



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
M/S Trade Tacts International (Pvt) Limited  
Lahore  
Reference # CED/TFL **37103** (Dr. Qasim Khan)  
Reference of the request letter # Nil

Dated: 27-09-2021

Dated: 27-09-2021

**Tension Test Report** (Page – 1/2)

Date of Test 04-10-2021

Gauge length 2 inches

Description Steel Structure Welded Steel Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Breaking Load	Ultimate Stress	Elongation	% Elongation	Remarks
	---	(mm)	(mm <sup>2</sup> )	(kg)	(MPa)	(inch)		
1	Plate	22.80x10.60	241.68	10800	438.38	0.60	30.00	Failure at the location other than weld
2	Plate	23.30x9.60	223.68	11200	491.20	0.50	25.00	Failure at the location other than weld
3	316L Tube 2"	19.40x3.70	71.78	4100	560.34	0.60	30.00	Failure at the location other than weld
4	304 L Tube 2"	19.60x4.00	78.40	5100	638.15	0.80	40.00	Failure at the location other than weld
5	Sch 40 2"	26.60x1.40	37.24	2900	763.94	0.60	30.00	Failure at the location other than weld
6	316 Sch 2"	26.60x1.00	26.60	1600	590.08	0.20	10.00	Failure at the location other than weld

**Only six samples for tensile and twelve samples for bend test**

**Bend Test**

Strip taken from Welded Plate Root Bend Test Through 180° is Satisfactory
Strip taken from Welded Plate Face Bend Test Through 180° is Satisfactory
Strip taken from Welded Plate Root Bend Test Through 180° is Satisfactory
Strip taken from Welded Plate Face Bend Test Through 180° is Satisfactory
Strip taken from Welded 316L Tube Root Bend Test Through 180° is Satisfactory
Strip taken from Welded 316L Tube Face Bend Test Through 180° is Satisfactory
Strip taken from Welded 304L Tube Root Bend Test Through 180° is Satisfactory
Strip taken from Welded 304L Tube Face Bend Test Through 180° is Satisfactory
Strip taken from Welded Sch 40 2" Root Bend Test Through 180° is Satisfactory
Strip taken from Welded Sch 40 2" Face Bend Test Through 180° is Satisfactory
Strip taken from Welded 316 Sch 2" Root Bend Test Through 180° is Satisfactory
Strip taken from Welded 316 Sch 2" Face Bend Test Through 180° is Satisfactory

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

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To,  
M/S Trade Tacts International (Pvt) Limited  
Lahore  
Reference # CED/TFL **37103** (Dr. Qasim Khan)  
Reference of the request letter # Nil

Dated: 27-09-2021

Dated: 27-09-2021

**Tension Test Report** (Page – 2/2)

Date of Test 04-10-2021

Gauge length 2 inches

Description Steel Structure Welded Steel Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Breaking Load	Ultimate Stress	Elongation	% Elongation	Remarks
	----	(mm)	(mm <sup>2</sup> )	(kg)	(MPa)	(inch)		
1	Sch 40 2"	19.40x4.10	79.54	3500	431.67	0.30	15.00	Failure at the location other than weld
2	304 Sch 40 4"	22.50x4.90	110.25	5100	453.80	0.40	20.00	Failure at the location other than weld
3	304 Sch 40 6"	21.40x7.50	160.50	7700	470.64	0.80	40.00	Failure at the location other than weld
4	Plate	23.70x12.40	293.88	18500	617.55	0.90	45.00	Failure at the location other than weld
5	Plate	23.60x12.40	292.64	18700	626.87	1.00	50.00	Failure at the location other than weld
<b>Only five samples for tensile and ten samples for bend test</b>								
<b>Bend Test</b>								
Strip taken from Welded Sch 40 2" Bend Test Through 180° is Satisfactory								
Strip taken from Welded Sch 40 2" Face Bend Test Through 180° is Satisfactory								
Strip taken from Welded 304 Sch 40 4" Root Bend Test Through 180° is Satisfactory								
Strip taken from Welded 304 Sch 40 4" Face Bend Test Through 180° is Satisfactory								
Strip taken from Welded 304 Sch 40 6" Root Bend Test Through 180° is Satisfactory								
Strip taken from Welded 304 Sch 40 6" Face Bend Test Through 180° is Satisfactory								
Strip taken from Welded Plate Bend Test Through 180° is Satisfactory								
Strip taken from Welded Plate Bend Test Through 180° is Satisfactory								
Strip taken from Welded Plate Bend Test Through 180° is Satisfactory								
Strip taken from Welded Plate Bend Test Through 180° is Satisfactory								

