3441.159203	3031.609516	3366.178224	3940.08322	3933.962382	4190.325325	1625.706
4188.065162	3455.177654	3043.600938	3371.943524	3956.031154	3949.058968	4197.581769	1627.722
4196.696706	3467.220848	3054.73252	3377.706227	3961.829743	3957.198982	4205.400002	1629.721
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4195.685979	3496.881149	3082.175236	3403.12619	3974.513923	3975.418571	4236.649527	1633.802
4275.053697	3522.432244	3111.290326	3439.246245	4039.237123	4039.555668	4319.806034	1635.801
4318.395865	3565.654199	3147.039435	3476.884373	4086.517792	4084.687549	4365.006658	1637.818
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4374.511555	3626.939666	3200.821279	3512.217939	4137.153236	4136.545565	4391.796981	1641.835
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4375.313361	3653.375471	3224.039245	3545.897348	4169.807028	4176.530575	4457.093273	1649.882
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4476.245071	3706.504133	3265.248875	3597.020822	4267.594153	4270.667423	4549.179888	1655.897
4467.815051	3763.956962	3314.285294	3628.326322	4265.488545	4271.660169	4548.056309	1657.912
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4664.241144	3873.671235	3412.913148	3728.337824	4419.21946	4427.295316	4723.299432	1665.928
4637.941059	3898.756403	3432.487065	3740.834554	4398.535472	4410.425544	4697.070898	1667.946
4792.739431	3957.564186	3488.195721	3806.286906	4524.282352	4514.236417	4815.806306	1669.946
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5277.436631	4353.747937	3816.365735	4148.564154	5007.454248	5007.51251	5382.463767	1702.121
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5215.798406	4369.6878	3823.011437	4156.443725	4973.036079	4978.317034	5343.498618	1706.136
5276.102981	4374.486427	3828.179316	4162.206423	5027.179069	5030.457046	5408.989125	1708.215
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5406.216621	4480.299363	3917.580688	4246.450471	5122.755317	5126.470947	5504.826997	1714.266
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5450.745974	4510.514812	3937.607614	4272.018539	5160.663608	5171.367764	5569.931973	1720.282
5497.875018	4538.579696	3962.138366	4299.356523	5199.560029	5214.383017	5603.039925	1722.282
5533.617424	4578.159674	3999.382626	4326.901131	5232.561545	5243.692815	5628.973137	1724.296
5487.615143	4593.465577	4007.991052	4335.904359	5213.494526	5228.049374	5616.290049	1726.313
5453.512867	4592.967194	4007.420954	4335.963529	5220.566282	5243.0747	5647.187718	1728.313
5566.540186	4614.015935	4034.166855	4364.774134	5294.573847	5315.493774	5730.507275	1730.393
5588.56127	4655.842537	4071.492074	4397.002403	5315.993538	5335.497679	5749.821211	1732.392
5635.844885	4683.488039	4094.529132	4416.903315	5343.845711	5359.549528	5767.480329	1734.407
5570.699286	4693.382673	4098.261161	4420.947537	5310.891582	5334.793948	5745.95611	1736.425
5686.70624	4706.658838	4116.716409	4440.204235	5380.122709	5403.202478	5824.31121	1738.424
5707.69159	4732.361324	4139.261901	4464.725816	5404.174024	5427.802625	5846.934784	1740.439
5741.670412	4749.906614	4148.731172	4473.20174	5410.795739	5433.992646	5843.081254	1742.441
5715.683564	4749.322029	4144.675	4465.436835	5396.431132	5419.310785	5829.83113	1744.455
5648.419167	4724.744341	4125.89366	4441.694513	5354.718807	5375.659819	5755.896596	1746.471
5579.313223	4697.721682	4108.890246	4421.78883	5322.512301	5344.03897	5701.819889	1748.473
5527.82855	4680.409516	4096.847779	4407.646222	5298.655609	5321.924857	5663.735908	1750.473
5493.167369	4666.093232	4087.029543	4395.826596	5284.39248	5308.7618	5637.802696	1752.487
5571.940986	4659.208255	4084.468031	4393.383838	5291.319614	5316.9537	5667.057118	1754.502
5601.199529	4653.526632	4081.548795	4386.330429	5289.483651	5315.762005	5660.42627	1756.504

Experiment 7

