



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

To,
Sub Divisional Officer
Highway Sub Division D. G. Khan
Construction of Metalled Road Yaroo to Naow abad Length = 12.00 km District D.G. Khan
(Phase-I from km no. 8.80 to 8.90 km Length = 0.10 (Part-B))

Reference # CED/TFL **37215** (Dr. Ali Ahmed)
Reference of the request letter # 335/2372/Sdc

Dated: 15-10-2021
Dated: 13-09-2021

Tension Test Report (Page -1/4)

Date of Test 20-10-2021
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	780.0	17600	172.66	19300	189.33	199	>3.50	xx
2	12.70 (1/2")	775.0	780.0	17600	172.66	19200	188.35	199	>3.50	xx
3	12.70 (1/2")	775.0	781.0	17800	174.62	19400	190.31	198	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only three samples for Test										

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.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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

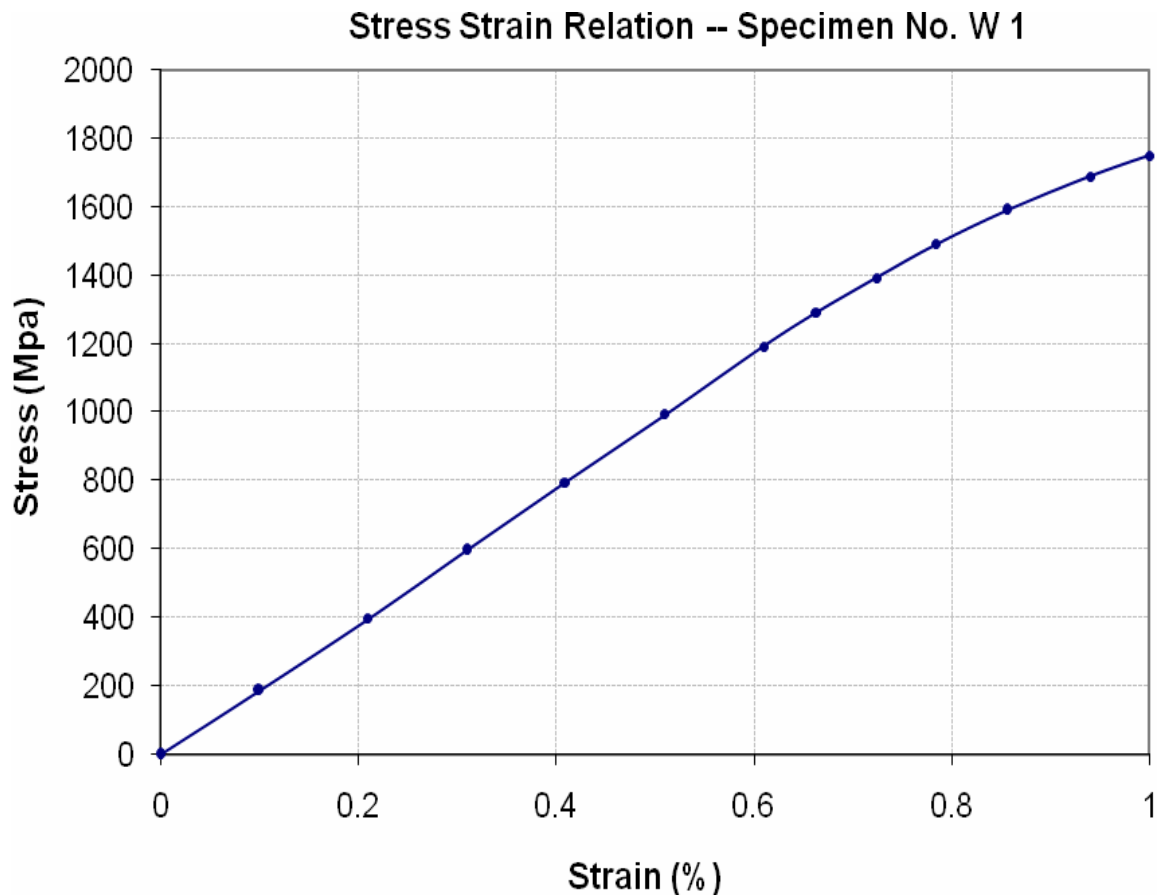
To,
Sub Divisional Officer
Highway Sub Division D. G. Khan
Construction of Metalled Road Yaroo to Naow abad Length = 12.00 km District D.G. Khan
(Phase-I from km no. 8.80 to 8.90 km Length = 0.10 (Part-B))