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Manager Monitoring & Coordination  
Shajar Roads Limited  
Dualization of Sheikhpura- Gujranwala Road

Reference # CED/TFL **37125** (Dr. Qasim Khan)  
Reference of the request letter # MMC/SHJR/SGRP/146

Dated: 29-09-2021  
Dated: 27-09-2021

**Tension Test Report** (Page -1/2)

Date of Test 04-10-2021  
Gauge length 640 mm  
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	775.0	782.0	15500	152.06	18200	178.54	199	>3.50	214
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
<b>Only one sample for Test</b>										

Witness by Rana Tariq (NESPAK)

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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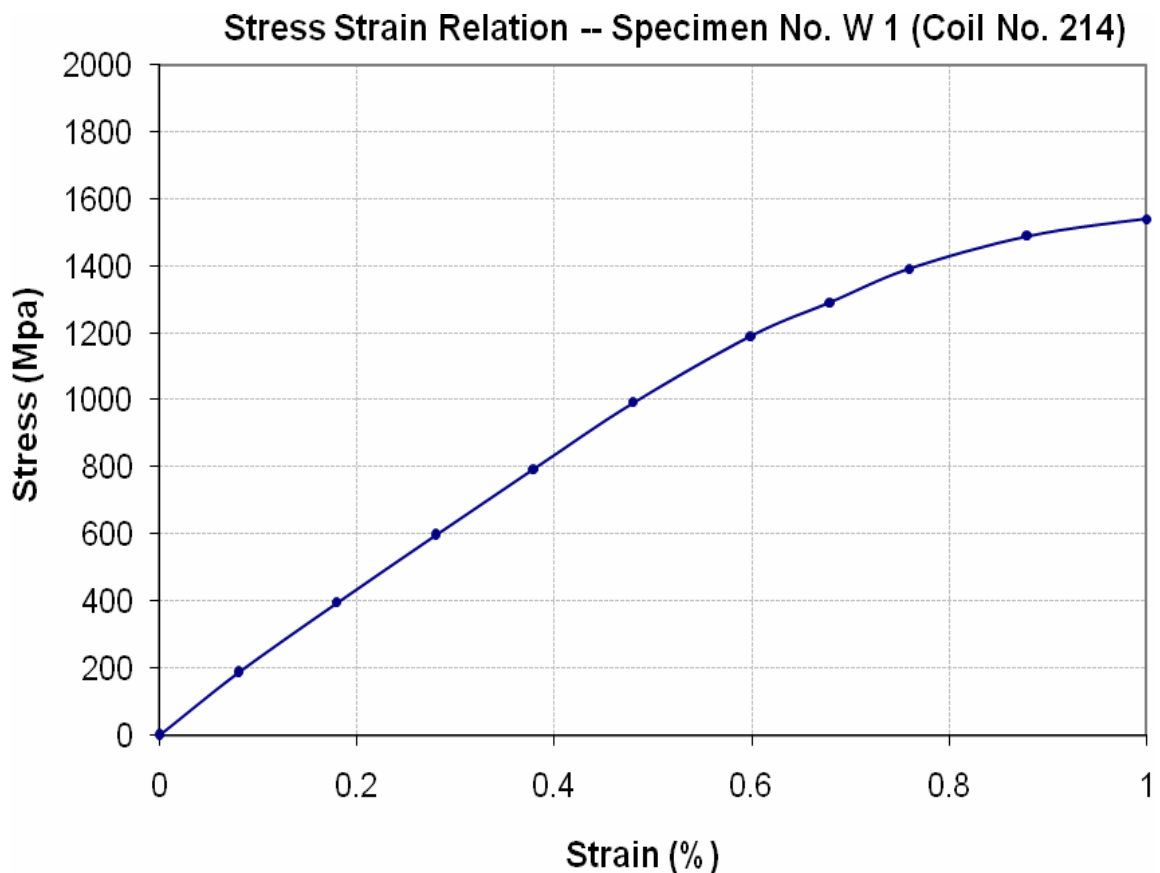
**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Manager Monitoring & Coordination  
Shajar Roads Limited  
Dualization of Sheikhpura- Gujranwala Road