LVDT 1	LVDT 2	LVDT 3	LVDT 4	LVDT 5	LVDT 6	LVDT 7
in	in	in	in	in	in	in
0.34481483	0.18903736	0.19098911	0.13391565	0.19943031	0.10146179	0.13249328
0.34483106	0.18902958	0.19098908	0.13391547	0.19943051	0.10146127	0.13249887
0.34483133	0.18902679	0.19098925	0.13391435	0.19943068	0.10146158	0.13249708
0.34483211	0.18902666	0.19099088	0.13391624	0.19943082	0.10146173	0.13249779
0.34483282	0.1890277	0.19099106	0.13391159	0.19943079	0.10146146	0.1324993
0.34483771	0.18902806	0.19099067	0.13391369	0.19943067	0.10146138	0.13249865
0.34483824	0.18902723	0.19099192	0.13391216	0.19943132	0.1014613	0.132499
0.34483466	0.18902509	0.19098902	0.13391265	0.1994315	0.10146098	0.13249986
0.34483696	0.18902313	0.19099167	0.13391367	0.19943121	0.10146097	0.13249934
0.34483775	0.18902476	0.19098916	0.13391363	0.19943122	0.10146072	0.13249812
0.34483653	0.18902515	0.19098986	0.13391377	0.19943124	0.10146084	0.13250235

0.34484073	0.18902131	0.19099292	0.13391006	0.19943161	0.10146139	0.13250136
0.34484156	0.18902095	0.19099098	0.1339091	0.19943091	0.10146147	0.13250116
0.34484044	0.18902335	0.19099382	0.13391072	0.19943091	0.10146161	0.13250205
0.34484125	0.18902243	0.1909952	0.1339112	0.19943226	0.10146135	0.13250556
0.34484206	0.18902348	0.1909939	0.13391027	0.19943244	0.10146105	0.13250596
0.34484301	0.18902	0.19099588	0.13391142	0.19943235	0.10146117	0.13250609
0.34484245	0.18902246	0.19099551	0.13391099	0.19943247	0.10146099	0.13250416
0.34484513	0.18902053	0.19099446	0.13391125	0.1994323	0.10146131	0.13250582
0.34484217	0.1890192	0.19099484	0.13391327	0.19943233	0.10146162	0.13250741
0.34484229	0.18902227	0.19099388	0.13391022	0.19943284	0.10146186	0.13250607
0.34484299	0.1890182	0.19099452	0.13390949	0.19943272	0.10146146	0.13250563
0.34484342	0.18901886	0.19099357	0.13391137	0.1994324	0.10146134	0.13250569
0.3448428	0.18901987	0.1909929	0.13391219	0.19943265	0.10146139	0.13250584
0.34484404	0.18902202	0.1909922	0.13391065	0.19943203	0.10146097	0.13250668
0.34484564	0.1890229	0.19099552	0.13391146	0.19943168	0.10146154	0.13250777
0.34484535	0.18902074	0.19099481	0.13391023	0.19943218	0.10146038	0.13250711
0.00000078	-0.00000217	0.00000058	0.00000079	0.00000081	-0.00000009	0.00000123
0.00000009	-0.00000671	-0.0000001	-0.00000123	0.00000031	0.00000016	0.00000047
0.00000116	-0.00000665	0.00000092	-0.00000195	0.00000069	0.00000008	0.00000111
0.00000108	-0.00000264	0.00000079	-0.0000016	0.00000058	0.00000006	0.00000051
0.00000205	-0.00000392	0.00000075	-0.0000007	-0.00000005	0.00000016	0.00000031
0.00000442	-0.00000328	0.00000009	-0.00000178	0.00000038	0.00000045	-0.00000017
0.00000384	-0.00000602	0.00000199	-0.00000182	0.00000067	0.00000031	-0.00000047
0.00001152	-0.00000744	0.00000222	-0.00001128	0.00000024	-0.00001338	0.00000325
0.00006982	-0.00002824	0.00001213	-0.00007181	-0.00001127	-0.00010728	0.0000377
0.00078514	-0.00034047	0.00013978	-0.00033261	0.00001561	-0.00032675	0.00036709
0.00285852	-0.00152755	0.00073181	-0.00100144	0.00024756	-0.00062832	0.00147079
0.00400987	-0.003044	0.00146242	-0.00182546	0.00058144	-0.00097956	0.00273052
0.00509944	-0.00431276	0.00218379	-0.00260866	0.00094467	-0.00134869	0.00409891
0.00567345	-0.00505797	0.00272437	-0.0031707	0.00125847	-0.00166899	0.00510452
0.00655695	-0.00557219	0.00298359	-0.00333771	0.00134814	-0.00176315	0.00556548
0.00776291	-0.00630262	0.00367211	-0.00392669	0.00171724	-0.00210521	0.00611286
0.00877307	-0.00677387	0.00417822	-0.00432088	0.00197816	-0.00239489	0.00687962
0.00946541	-0.00705529	0.00457425	-0.00458633	0.00217984	-0.00259779	0.00761348
0.00968702	-0.00708091	0.00466653	-0.00461505	0.00221581	-0.00263087	0.00769857
0.01109807	-0.00749032	0.00522815	-0.00497187	0.00245711	-0.00296644	0.00871228
0.01250751	-0.00769681	0.00575186	-0.00515916	0.0026805	-0.00318335	0.00961341