Reference # CED/TFL **37215** (Dr. Ali Ahmed)
Reference of the request letter # 335/2372/Sdc

Dated: 15-10-2021

Dated: 13-09-2021

Graph (Page – 2/4)



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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

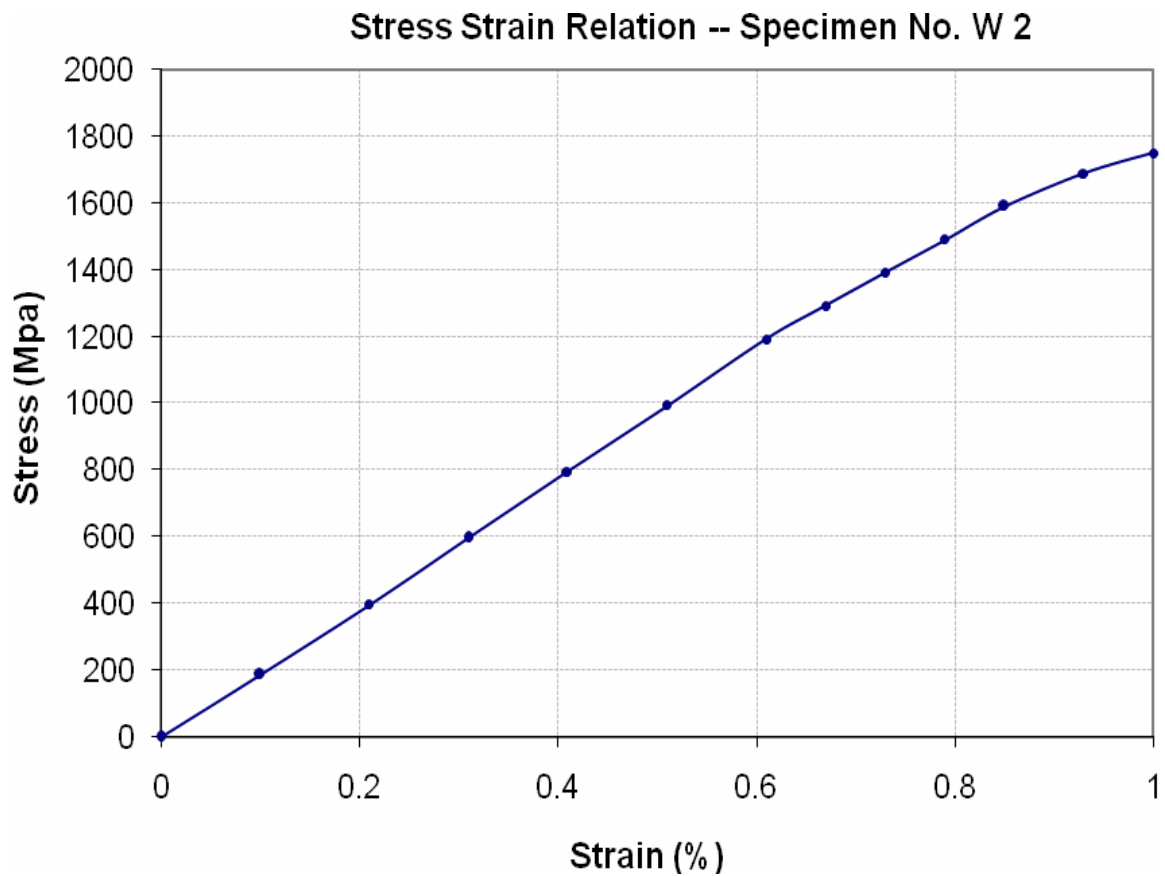
To,
Sub Divisional Officer
Highway Sub Division D. G. Khan
Construction of Metalled Road Yaroo to Naow abad Length = 12.00 km District D.G. Khan
(Phase-I from km no. 8.80 to 8.90 km Length = 0.10 (Part-B))

Reference # CED/TFL **37215** (Dr. Ali Ahmed)
Reference of the request letter # 335/2372/Sdc

Dated: 15-10-2021

Dated: 13-09-2021

Graph (Page – 3/4)



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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