Reference # CED/TFL 37125 (Dr. Qasim Khan)  
Reference of the request letter # MMC/SHJR/SGRP/146

Dated: 29-09-2021  
Dated: 27-09-2021

**Graph** (Page – 2/2)



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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**University of Engineering and Technology Lahore, 54890**  
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To,  
Manager Monitoring & Coordination  
Shajar Roads Limited  
Dualization of Sheikhpura- Gujranwala Road

Reference # CED/TFL 37126 (Dr. Qasim Khan)  
Reference of the request letter # MMC/SHJR/SGRP/147

Dated: 29-09-2021  
Dated: 27-09-2021

**Tension Test Report** (Page -1/4)

Date of Test 04-10-2021  
Gauge length 640 mm  
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)			
1	12.70 (1/2")	775.0	784.0	16400	160.88	19100	187.37	199	>3.50	183
2	12.70 (1/2")	775.0	782.0	16800	164.81	18200	178.54	198	>3.50	207
3	12.70 (1/2")	775.0	786.0	17800	174.62	19300	189.33	199	>3.50	215
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
<b>Only three samples for Test</b>										

Witness by Rana Tariq (NESPAK)

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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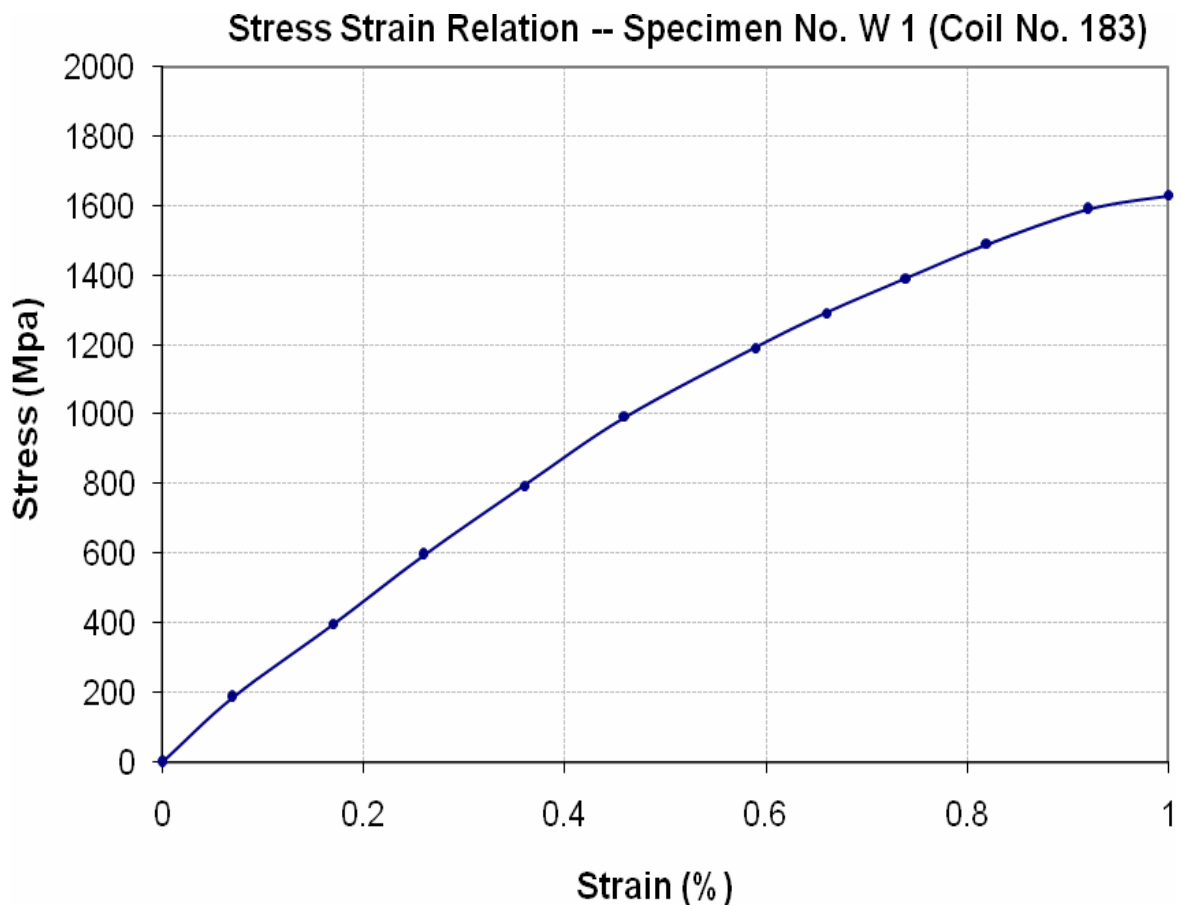
**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
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To,  
Manager Monitoring & Coordination  
Shajar Roads Limited  
Dualization of Sheikhpura- Gujranwala Road