0.01362699	-0.00787172	0.00618131	-0.00531855	0.00287602	-0.00337729	0.01049218
0.01396669	-0.00789297	0.00628504	-0.00531799	0.0029065	-0.00338792	0.01053808
0.01402604	-0.00794371	0.0064164	-0.00540935	0.00298071	-0.00348558	0.01107638
0.01561854	-0.00809696	0.00681613	-0.00547167	0.00312806	-0.00358583	0.01152883
0.01667481	-0.00824507	0.00715081	-0.00556966	0.00327215	-0.00371524	0.01222659
0.01717361	-0.00827747	0.00733109	-0.00558611	0.00334165	-0.00374879	0.01244362
0.01716767	-0.00827703	0.00735004	-0.005585	0.003351	-0.00374842	0.01245853

0.01812884	-0.00843836	0.00759383	-0.00568123	0.00345971	-0.00386764	0.01316324
0.01884124	-0.00845589	0.00778406	-0.00568828	0.00352602	-0.00388564	0.01328252
0.01955988	-0.00854422	0.00797693	-0.0057381	0.00361232	-0.00396087	0.01379491
0.02026548	-0.00856315	0.00816883	-0.00574345	0.00369561	-0.00398639	0.01395695
0.02025485	-0.00856586	0.00818611	-0.00574529	0.00370979	-0.00398582	0.01396372
0.02024822	-0.00856288	0.00819226	-0.00574436	0.00371646	-0.00398572	0.01396491
0.02024151	-0.00856301	0.0081982	-0.00574643	0.00373245	-0.00403497	0.01440512
0.02185141	-0.00885766	0.00861685	-0.0058991	0.00390784	-0.00412218	0.01471161
0.02183336	-0.00886182	0.00863227	-0.00589809	0.00392143	-0.00412221	0.01471698
0.02283546	-0.00888785	0.00891382	-0.00590362	0.00405495	-0.00422155	0.01544867
0.02329432	-0.00888611	0.00908907	-0.00590217	0.00413344	-0.00422841	0.01552035
0.02376538	-0.00891847	0.00928988	-0.00590418	0.00422736	-0.00429917	0.01608934
0.02474426	-0.00891624	0.0095725	-0.00588904	0.00435236	-0.00429839	0.01633301
0.02474419	-0.00892003	0.00962656	-0.00587688	0.00440722	-0.00431533	0.01673587
0.02612037	-0.00893658	0.01000775	-0.00585025	0.00458058	-0.00430575	0.01710223
0.02617622	-0.00893164	0.01006112	-0.0058318	0.00461283	-0.00426533	0.01713161
0.02693579	-0.00896097	0.01028172	-0.0058094	0.00474437	-0.00427028	0.01774093
0.02762116	-0.00896264	0.01050855	-0.00578222	0.00485293	-0.0042367	0.01792073
0.02760743	-0.00896512	0.01052965	-0.00577443	0.00487225	-0.00420914	0.01793815
0.02802227	-0.00896363	0.01062922	-0.00575433	0.00492696	-0.00420937	0.01816135
0.02851554	-0.0089761	0.01075993	-0.00574297	0.00500091	-0.00421099	0.01841299
0.02899384	-0.00897255	0.01091309	-0.00572715	0.00507939	-0.00420823	0.01865197
0.02899945	-0.00897051	0.01094721	-0.00572007	0.00510341	-0.00418447	0.01866991
0.02899546	-0.00897014	0.01095657	-0.0057152	0.00511307	-0.00416925	0.01867683
0.03022756	-0.0090117	0.01123055	-0.00568517	0.00525772	-0.00417654	0.01928107
0.03039149	-0.00900845	0.01132675	-0.00567675	0.00531331	-0.00415821	0.01935419
0.03039044	-0.00900746	0.01134349	-0.00566747	0.00532907	-0.00413878	0.01936568
0.03038747	-0.00900911	0.01135013	-0.005668	0.0053382	-0.00412685	0.01937446
0.03135681	-0.0090447	0.0115434	-0.00564135	0.00543704	-0.00413445	0.01987029
0.0317595	-0.00904354	0.01168924	-0.00563232	0.00550452	-0.00413322	0.02008734
0.03176172	-0.00904334	0.01172087	-0.00563253	0.00552203	-0.00412686	0.02012047
0.03269535	-0.0090831	0.01189956	-0.00560938	0.00560595	-0.00413423	0.02067
0.0332314	-0.00908433	0.01205923	-0.00559927	0.00567527	-0.0041298	0.02084638
0.03322971	-0.00908516	0.01208177	-0.00559833	0.00568904	-0.00412064	0.02087266
0.03322501	-0.00908488	0.01208921	-0.00559983	0.00569504	-0.0041146	0.02088702
0.03322557	-0.00908286	0.01209273	-0.00559976	0.00569781	-0.00411256	0.02090019
0.03328756	-0.00908298	0.01209588	-0.0055982	0.00569999	-0.00411177	0.02094133
0.03348978	-0.00908126	0.01212185	-0.00559248	0.00571196	-0.00411169	0.02100155
0.03367232	-0.00908109	0.01215127	-0.00558582	0.00572253	-0.00411241	0.0210703
0.03388114	-0.00908609	0.01218233	-0.00558027	0.00573645	-0.00411128	0.02114068
0.03406402	-0.00909807	0.01221088	-0.00557906	0.00575083	-0.00411343	0.02120808