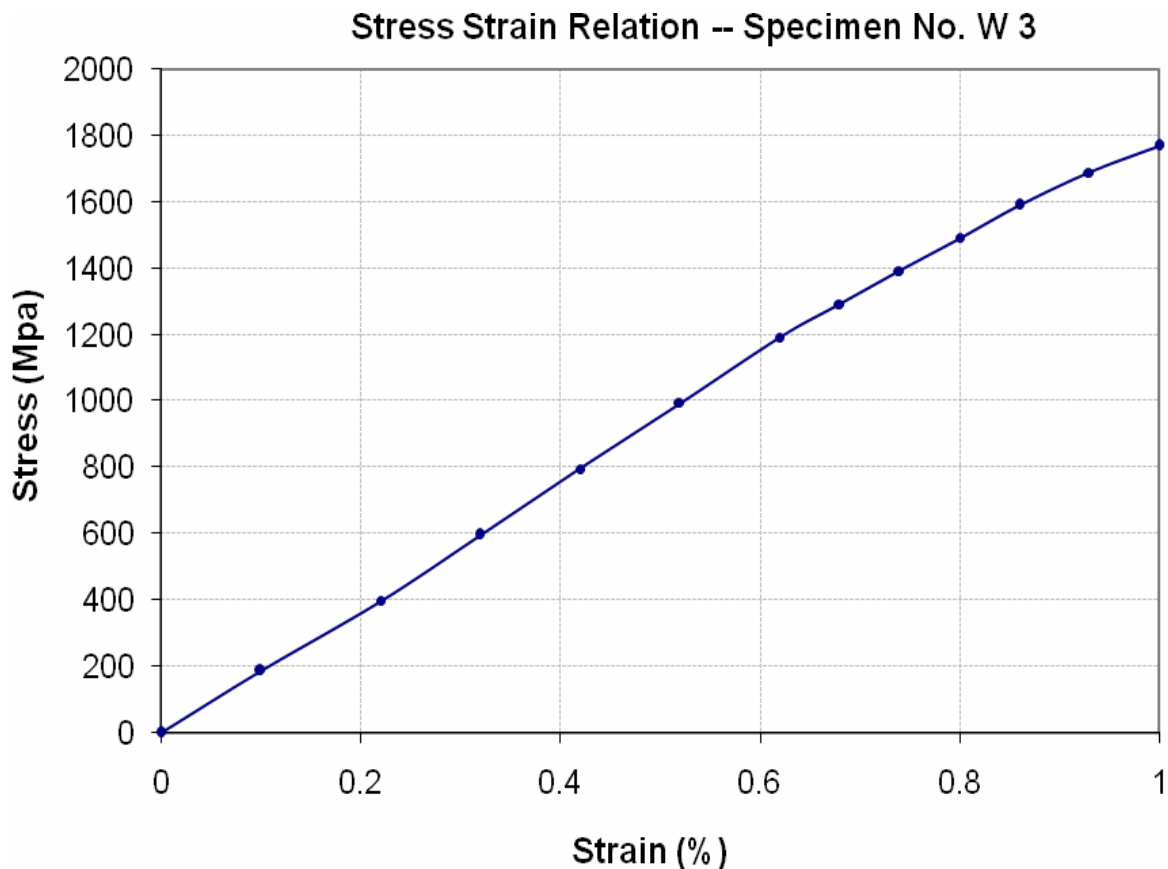
To,
Sub Divisional Officer
Highway Sub Division D. G. Khan
Construction of Metalled Road Yaroo to Naow abad Length = 12.00 km District D.G. Khan
(Phase-I from km no. 8.80 to 8.90 km Length = 0.10 (Part-B))

Reference # CED/TFL **37215** (Dr. Ali Ahmed)
Reference of the request letter # 335/2372/Sdc

Dated: 15-10-2021

Dated: 13-09-2021

Graph (Page – 4/4)



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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,
Executive Engineer
Highway Division, Taunsa
(Rehabilitation of Metalled Road from Vehova to Kotani Length: 7.50 km District D.G. Khan)

Reference # CED/TFL **37216** (Dr. Ali Ahmed)
Reference of the request letter # 496

Dated: 15-10-2021
Dated: 29-09-2021

Tension Test Report (Page -1/4)

Date of Test 20-10-2021
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	779.0	17300	169.71	19400	190.31	199	>3.50	xx
2	12.70 (1/2")	775.0	782.0	17800	174.62	19500	191.30	199	>3.50	xx
3	12.70 (1/2")	775.0	781.0	17700	173.64	19300	189.33	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Only three samples for Test

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 Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