Reference # CED/TFL 37126 (Dr. Qasim Khan)  
Reference of the request letter # MMC/SHJR/SGRP/147

Dated: 29-09-2021  
Dated: 27-09-2021

**Graph** (Page – 2/4)



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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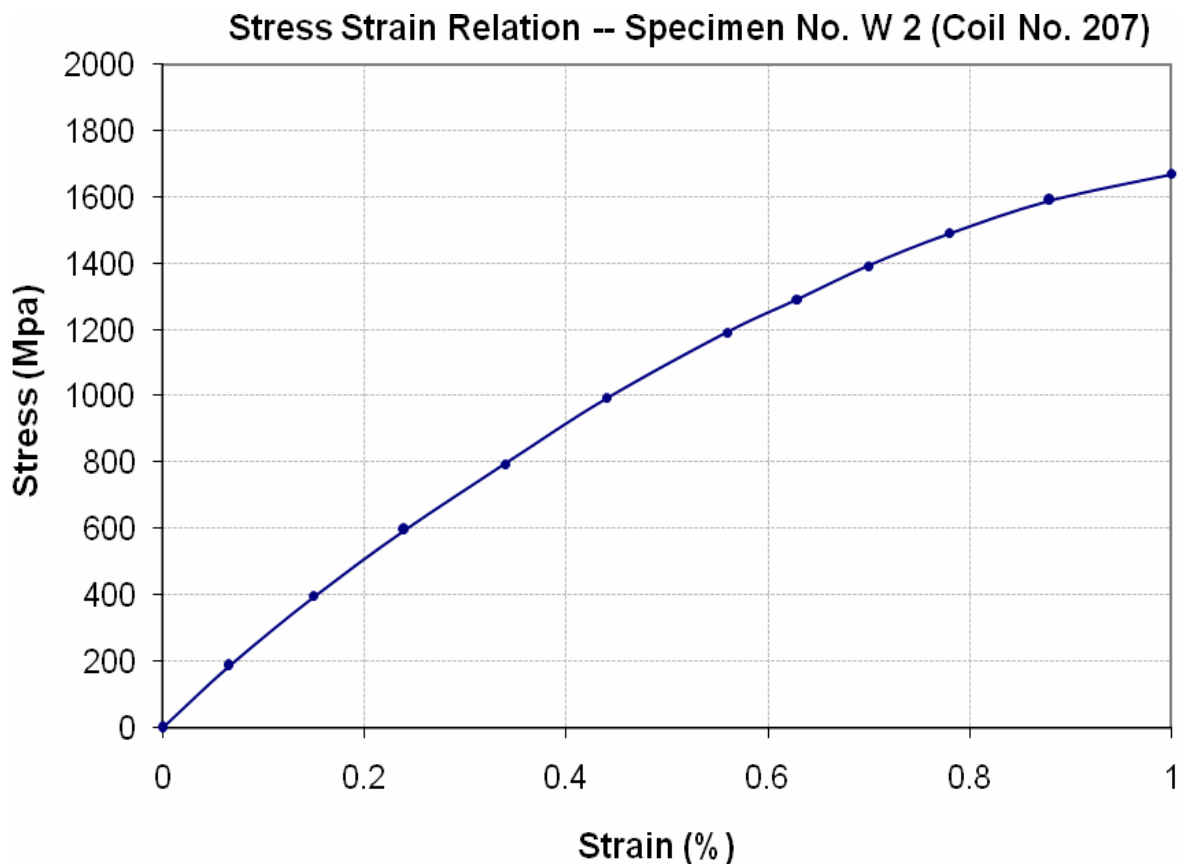
**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
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**University of Engineering and Technology Lahore, 54890**  
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To,  
Manager Monitoring & Coordination  
Shajar Roads Limited  
Dualization of Sheikhpura- Gujranwala Road