0.0341679	-0.00910451	0.01223228	-0.005576	0.00576257	-0.00411375	0.02124358
0.03425044	-0.00911266	0.01224564	-0.0055724	0.00577287	-0.00411477	0.02136984
0.0349034	-0.00915301	0.01234574	-0.00558469	0.00581316	-0.00412049	0.02148584

0.03490274	-0.00915026	0.01235875	-0.00558301	0.00582363	-0.00412027	0.02149342
0.0348989	-0.00915178	0.01236189	-0.00558526	0.00583043	-0.00412041	0.02150683
0.03507831	-0.00915974	0.01237596	-0.00558386	0.00583688	-0.00412123	0.02160131
0.03556227	-0.00920856	0.01245309	-0.00558816	0.00587197	-0.00412745	0.02176157
0.03568244	-0.0092206	0.01249133	-0.00558922	0.00589595	-0.00412907	0.02183405
0.03589863	-0.00924827	0.01253168	-0.00559435	0.00592113	-0.00412926	0.0219241
0.03604303	-0.00930503	0.0125616	-0.00561296	0.00594522	-0.00412907	0.02198013
0.03608814	-0.0093234	0.01258574	-0.0056197	0.00596367	-0.00413129	0.0220017
0.03608893	-0.00932387	0.01259346	-0.00562519	0.00597211	-0.00413089	0.02200854
0.03608555	-0.00932194	0.01259904	-0.00562648	0.00597923	-0.00413085	0.02201197
0.03671299	-0.00941018	0.01265609	-0.0056518	0.00600448	-0.00414345	0.02219949
0.03715155	-0.00944818	0.01272853	-0.00565919	0.00604338	-0.00415982	0.02234462
0.03735942	-0.00945446	0.01277055	-0.00565857	0.0060722	-0.00416395	0.02242983
0.0377481	-0.0094715	0.01282672	-0.0056586	0.0061049	-0.00416805	0.02253197
0.03779045	-0.00946892	0.01285751	-0.00566433	0.00612584	-0.00416828	0.0225521
0.03821505	-0.00947139	0.01290625	-0.00568821	0.00615159	-0.00418061	0.02274215
0.03899868	-0.00948269	0.01304241	-0.00570029	0.0062227	-0.00421069	0.02305331
0.03939322	-0.00948608	0.01326864	-0.00573836	0.00629574	-0.00422255	0.02320542
0.0394013	-0.00948858	0.01329672	-0.00574767	0.00632206	-0.00422389	0.02334442
0.04027708	-0.00949882	0.01346213	-0.00576433	0.00640295	-0.00424761	0.02370059
0.0406328	-0.00951003	0.01358304	-0.00577375	0.0064615	-0.00425896	0.02393318
0.0406418	-0.00951417	0.01363029	-0.00578457	0.00649025	-0.00425914	0.02398969
0.04063881	-0.00951583	0.01365133	-0.0057954	0.00650565	-0.00425968	0.02403025
0.04150448	-0.0095889	0.01378955	-0.00582762	0.00657033	-0.0043055	0.02473471
0.04182922	-0.00967727	0.01397262	-0.00588417	0.00665093	-0.0043382	0.02548664
0.04182436	-0.00968054	0.01402201	-0.00590123	0.00667344	-0.00433976	0.02571732
0.04194607	-0.00972278	0.01407223	-0.00593455	0.00670042	-0.00436644	0.02627098
0.04237811	-0.00982534	0.01422485	-0.00599188	0.00676456	-0.00440879	0.02686002
0.04247714	-0.00991649	0.014433	-0.00612991	0.00702967	-0.00458196	0.0274768
0.04267125	-0.00992873	0.01455019	-0.0061634	0.00709571	-0.00460598	0.02782402
0.04266618	-0.00993184	0.0145814	-0.00617754	0.00712186	-0.00461045	0.02797231
0.04266577	-0.00993627	0.01459724	-0.00618616	0.0071379	-0.00461875	0.02820153
0.04273463	-0.00996096	0.01463776	-0.0062102	0.0071608	-0.00463356	0.02842924
0.04281468	-0.00999233	0.01467226	-0.00623103	0.0071841	-0.00464746	0.02866606
0.04282716	-0.01000465	0.01470244	-0.00624933	0.00720135	-0.00465596	0.0288182
0.0429677	-0.01004592	0.01474853	-0.00627723	0.00722504	-0.00467762	0.02917823
0.04334133	-0.01013344	0.01485918	-0.00633059	0.00727998	-0.00471763	0.02978145
0.04339963	-0.01015355	0.01493452	-0.00636331	0.00731571	-0.00473422	0.03005803
0.04339701	-0.0101596	0.01496384	-0.00637359	0.0073319	-0.00474246	0.03022266
0.04369542	-0.01022796	0.01503769	-0.00641602	0.00737033	-0.00477476	0.0307155
0.04380118	-0.01026435	0.01511493	-0.00644783	0.00740657	-0.00479782	0.03104272
0.04384587	-0.01028445	0.01516455	-0.00647101	0.00743277	-0.0048097	0.03124403
0.04390146	-0.01030563	0.01519841	-0.00648539	0.00745339	-0.00482495	0.03149647
0.04413863	-0.01036215	0.01527041	-0.00652508	0.00748797	-0.00484979	0.03187463

0.04416144	-0.0103719	0.01531977	-0.00654484	0.00751474	-0.00486188	0.03203779