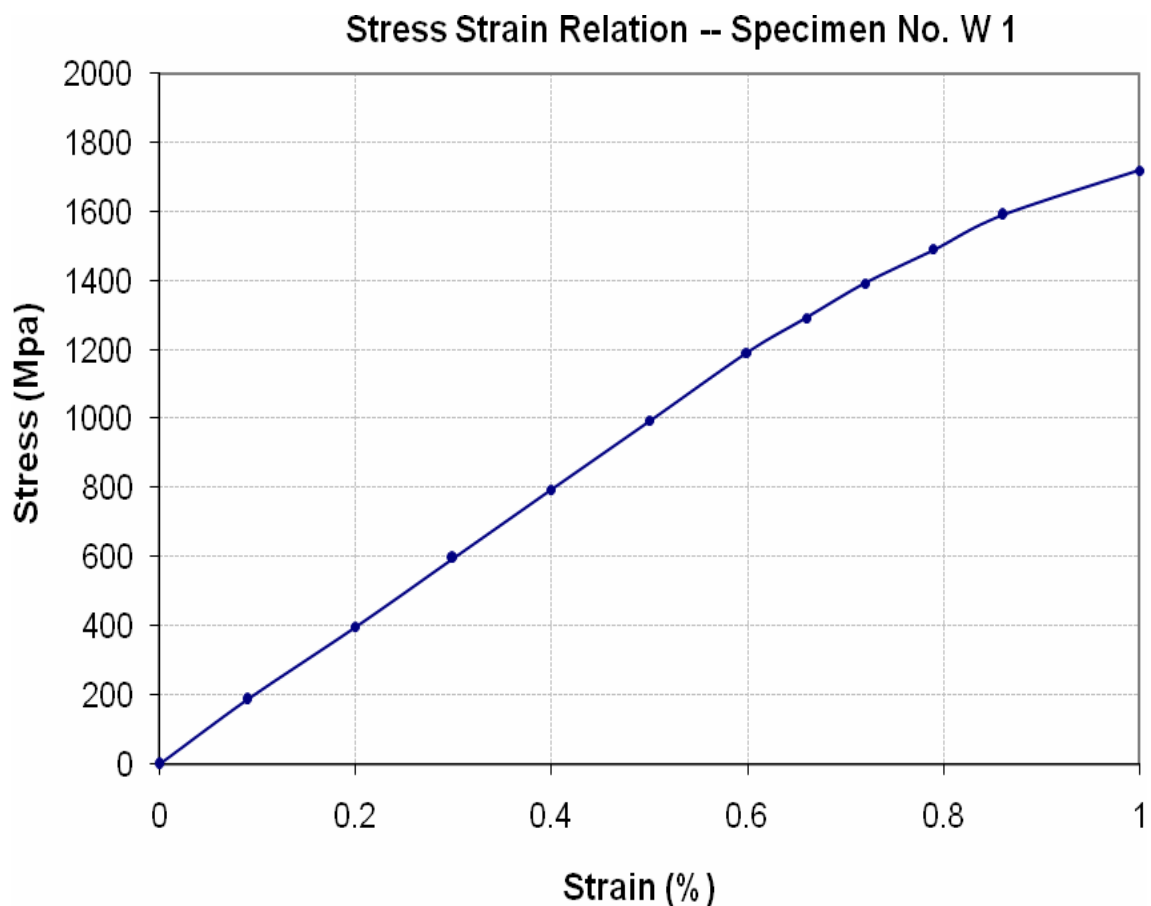
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Executive Engineer
Highway Division, Taunsa
(Rehabilitation of Metalled Road from Vehova to Kotani Length: 7.50 km District D.G. Khan)

Reference # CED/TFL **37216** (Dr. Ali Ahmed)
Reference of the request letter # 496

Dated: 15-10-2021
Dated: 29-09-2021

Graph (Page – 2/4)