Reference # CED/TFL 37126 (Dr. Qasim Khan)  
Reference of the request letter # MMC/SHJR/SGRP/147

Dated: 29-09-2021  
Dated: 27-09-2021

**Graph** (Page – 3/4)



**I/C Testing Laboratories**  
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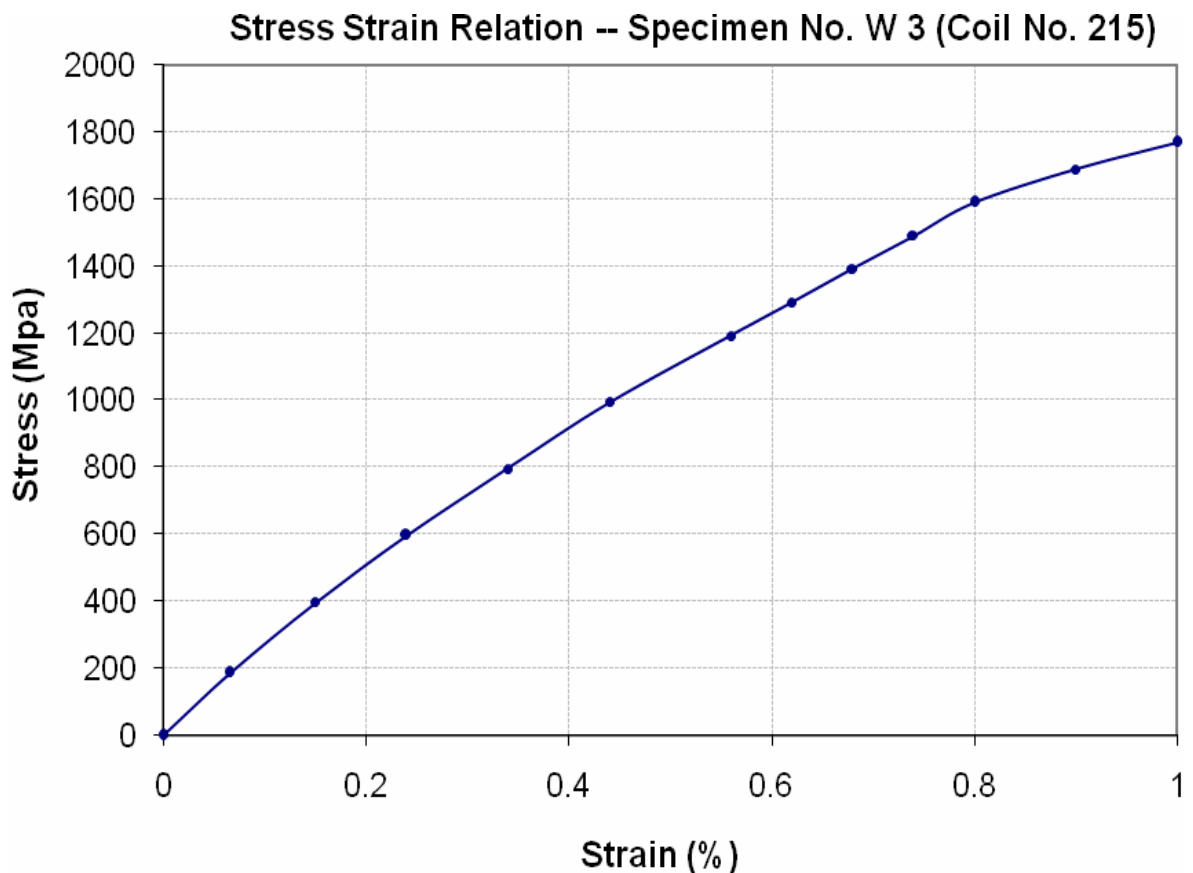
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**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
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To,  
Manager Monitoring & Coordination  
Shajar Roads Limited  
Dualization of Sheikhpura- Gujranwala Road