0.04415615	-0.01037472	0.01534393	-0.0065572	0.00752968	-0.00486659	0.03212012
0.0441568	-0.01037478	0.01535379	-0.00656247	0.00753799	-0.00487443	0.03226265
0.04443718	-0.01045363	0.0154205	-0.00660633	0.00757115	-0.00490403	0.03269495
0.0446428	-0.01052789	0.01550408	-0.00665587	0.00761468	-0.00493706	0.03310383
0.0343143	-0.0112771	0.01785982	-0.00758535	0.00807812	-0.00530387	0.04562647
0.03175173	-0.01127757	0.0182951	-0.00765872	0.00812108	-0.00533144	0.04662261
0.03107778	-0.01128235	0.01855831	-0.00769937	0.00815401	-0.00535838	0.04735121
0.03050249	-0.01128171	0.01868699	-0.00772247	0.00817003	-0.00536735	0.04764741
0.03033719	-0.0113069	0.01884936	-0.00775563	0.00819267	-0.00539492	0.0483087
0.03005061	-0.01136231	0.01905273	-0.00780926	0.00822269	-0.0054219	0.04886186
0.02967756	-0.01141336	0.01922448	-0.00786051	0.00824925	-0.00544836	0.04933872
0.02892817	-0.01148333	0.01940051	-0.00791728	0.00827685	-0.00547738	0.04981486
0.02850237	-0.0115511	0.01958503	-0.00797896	0.00830452	-0.00551485	0.05058274
0.02779503	-0.01170628	0.01992408	-0.00808921	0.0083573	-0.00556316	0.05130385
0.02720525	-0.01172077	0.02004467	-0.00811493	0.00837375	-0.0055831	0.05171684
0.02682281	-0.01189578	0.02048452	-0.00824785	0.00843574	-0.00564795	0.0529232
0.02603319	-0.01199142	0.02085015	-0.00832529	0.00848183	-0.00568523	0.05352689
0.02559347	-0.01204	0.02105401	-0.00837059	0.00850728	-0.00571004	0.05397302
0.02519615	-0.01204847	0.0211472	-0.00838837	0.00852072	-0.00571821	0.05411137
0.02507711	-0.01212087	0.02135333	-0.00844415	0.00854427	-0.00575332	0.0549063
0.0246286	-0.01225452	0.02170116	-0.00853738	0.00859313	-0.00579717	0.05577471
0.02392161	-0.01233065	0.02196861	-0.00860449	0.00862549	-0.00582742	0.05629217
0.02334492	-0.0123472	0.02207988	-0.00863042	0.0086385	-0.00583855	0.05644105
0.02312762	-0.01236077	0.022175	-0.00864769	0.00864691	-0.00585365	0.0567923
0.02284221	-0.01246023	0.02243107	-0.00871773	0.00867572	-0.00588902	0.0574937
0.02213347	-0.01256527	0.02274274	-0.00881024	0.00870972	-0.00594094	0.05819883
0.02123619	-0.01263995	0.02297079	-0.00887095	0.0087291	-0.00597635	0.05857733
0.02047842	-0.01264542	0.02311838	-0.00888992	0.00873675	-0.00599241	0.05871093
0.02008204	-0.01264466	0.02326987	-0.00890036	0.00874565	-0.00601046	0.05897684
0.01974621	-0.01269516	0.02370202	-0.0089393	0.00878147	-0.00605256	0.05951339
0.01905594	-0.0127039	0.02410335	-0.00895082	0.00880712	-0.00608015	0.05983845
0.01840812	-0.01270098	0.02441553	-0.0089645	0.00882645	-0.00610336	0.06013682
0.01778535	-0.01270168	0.02467703	-0.00897208	0.00884184	-0.0061271	0.06046924
0.01703673	-0.01272218	0.02501133	-0.00899298	0.00886718	-0.00615705	0.06087871
0.01617279	-0.0127344	0.02524947	-0.00900698	0.00888357	-0.00617782	0.06110036
0.01546354	-0.01273378	0.02536502	-0.00901584	0.00889118	-0.00618772	0.06118693
0.01479599	-0.0127303	0.02544024	-0.0090194	0.00889393	-0.00619828	0.0612972
0.01377937	-0.01277861	0.02568518	-0.00905252	0.00891761	-0.00623067	0.06172965
0.01265442	-0.01284315	0.02597352	-0.00909046	0.0089501	-0.00626835	0.06206518
0.0112242	-0.01284775	0.02629939	-0.00910823	0.00901934	-0.0063104	0.06218705
0.00985358	-0.01285335	0.02654647	-0.00911508	0.00906412	-0.00633307	0.06235818
0.00833303	-0.01286025	0.02673272	-0.00912354	0.00907323	-0.00635136	0.06257731
0.00713912	-0.01294176	0.02695786	-0.00916592	0.00897571	-0.0063848	0.06296692

0.00580759	-0.01295485	0.0270113	-0.00918425	0.00869534	-0.00640333	0.06300763
0.00509871	-0.0129591	0.02699227	-0.0091905	0.00843219	-0.0064108	0.06300743
0.00469269	-0.01297864	0.02686884	-0.00919895	0.00812752	-0.00642471	0.0630404
0.00448605	-0.01304796	0.02660587	-0.00924088	0.00745176	-0.0064577	0.06320733
0.00459715	-0.01306628	0.02592265	-0.00925837	0.00624901	-0.00648031	0.06320728