I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



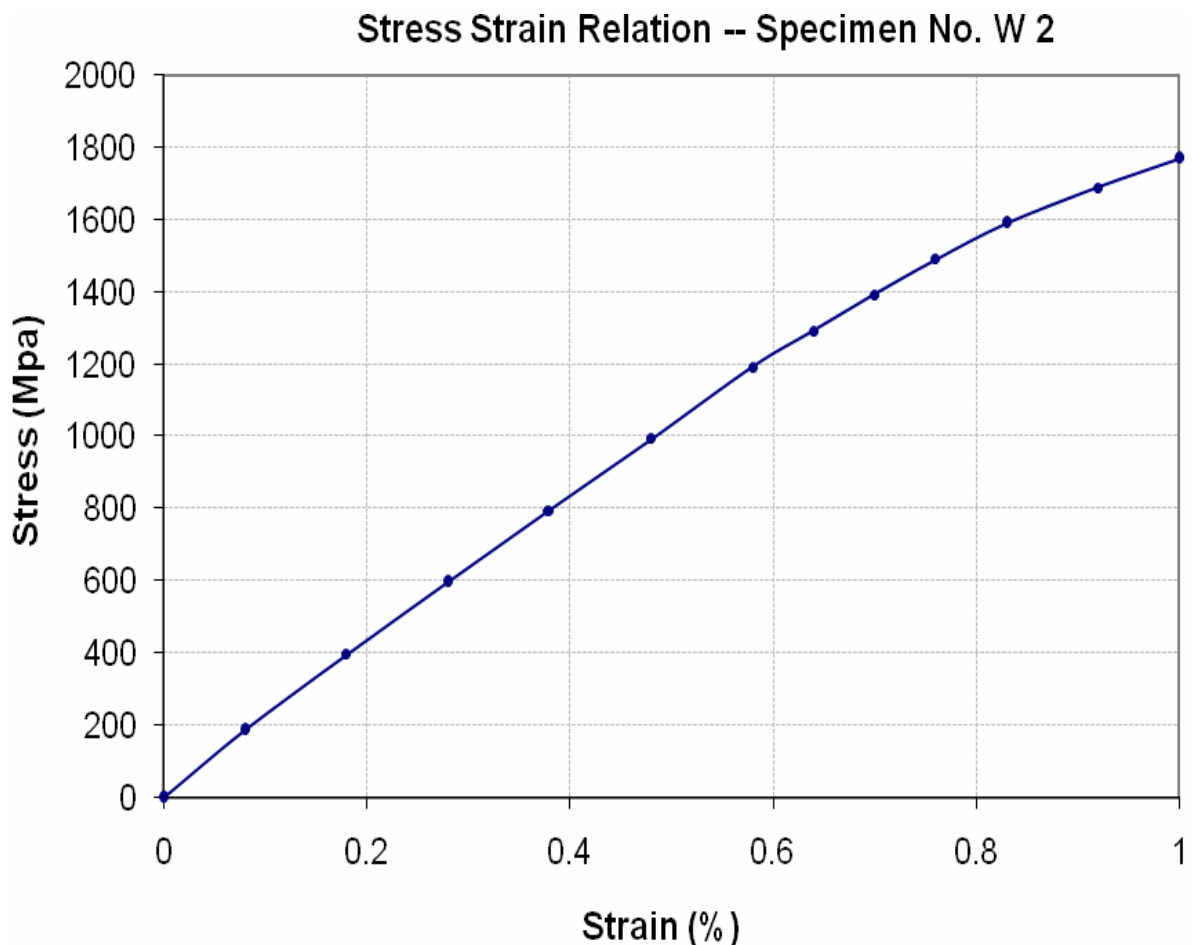
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Executive Engineer
Highway Division, Taunsa
(Rehabilitation of Metalled Road from Vehova to Kotani Length: 7.50 km District D.G. Khan)

Reference # CED/TFL **37216** (Dr. Ali Ahmed)
Reference of the request letter # 496

Dated: 15-10-2021
Dated: 29-09-2021

Graph (Page – 3/4)