Reference # CED/TFL 37126 (Dr. Qasim Khan)  
Reference of the request letter # MMC/SHJR/SGRP/147

Dated: 29-09-2021  
Dated: 27-09-2021

**Graph** (Page – 4/4)



**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/10/37127

Dated: 29-09-2021

Dated of Test: 04-10-2021

To  
**Manager Monitoring & Coordination**  
**Shajar Roads Limited**  
**Dualization of Sheikhpura- Gujranwala Road**

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. MMC/SHJR/SGRP/148, dated 27.09 ;2021 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	36 (910mm)	7.92	7.59	3.67	2.99	4.11	30180	44740	2937	4354

Witness by Rana Tariq (NESPAK)

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Assistant Project Engineer  
 Defence Housing Authority,  
 Gujranwala  
 Construction of Villas (Block – C)

Reference # CED/TFL **37130** (Dr. Qasim Khan)  
 Reference of the request letter # 111/3/APE Bldgs/Gen/07

Dated: 30-09-2021  
 Dated: 27-09-2021

**Tension Test Report** (Page -1/1)

Date of Test 04-10-2021  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.381	3	0.377	0.11	0.112	3500	5100	70200	68950	102200	100500	1.20	15.0	FF Steel
2	0.385	3	0.380	0.11	0.113	3500	5100	70200	68170	102200	99400	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for Bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
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To,  
 Zubair Ahmed  
 Zubair Ahmed Engineers & Contractors  
 Bank Al Habib Allama Iqbal Town Branch Lahore

Reference # CED/TFL 37137 (Dr. Qasim Khan)  
 Reference of the request letter # Nil

Dated: 01-10-2021  
 Dated: 01-10-2021

**Tension Test Report** (Page -1/1)

Date of Test 04-10-2021  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.394	3	0.384	0.11	0.116	3900	4900	78200	74290	98200	93400	1.00	12.5	
2	0.384	3	0.379	0.11	0.113	3900	4900	78200	76060	98200	95600	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for Bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratories**  
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Site Engineer  
 Allied Engineers  
 Construction of School of Economics at University of The Punjab Lahore

Reference # CED/TFL **37138** (Dr. Qasim Khan)  
 Reference of the request letter # AE/PU/Economics/-1

Dated: 01-10-2021  
 Dated: 01-10-2021

**Tension Test Report** (Page -1/1)

Date of Test 04-10-2021  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.378	3/8	0.376	0.11	0.111	3300	5100	66200	65510	102200	101300	1.10	13.8	Afco Steel
2	0.361	3/8	0.367	0.11	0.106	3400	5300	68200	70690	106200	110200	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for Bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 GM Development  
 Al-Kabir Town (Private) Limited  
 New One Bed Apartment Ph-1 and School Building Ph-2 Al-Kabir Town

Reference # CED/TFL **37140** (Dr. Qasim Khan)  
 Reference of the request letter # Nil

Dated: 01-10-2021  
 Dated: 01-10-2021

**Tension Test Report** (Page -1/1)

Date of Test 04-10-2021  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.367	3	0.371	0.11	0.108	3600	4600	72200	73580	92200	94100	1.10	13.8	
2	0.360	3	0.367	0.11	0.106	3700	4700	74200	77010	94200	97900	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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<b>Note: only two samples for tensile and one sample for Bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
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- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Senior Civil Engineer  
 National Management Foundation  
 Construction of Female Hostel-6 Building at LUMS

Reference # CED/TFL **37141** (Dr. Qasim Khan)  
 Reference of the request letter # NMF/GM/F-61