0.00501005	-0.01306674	0.02508251	-0.00927366	0.00477151	-0.00650429	0.06320452
0.00540654	-0.01306644	0.02413808	-0.00929871	0.00312968	-0.00653358	0.06319269
0.00571404	-0.01306714	0.02333433	-0.00931599	0.00187261	-0.00655029	0.06305681
0.00573085	-0.01306199	0.02258088	-0.00932636	0.00054776	-0.00655747	0.06281605
-0.2591323	-0.00670309	0.01706213	0.0111029	-0.01676975	-0.01417065	0.0222431
-0.25890208	-0.00677025	0.01705746	0.0110628	-0.01677111	-0.01418086	0.02220164
-0.25889758	-0.00677077	0.01704877	0.01105962	-0.01677589	-0.01418258	0.02216011
-0.2567217	-0.00700816	0.01713033	0.01090736	-0.01673457	-0.01426755	0.02226926
-0.25561104	-0.00698444	0.01710177	0.01091954	-0.0167455	-0.01426387	0.02220701

Pressure Transducer	Load Cell 1	Load Cell 2	Load Cell 3	Load Cell 4	Load Cell 5	Load Cell 6	Time
lbs	lbs	lbs	lbs	lbs	lbs	lbs	Seconds
10.7	-111.8	34.4	41.3	73.5	31.2	568.8	385.387
5.1	-112.4	33.8	40.5	72.9	30.4	604.0	443.817
11.1	-112.4	33.7	40.9	72.6	30.3	608.9	445.817
20.2	-112.4	33.9	40.6	72.5	30.2	603.4	447.898
17.2	-112.3	33.6	40.6	72.6	30.3	608.4	449.897
27.1	-112.3	33.7	40.5	72.5	30.2	613.9	451.914
17.1	-112.3	33.8	40.5	72.6	30.2	602.3	453.916
23.2	-112.4	33.6	40.5	72.4	30.3	594.6	455.914
15.5	-112.4	33.9	40.7	72.6	30.3	606.7	457.929
27.0	-112.4	33.9	40.5	72.5	30.2	606.7	459.93
34.7	-112.7	33.9	40.5	72.5	30.4	606.7	461.946
17.5	-112.2	33.8	40.6	72.5	30.2	608.9	464.025
11.6	-112.5	33.7	40.3	72.6	30.4	608.4	466.027
23.0	-112.6	33.9	40.5	72.7	30.3	590.2	468.043
21.8	-112.6	33.8	40.2	72.4	30.5	600.7	470.058
23.6	-112.5	33.6	40.5	72.4	30.3	594.6	472.057
29.8	-112.4	33.8	40.4	72.7	30.2	601.2	474.074
37.2	-112.4	33.8	40.6	72.4	30.2	607.3	476.073
32.9	-112.5	33.7	40.3	72.5	30.3	590.8	478.073
36.9	-112.0	33.8	40.8	72.7	30.6	585.3	480.09
33.2	-112.3	33.9	40.6	72.7	30.5	599.6	482.09
26.3	-112.1	34.0	40.7	72.7	30.5	588.0	484.091
36.3	-112.1	34.0	40.8	72.9	30.5	593.5	486.105
33.8	-112.0	34.1	40.7	73.0	30.6	590.8	488.105
27.0	-112.1	34.1	40.9	72.9	30.7	593.0	490.106
23.1	-112.0	34.1	41.0	73.1	30.7	593.5	492.122

33.3	-112.0	34.2	41.0	73.0	30.9	597.9	494.124
6.4	0.0	0.0	0.0	0.1	-0.1	-13.2	496.121
6.4	0.0	0.0	0.0	0.0	-0.2	-2.8	498.137
-3.4	0.3	0.2	0.1	0.1	0.0	-9.3	500.137
-1.1	0.4	0.1	0.1	0.2	0.3	-15.4	502.138
-15.5	0.4	0.2	0.5	0.1	0.3	-6.6	504.154
-20.9	0.6	0.3	0.4	0.4	0.2	-10.4	506.154
-19.3	0.4	0.2	0.5	0.2	0.2	-14.8	508.153
8.3	0.6	0.5	0.4	0.7	0.3	-2.2	510.169
92.5	0.9	0.6	0.5	33.6	18.2	14.8	512.17
142.0	11.8	0.8	0.5	34.8	35.2	20.3	514.171
157.3	30.2	1.1	0.7	44.1	58.9	28.6	516.264
183.5	46.1	1.5	3.3	38.2	63.2	38.5	518.266
226.8	75.0	9.9	24.9	61.9	82.2	58.3	520.282
255.4	104.6	25.6	54.7	85.1	109.5	83.0	522.297
289.6	134.2	44.4	80.3	117.8	138.3	114.3	524.297
278.6	137.0	47.0	85.5	138.5	159.4	129.7	526.393
303.7	159.8	65.2	100.4	142.0	159.0	138.0	528.393
336.3	182.1	79.2	122.4	162.0	185.4	160.0	530.41
367.5	185.5	90.8	143.3	204.1	236.0	178.6	532.408
388.7	193.3	121.5	163.2	251.3	290.7	196.2	534.41
411.5	209.7	138.2	168.8	257.3	308.2	217.7	536.424
473.2	244.0	170.2	203.4	297.0	341.4	235.9	538.442
448.4	242.7	169.6	201.5	293.5	334.7	229.0	540.441
537.6	272.2	203.9	246.4	362.5	417.3	308.9	542.457
521.8	284.2	209.8	248.8	353.9	408.9	321.5	544.457
610.0	329.7	258.9	309.0	433.5	475.6	369.8	546.473
577.7	330.0	257.9	304.5	426.0	464.4	372.1	548.49
569.3	328.8	257.7	303.1	426.8	477.6	392.3	550.49
680.8	382.6	314.3	369.0	515.5	543.2	454.2	552.504
632.5	379.8	312.8	365.3	533.1	576.3	490.7	554.522
720.4	435.2	363.9	425.8	601.2	622.9	554.8	556.52
697.5	436.6	363.9	422.6	587.8	606.2	522.2	558.519
669.6	434.2	362.7	421.0	584.0	601.5	535.7	560.538
651.4	433.1	362.4	420.1	581.8	598.7	522.2	562.551
785.7	494.5	417.7	483.9	674.6	691.6	625.4	564.554
728.4	489.4	412.6	477.8	661.7	676.7	611.1	566.633
734.8	489.9	423.8	500.7	712.7	736.0	681.7	568.633
831.2	551.9	470.2	555.9	753.0	765.0	703.8	570.649
804.5	545.7	466.6	551.4	743.5	759.2	703.3	572.648
892.8	604.9	525.3	636.1	855.1	854.7	810.4	574.649
866.5	613.4	526.8	633.9	834.4	834.1	792.4	576.666
933.3	657.1	573.4	702.8	930.7	926.1	881.6	578.665
940.2	684.2	594.1	725.0	936.0	922.5	886.4	580.664

924.6	681.6	591.0	720.7	934.9	934.3	911.5	582.744
1053.2	750.0	664.4	817.2	1053.7	1026.6	988.7	584.744
1026.3	755.3	662.2	813.2	1035.4	1006.1	964.2	586.76
1064.1	762.7	673.4	833.1	1077.2	1047.3	1015.7	588.794
1061.3	786.6	689.0	847.8	1078.8	1045.4	1018.7	590.792
1124.2	817.3	725.1	897.8	1149.7	1115.8	1083.9	592.809
1132.5	831.7	734.3	906.0	1143.7	1101.3	1073.7	594.808
1118.8	829.9	731.7	901.8	1136.0	1092.9	1064.8	596.807
1124.1	829.0	730.6	908.1	1189.1	1163.1	1150.3	598.824
1264.2	906.8	810.9	1002.2	1261.0	1205.9	1166.5	600.824
1236.3	906.6	807.4	996.2	1249.9	1192.3	1154.5	602.824
1224.5	905.7	805.4	993.3	1244.1	1185.3	1152.7	604.904
1284.0	919.3	827.1	1029.0	1313.8	1263.5	1234.1	606.904
1356.6	980.0	883.7	1091.4	1376.6	1312.4	1265.3	608.92
1344.8	988.9	888.7	1093.2	1364.4	1294.6	1264.7	610.938
1310.2	987.8	885.9	1089.2	1384.7	1334.8	1311.9	612.936
1489.5	1069.7	973.6	1192.9	1494.5	1416.8	1379.0	615.031
1429.5	1071.3	971.0	1187.3	1477.1	1396.2	1359.8	617.032
1388.7	1069.9	968.4	1183.9	1470.3	1387.7	1341.3	619.047
1384.8	1068.9	966.6	1181.7	1467.5	1386.5	1351.4	621.064
1419.1	1070.4	967.6	1184.3	1490.9	1411.9	1370.0	623.063
1443.6	1083.5	981.5	1202.4	1505.2	1425.4	1379.6	625.078
1447.0	1092.3	989.1	1211.0	1517.8	1438.0	1404.1	627.079
1457.0	1105.6	999.5	1223.7	1531.3	1450.9	1419.7	629.08
1461.3	1118.1	1008.4	1233.9	1542.8	1460.8	1442.4	631.095
1474.8	1127.5	1015.2	1240.9	1548.9	1466.5	1441.2	633.111
1481.1	1130.9	1017.0	1241.9	1543.1	1457.8	1435.8	635.113
1539.8	1159.8	1050.2	1284.3	1594.9	1512.9	1483.1	637.193
1499.0	1159.4	1047.2	1278.1	1582.0	1497.0	1467.0	639.192
1472.5	1158.1	1044.5	1274.6	1575.9	1489.3	1462.2	641.208
1523.6	1160.5	1048.3	1283.6	1607.6	1527.2	1493.9	643.222
1586.6	1186.9	1076.5	1316.7	1643.3	1563.1	1532.2	645.223
1608.8	1206.8	1094.6	1333.1	1656.0	1573.3	1555.1	647.303
1607.5	1218.3	1105.3	1345.0	1675.8	1590.1	1559.2	649.304
1623.3	1231.8	1119.0	1359.4	1690.4	1603.3	1573.3	651.336
1635.7	1240.3	1127.6	1369.8	1693.6	1603.9	1578.5	653.335
1617.1	1239.8	1126.4	1366.6	1685.1	1593.3	1562.7	655.336
1594.5	1239.0	1124.5	1363.8	1682.5	1590.5	1566.8	657.415
1636.1	1238.6	1125.4	1373.7	1731.6	1649.1	1619.6	659.415
1747.0	1281.5	1175.1	1425.8	1770.3	1682.5	1661.2	661.43
1768.8	1300.9	1192.6	1441.1	1786.9	1694.8	1671.2	663.446
1778.5	1315.0	1207.1	1457.8	1811.9	1720.9	1704.6	665.463
1784.7	1327.0	1219.1	1469.0	1811.0	1714.2	1685.3	667.544
1766.7	1325.2	1216.1	1465.0	1808.7	1723.3	1706.4	669.543

1886.3	1366.1	1262.8	1520.8	1885.7	1798.4	1781.4	671.544
1940.0	1411.9	1308.4	1572.3	1943.3	1847.6	1825.4	673.623
1906.1	1416.2	1307.9	1568.6	1926.5	1823.8	1804.3	675.623
1991.9	1451.5	1347.4	1618.6	2004.9	1910.0	1892.8	677.639
2036.7	1494.1	1384.2	1660.1	2049.2	1950.6	1935.6	679.656
2022.4	1511.7	1397.9	1673.1	2051.9	1946.5	1928.6	681.655
1995.7	1509.8	1394.0	1668.1	2039.9	1932.6	1916.3	683.672
2048.8	1511.0	1397.3	1681.1	2094.1	1997.6	1991.3	685.672
2201.6	1596.7	1478.7	1772.8	2177.6	2078.4	2075.2	687.672
2157.3	1606.3	1481.6	1774.0	2163.9	2057.8	2048.8	689.751
2132.5	1603.5	1476.9	1768.7	2158.6	2067.8	2078.1	691.751
2252.3	1652.8	1522.4	1830.9	2253.8	2155.9	2155.5	693.766
2259.3	1674.9	1540.4	1852.2	2262.9	2161.3	2159.0	695.798
2292.9	1697.5	1558.5	1874.5	2285.5	2183.7	2187.8	697.798
2238.2	1700.4	1559.9	1874.5	2274.8	2170.6	2169.6	699.895
2226.2	1698.3	1557.1	1871.2	2279.0	2176.1	2176.0	701.896
2278.7	1716.9	1571.9	1891.2	2302.8	2199.0	2193.6	703.91
2280.3	1722.2	1577.1	1897.8	2319.9	2216.7	2219.4	705.912
2286.7	1733.7	1587.2	1909.2	2319.5	2216.8	2216.5	707.926
2295.0	1735.6	1589.4	1913.1	2340.0	2240.1	2245.8	709.944
2354.0	1768.4	1619.1	1954.6	2390.8	2292.7	2293.3	711.941
2362.9	1795.6	1642.5	1978.4	2403.2	2301.9	2301.5	713.941
2317.2	1794.9	1641.3	1975.3	2387.8	2285.0	2283.9	715.958
2390.1	1807.9	1653.0	1993.9	2437.7	2338.3	2348.4	717.976
2443.5	1840.0	1681.7	2023.0	2462.9	2363.2	2374.8	719.975
2448.5	1851.9	1692.2	2035.3	2473.0	2370.7	2388.9	721.991
2407.3	1854.2	1693.5	2035.0	2470.1	2374.2	2394.2	723.989
2487.3	1875.0	1711.4	2060.2	2512.3	2415.7	2431.7	725.99
2473.8	1894.5	1727.9	2075.8	2511.7	2410.6	2429.3	728.071
2448.7	1892.4	1725.6	2073.3	2500.6	2397.9	2417.0	730.07
2412.3	1890.2	1723.3	2070.7	2493.6	2389.9	2407.7	732.087
2500.8	1907.3	1738.4	2092.1	2556.8	2457.5	2485.0	734.088
2544.1	1941.5	1770.2	2125.6	2588.6	2490.5	2517.3	736.086
2571.1	1961.4	1788.3	2147.3	2579.1	2488.3	2513.8	738.101
2464.3	1949.0	1770.7	2133.5	2490.7	2445.2	2466.9	740.12
2494.5	1942.5	1764.2	2127.3	2511.1	2460.2	2472.1	742.119
2478.6	1940.5	1760.5	2124.6	2507.9	2448.0	2454.6	744.197
2518.9	1938.8	1757.8	2122.3	2534.2	2478.2	2495.0	746.199
2556.5	1941.7	1757.8	2124.7	2566.3	2503.6	2536.1	748.215
2564.4	1946.4	1758.3	2127.8	2584.1	2517.3	2547.8	750.23
2602.5	1949.7	1758.7	2130.2	2598.0	2527.2	2562.5	752.229
2588.7	1955.7	1760.7	2134.4	2608.7	2539.4	2575.2	754.311
2689.4	1979.7	1782.2	2157.5	2677.2	2607.1	2644.4	756.31
2658.7	2001.4	1802.9	2175.9	2663.9	2587.8	2626.2	758.343

2721.4	2017.1	1825.2	2199.4	2731.4	2666.4	2719.8	760.342
2798.5	2064.6	1875.1	2248.1	2773.9	2699.4	2741.9	762.343
2786.4	2075.5	1884.8	2259.5	2784.1	2709.7	2750.4	764.44
2770.1	2088.9	1895.1	2270.7	2777.0	2698.3	2738.0	766.439
2770.6	2087.3	1892.1	2270.1	2809.1	2740.8	2787.3	768.453
2882.7	2136.7	1943.8	2323.6	2875.2	2804.3	2849.1	770.455
2931.7	2177.1	1979.2	2359.6	2901.3	2831.0	2891.1	772.454
2917.3	2191.3	1990.1	2372.7	2892.5	2815.6	2863.3	774.469
2870.8	2188.7	1986.3	2369.8	2889.9	2819.2	2871.8	776.486
2960.7	2209.9	2009.0	2397.6	2943.0	2874.8	2933.7	778.487
3029.9	2251.4	2047.4	2435.7	2990.0	2920.1	2979.6	780.567
3055.0	2284.4	2075.0	2465.8	3013.3	2939.0	2992.1	782.567
3039.7	2293.0	2079.6	2472.7	3002.9	2925.4	2976.2	784.583
3003.2	2291.1	2076.6	2470.1	2992.3	2918.9	2973.4	786.598
3089.9	2302.1	2088.0	2486.6	3041.9	2969.8	3025.5	788.599
3100.1	2328.6	2111.3	2508.8	3058.8	2983.5	3046.0	790.614
3114.0	2340.3	2120.7	2518.6	3071.1	2994.0	3064.7	792.614
3111.2	2351.6	2129.8	2527.8	3078.1	3000.9	3073.8	794.614
3152.0	2366.6	2142.7	2543.0	3101.0	3026.5	3092.5	796.629
3177.4	2384.8	2158.7	2560.2	3111.9	3037.9	3102.1	798.631
3139.9	2390.6	2162.9	2565.2	3106.2	3029.6	3091.3	800.63
3113.3	2389.3	2160.6	2563.2	3095.0	3016.3	3086.2	802.646
3171.0	2389.1	2159.2	2563.4	3126.2	3053.1	3120.3	804.66
3199.3	2410.7	2180.2	2581.9	3151.8	3079.9	3149.7	806.66
3230.6	2427.2	2195.8	2596.1	3163.8	3088.4	3167.3	808.742
3237.7	2435.5	2201.6	2602.7	3171.1	3095.2	3169.0	810.742
3260.8	2444.8	2209.9	2611.2	3180.2	3104.0	3187.8	812.774
3294.4	2452.3	2217.7	2620.0	3202.9	3130.5	3212.7	814.774
3288.5	2468.3	2233.6	2635.2	3205.1	3130.2	3208.2	816.774
3243.5	2468.9	2232.3	2634.8	3189.6	3111.7	3180.9	818.854
3238.6	2466.2	2228.9	2632.4	3198.7	3123.6	3198.0	820.854
3274.4	2471.3	2234.0	2638.9	3232.6	3162.2	3249.6	822.869
3312.0	2498.7	2268.6	2665.0	3263.3	3188.6	3276.8	824.887
3359.3	2519.6	2287.4	2681.6	3286.7	3211.7	3312.5	826.884
3378.2	2541.0	2305.5	2699.9	3307.4	3234.4	3332.4	828.901
3365.7	2551.7	2312.0	2708.8	3303.5	3226.4	3326.1	830.9
3318.0	2550.9	2308.3	2706.4	3287.4	3206.6	3304.0	832.902
3368.1	2521.6	1529.2	66.9	140.0	108.1	78.1	834.982
370.9	45.6	52.0	49.9	118.8	98.1	90.1	836.996
357.4	48.5	51.6	48.1	113.9	96.0	78.1	839.013
344.0	49.9	51.3	47.0	112.4	95.4	74.8	841.013
361.3	59.9	51.4	47.2	125.0	106.3	86.8	843.013
343.8	60.2	51.2	46.9	122.5	103.9	98.4	845.029