I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



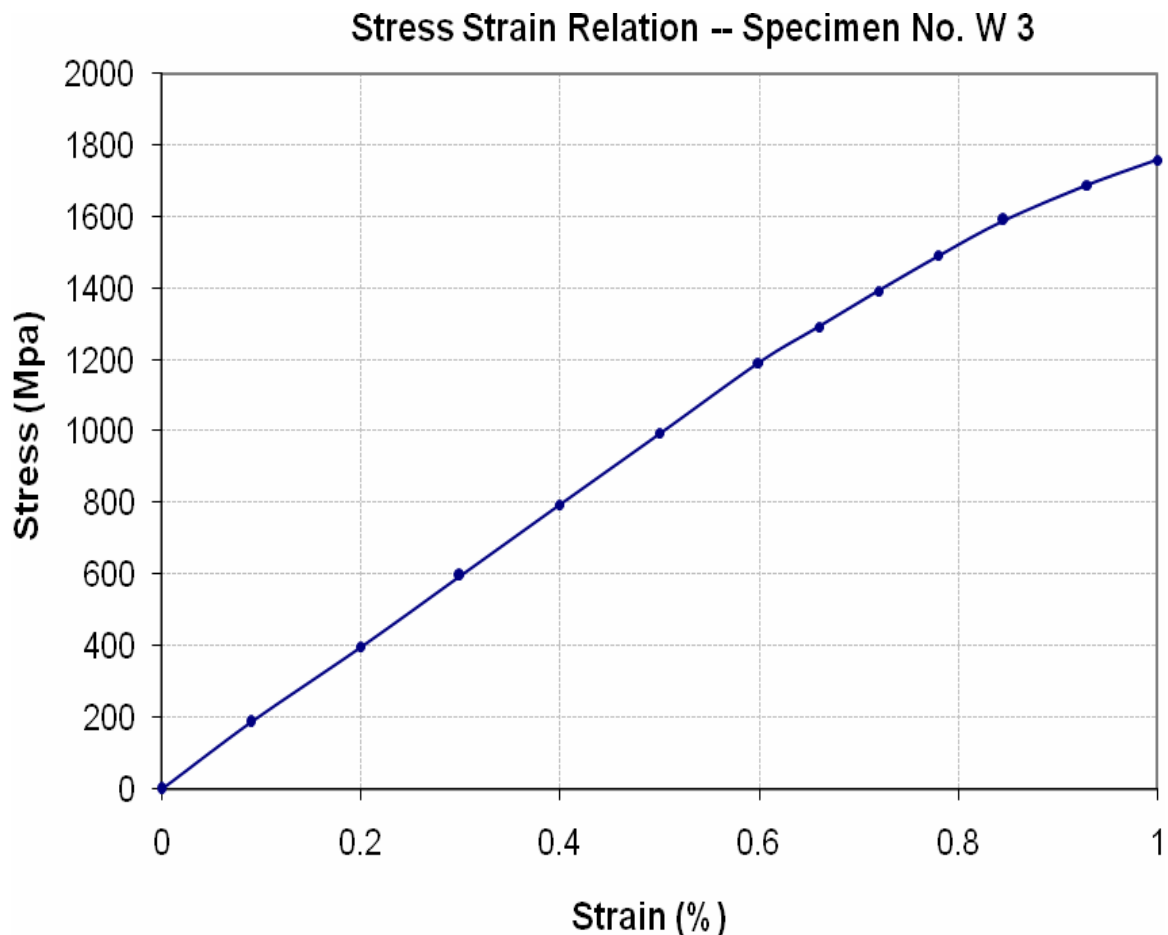
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Executive Engineer
Highway Division, Taunsa
(Rehabilitation of Metalled Road from Vehova to Kotani Length: 7.50 km District D.G. Khan)

Reference # CED/TFL **37216** (Dr. Ali Ahmed)
Reference of the request letter # 496

Dated: 15-10-2021
Dated: 29-09-2021

Graph (Page – 4/4)



I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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 Site Engineer
 AF Builders
 Shahram Filling Station & Aslam Filling Station Multan

Reference # CED/TFL 37222 (Dr. Ali Ahmed)
 Reference of the request letter # Nil

Dated: 18-10-2021
 Dated: 15-10-2021

Tension Test Report (Page -1/1)

Date of Test 20-10-2021
 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 ²)		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	4200	5000	84200	83330	100200	99300	1.00	12.5	
2	0.377	3/8	0.376	0.11	0.111	4100	5000	82200	81570	100200	99500	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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,
Resident Engineer - 2
ACES
Civil Infrastructure Development Works DHA Multan

Reference # CED/TFL 37225 (Dr. Ali Ahmed)
Reference of the request letter # ACES-DHAM-NLC-009

Dated: 18-10-2021
Dated: 16-10-2021

Tension Test Report (Page -1/1)

Date of Test 20-10-2021
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A496

Sr. No.	Weight (kg/m)	Diameter/ Size (mm)		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (Mpa)		Ultimate Stress (Mpa)		Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual	
1	0.159	5	5.09	19.40	20.32	1040	1280	526	502	647	618	Ali Steel
2	0.158	5	5.06	19.40	20.09	1040	1240	526	508	627	605	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test												
Bend Test												
5mm Dia 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
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.
- 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,
 Resident Engineer
 NESPAK
 Provision of Cricket High Performance Centre at Divisional Head Quarter Faisalabad