Dated: 01-10-2021  
 Dated: 01-10-2021

**Tension Test Report** (Page -1/1)

Date of Test 04-10-2021  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.382	3/8	0.378	0.11	0.112	3800	4900	76200	74540	98200	96200	1.20	15.0	
2	0.385	3/8	0.380	0.11	0.113	3900	5000	78200	75970	100200	97400	1.10	13.8	
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<b>Note: only two samples for tensile and one sample for Bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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- 2- The above results pertain to sample /samples supplied to this laboratory.
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
M/s MAjeed Associates (Pvt) Ltd.  
Allied Bank Warehouse, Sahiwal

Reference # CED/TFL **37142 (Dr. Qasim Khan)**  
Reference of the request letter # Nil

Dated: 04-10-2021  
Dated: 04-10-2021

**Tension Test Report** (Page -1/1)

Date of Test 04-10-2021  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.379	10	9.57	0.12	0.111	4200	5100	77161	83050	93696	100900	0.90	11.3	
2	0.381	10	9.59	0.12	0.112	4300	5200	78998	84650	95533	102400	0.90	11.3	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**Note: only two samples for tensile and one sample for Bend test**

**Bend Test**

10mm Dia Bar Bend Test Through 180° is Satisfactory

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
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**University of Engineering and Technology Lahore, 54890**  
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To,  
 Manager Projects  
 IDAP  
 Construction of Civil Secretariat and GOR, Multan (The Project)

Reference # CED/TFL **37143** (Dr. Qasim Khan)  
 Reference of the request letter # CSM-1/IDAP/2021/12

Dated: 04-10-2021  
 Dated: 02-10-2021

**Tension Test Report** (Page -1/1)

Date of Test 04-10-2021  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.367	3	0.371	0.11	0.108	3300	4500	66200	67380	90200	91900	1.00	12.5	FF Steel
2	0.369	3	0.372	0.11	0.108	3400	4500	68200	69080	90200	91500	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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<b>Note: only two samples for tensile and one sample for Bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/10/37144

Dated: 04-10-2021

Date of Test: 04-10-2021

To,  
M/S Birudo Engineers  
Lahore

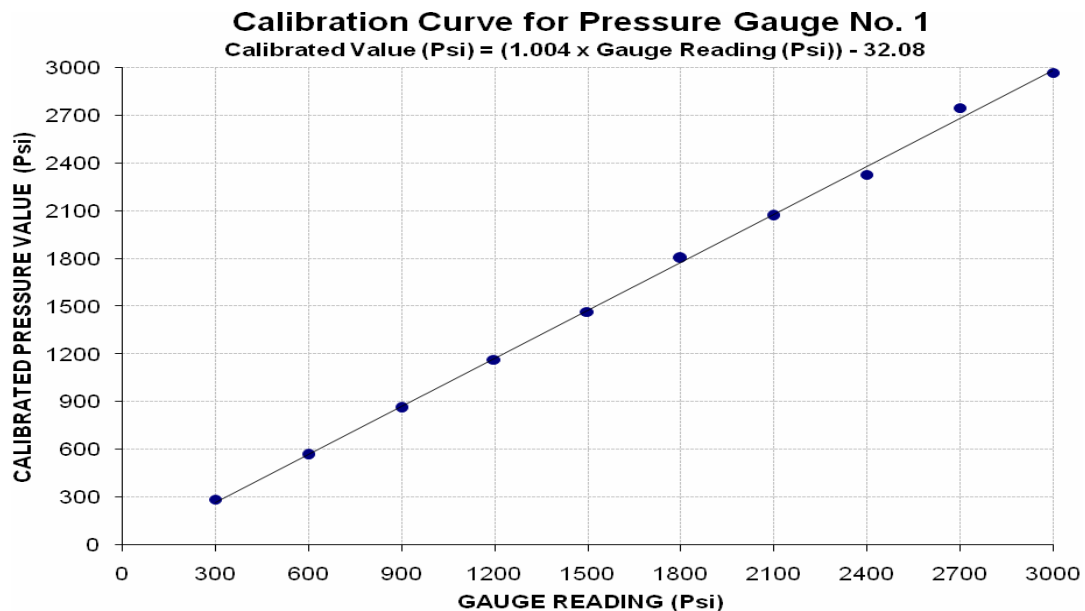
Subject: - **CALIBRATION OF PRESSURE GAUGE (MARK: TFL/10/37144)** (Page # 1/2)

Reference to your Letter No. Nil, Dated: 04/10/2021 on the subject cited above. One Pressure Gauge No. 1 as received by us has been calibrated. The results are tabulated as under:

**Total Range : Zero - 3500 (Psi)**  
**Calibrated Range : Zero - 3000 (Psi)**

<b>Gauge Reading (Psi)</b>	300	600	900	1200	1500	1800	2100	2400	2700	3000
<b>Calibrated Load (k g)</b>	4000	7900	12000	16200	20400	25100	28800	32400	38200	41300
<b>Calibrated Pressure (Psi)</b>	287	567	862	1164	1465	1803	2069	2327	2744	2967

The Ram Area use for Calibration = 198 cm<sup>2</sup>



**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
2. The above results pertain to sample /samples supplied to this laboratory.
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Ref: CED/TFL/10/37144

Dated: 04-10-2021

Date of Test: 04-10-2021

To,  
M/S Birudo Engineers  
Lahore

Subject: - **CALIBRATION OF PRESSURE GAUGE (MARK: TFL/10/37144)** (Page # 2/2)

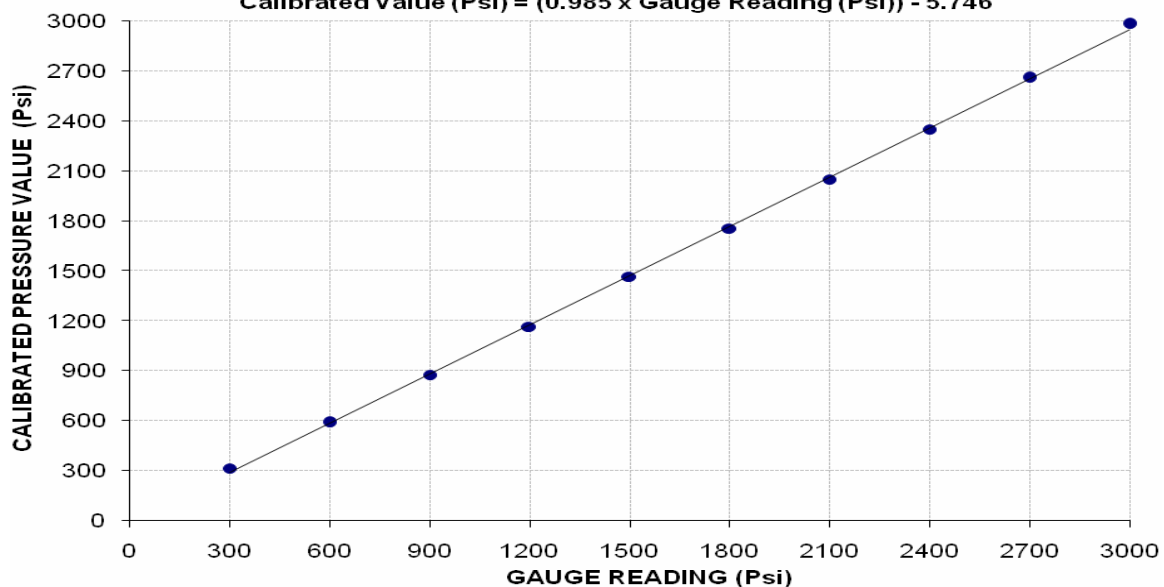
Reference to your Letter No. Nil, Dated: 04/10/2021 on the subject cited above. One Pressure Gauge No. 2 as received by us has been calibrated. The results are tabulated as under:

**Total Range : Zero - 3500 (Psi)**  
**Calibrated Range : Zero - 3000 (Psi)**

<b>Gauge Reading (Psi)</b>	300	600	900	1200	1500	1800	2100	2400	2700	3000
<b>Calibrated Load (k g)</b>	4400	8200	12200	16200	20400	24400	28500	32700	37000	41500
<b>Calibrated Pressure (Psi)</b>	316	589	876	1164	1465	1753	2047	2349	2658	2981

The Ram Area use for Calibration = 198 cm<sup>2</sup>

**Calibration Curve for Pressure Gauge No. 2**  
**Calibrated Value (Psi) = (0.985 x Gauge Reading (Psi)) - 5.746**



**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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