Reference # CED/TFL 37226 (Dr. Ali Ahmed) Dated: 18-10-2021
 Reference of the request letter # 4314/13/SYA/Steel/06 Dated: 16-10-2021

Tension Test Report (Page -1/1)

Date of Test 20-10-2021
 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 ²)		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	0.376	3	0.375	0.11	0.110	3400	4600	68200	67880	92200	91900	1.40	17.5	Kamran steel
2	0.376	3	0.375	0.11	0.110	3500	4700	70200	69840	94200	93800	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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,
 Resident Engineer
 ACES
 Development of Sectors I & G- DHA Multan

Reference # CED/TFL 37227 (Dr. Ali Ahmed)
 Reference of the request letter # RE/Sec – I &G/Test/27

Dated: 18-10-2021
 Dated: 14-10-2021

Tension Test Report (Page -1/1)

Date of Test 20-10-2021
 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 ²)		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	0.385	3	0.379	0.11	0.113	3800	4800	76200	74080	96200	93600	1.00	12.5	Mughal steel
2	0.384	3	0.379	0.11	0.113	3700	4700	74200	72340	94200	91900	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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

Ref: CED/TFL/10/37228

Dated: 18-10-2021

Date of Test: 20-10-2021

To,
Project Director
ECLIPSE
Resort Living & Mall,
Peshawar

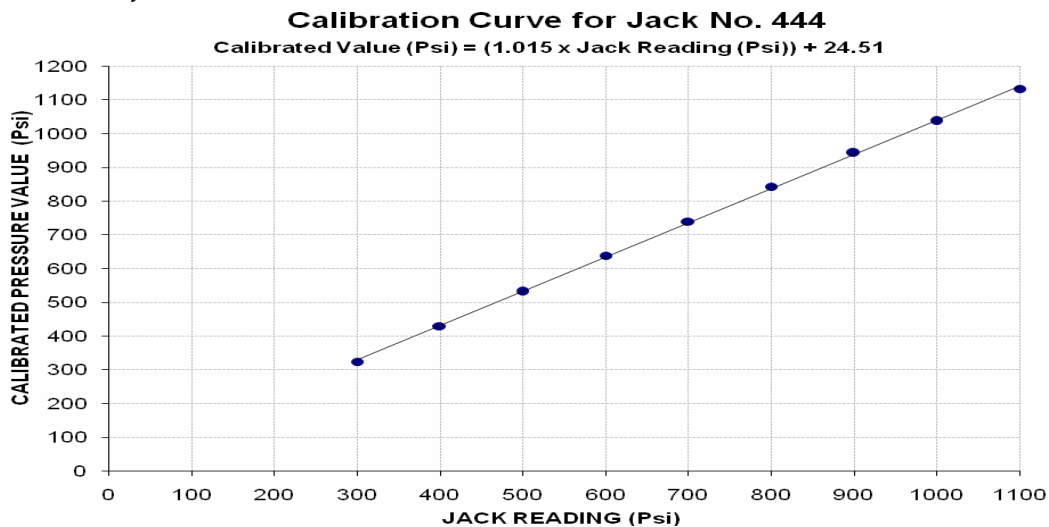
Subject: - CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE
(MARK: TFL/10/37228) (Page # 1/3)

Reference to your Letter No. Nil, Dated: 14/10/2021 on the subject cited above. One Hydraulic Jack No. 444 with Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 6000 (Psi)
Calibrated Range : Zero - 1100 (Psi)

Hydraulic Jack Reading (Psi)	300	400	500	600	700	800	900	1000	1100
Calibrated Load (kg)	55800	74000	91600	110000	127600	145400	162600	179000	195400
Calibrated Pressure (Psi)	323	429	531	638	740	843	943	1038	1133

The Ram Area of Jack = 380.29 in²



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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

Ref: CED/TFL/10/37228

Dated: 18-10-2021

Date of Test: 20-10-2021

To,
Project Director
ECLIPSE
Resort Living & Mall,
Peshawar

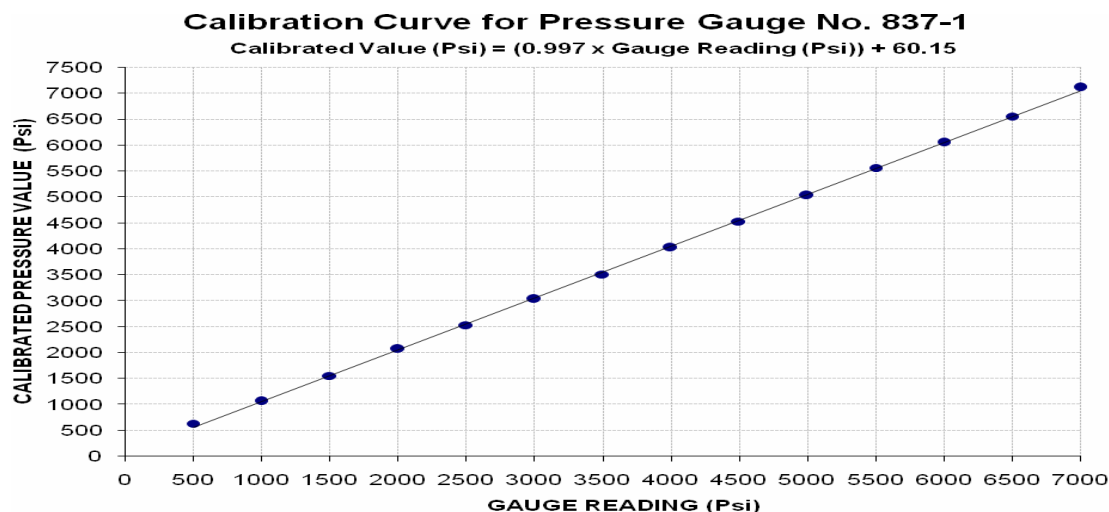
Subject: - **CALIBRATION OF PRESSURE GAUGE (MARK: TFL/10/37228)** (Page # 2/3)

Reference to your Letter No. Nil, Dated: 14/10/2021 on the subject cited above. One Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 10000 (Psi)
Calibrated Range : Zero - 7000 (Psi)

Hydraulic Jack Reading (Psi)	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000
Calibrated Load (kg)	8800	14800	21600	28800	35200	42200	48800	56000	63000	70000	77400	84200	91200	99000
Calibrated Pressure (Psi)	632	1063	1552	2069	2529	3031	3505	4023	4526	5028	5560	6048	6551	7112

The Ram Area of Jack = 198 cm²



I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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

Ref: CED/TFL/10/37228

Dated: 18-10-2021

Date of Test: 20-10-2021

To,
Project Director
ECLIPSE
Resort Living & Mall,
Peshawar

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/10/37228) (Page # 3/3)

Reference to your Letter No. Nil, Dated: 14/10/2021 on the subject cited above. Three Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 100 (mm)
Calibrated Range : Zero - 50 (mm)

Standard Reading	Dial Gauge Readings		
	Dial Gauge No. I (4C18942)	Dial Gauge No. II (4C19025)	Dial Gauge No. III (4C18901)
400	393	395	396
800	794	797	797
1200	1193	1196	1197
1600	1593	1596	1597
2000	1992	1995	1997
2400	2393	2397	2397
2800	2793	2797	2798
3200	3193	3197	3197
3600	3594	3597	3597
4000	3993	3997	3998

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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

4400	4393	4397	4398
4800	4793	4797	4798
5000	4993	4997	4996

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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,
 Project Manager
 CM Engineering (Pvt) Ltd
 Project CMPAK Site ID: 52917, 53221, 52120, 52992, 53195, 53153, 53249

Reference # CED/TFL 37229 (Dr. Ali Ahmed)
 Reference of the request letter # CME/Steel/CMPAK/309

Dated: 18-10-2021
 Dated: 18-10-2021

Tension Test Report (Page -1/1)

Date of Test 20-10-2021
 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 ²)		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	0.373	10	9.49	0.12	0.110	3360	4960	61729	67560	91123	99800	1.40	17.5	
2	0.375	10	9.52	0.12	0.110	3400	5120	62464	67980	94063	102400	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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,
 Dy Dir MTL
 Defence Housing Authority.
 Lahore Cantt
 (18 Green Apartment Complex DRGCC DHA Phase-VI) – (M/s Construct)

Reference # CED/TFL **37230 (Dr. Asad Ali)**
 Reference of the request letter # 408/241/E/Lab/146/05

Dated: 20-10-2021
 Dated: 20-10-2021

Tension Test Report (Page -1/1)

Date of Test 20-10-2021
 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 ²)		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	0.377	3	0.376	0.11	0.111	3380	4740	67800	67210	95000	94300	1.30	16.3	Kamran Steel
2	0.376	3	0.375	0.11	0.111	3360	4710	67400	66920	94400	93900	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 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

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples