



**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/10/2064

Dated: 04-10-2022

Dated: 08-10-2022

To

**M/S Sheikhu Sugar Mills (Steel Division)**  
**Sheikhu Steel**  
**Anwar Abad Kot Addu, Muzaffargarh**

Subject:- **CALIBRATION OF UNIVERSAL TESTING MACHINE OF 1000 kN**  
**MARK: CED/TFL/10/2064) (Page – 1/4)**

Reference to your letter No. Nil, dated: 23/09/2022 on the subject cited above. One Universal Testing Machine (Model No. WAW-1000D, Serial No. 20210431, Make – Jinan Hesgrand Instrument Co. Ltd.) has been calibrated by using standard calibration device. The results are tabulated as under:

**Total Range : Zero - 1000 (kN)**

**Calibrated Range : Zero - 900 (kN)**

Machine Reading (kN)	Corrected Load Value (kN)
50	51
100	101
150	150
200	200
250	251
300	301
350	353
400	402
450	450

Machine Reading (kN)	Corrected Load Value (kN)
500	501
550	553
600	603
650	654
700	703
750	753
800	803
850	855
900	904

**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](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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Ref: CED/TFL/10/2064

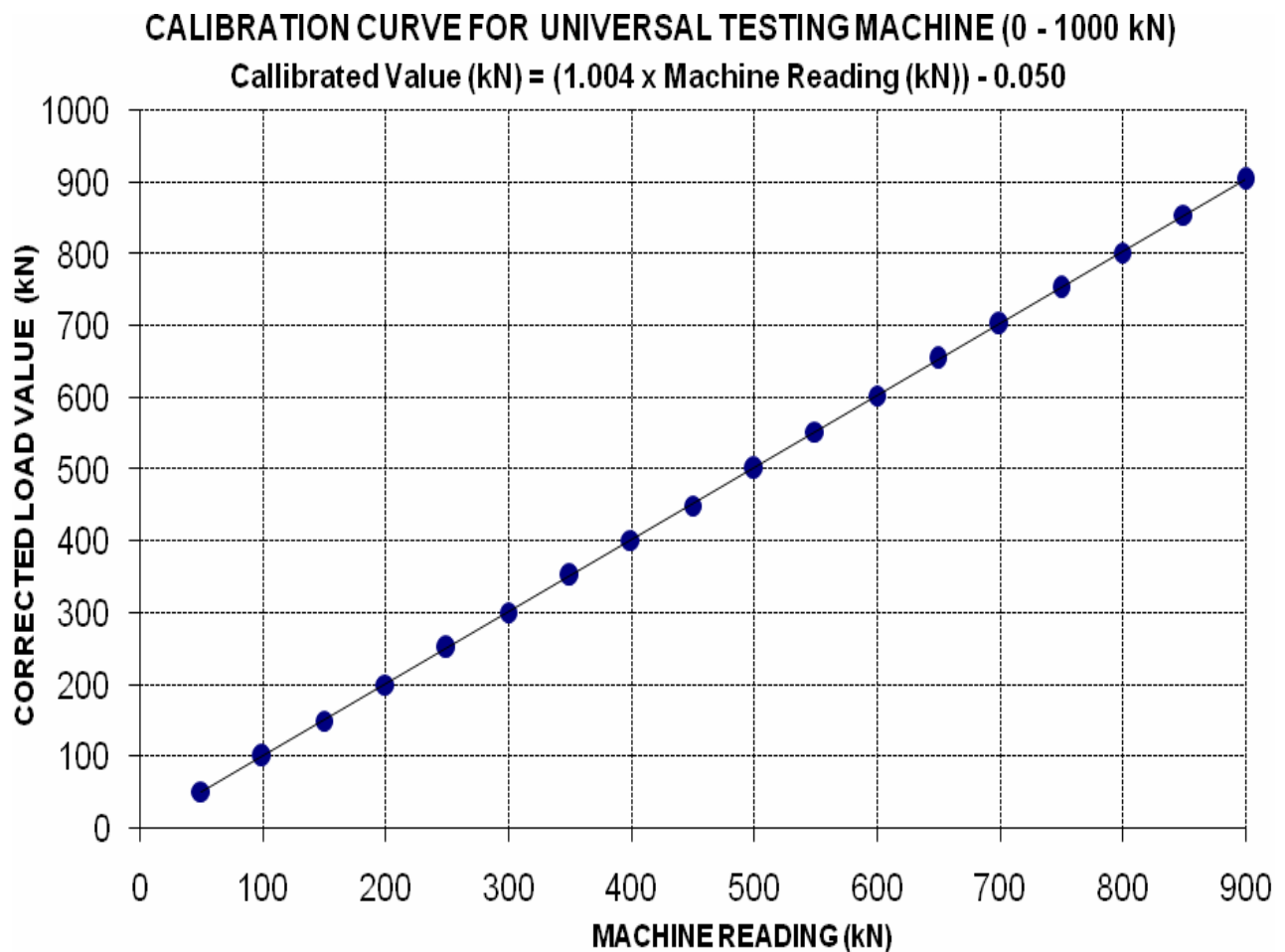
Dated: 04-10-2022

Dated: 08-10-2022

To

**M/S Sheikhu Sugar Mills (Steel Division)**  
**Sheikhu Steel**  
**Anwar Abad Kot Addu, Muzaffargarh**

Subject:- **CALIBRATION OF UNIVERSAL TESTING MACHINE OF 1000 kN**  
**MARK: CED/TFL/10/2064) (Page – 2/4)**



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

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Ref: CED/TFL/10/2064

Dated: 04-10-2022

Dated: 08-10-2022

To

**M/S Sheikhu Sugar Mills (Steel Division)**  
**Sheikhu Steel**  
**Anwar Abad Kot Addu, Muzaffargarh**

Subject:- **CALIBRATION OF UNIVERSAL TESTING MACHINE OF 2000 kN**  
**MARK: CED/TFL/10/2064) (Page – 3/4)**

Reference to your letter No. Nil, dated: 23/09/2022 on the subject cited above. One Universal Testing Machine (Model No. WAW-2000E, Serial No. 20210432, Make – Jinan Hesgrand Instrument Co. Ltd.) has been calibrated by using standard calibration device. The results are tabulated as under:

**Total Range : Zero - 2000 (kN)**

**Calibrated Range : Zero - 1800 (kN)**

Machine Reading (kN)	Corrected Load Value (kN)
100	107
200	214
300	315
400	414
500	514
600	615
700	716
800	817
900	917

Machine Reading (kN)	Corrected Load Value (kN)
1000	1017
1100	1117
1200	1217
1300	1316
1400	1418
1500	1517
1600	1618
1700	1715
1800	1814

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

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**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/10/2064

Dated: 04-10-2022

Dated: 08-10-2022

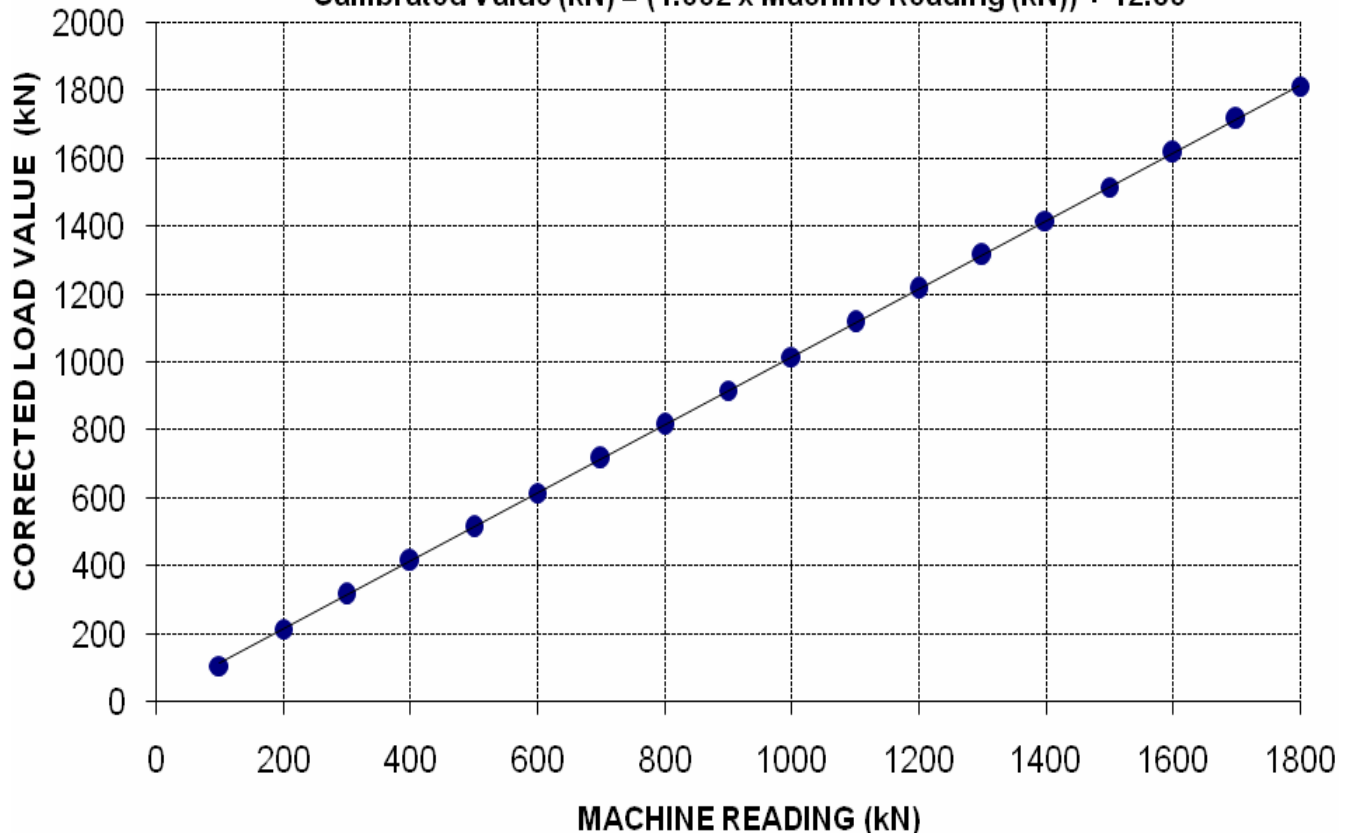
To

**M/S Sheikhu Sugar Mills (Steel Division)**  
**Sheikhu Steel**  
**Anwar Abad Kot Addu, Muzaffargarh**

Subject:- **CALIBRATION OF UNIVERSAL TESTING MACHINE OF 2000 kN**  
**MARK: CED/TFL/10/2064) (Page – 4/4)**

**CALIBRATION CURVE FOR UNIVERSAL TESTING MACHINE (0 - 2000 kN)**

$$\text{Calibrated Value (kN)} = (1.002 \times \text{Machine Reading (kN)}) + 12.86$$



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

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**University of Engineering and Technology Lahore, 54890**  
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To,  
 Assistant Director (Building Section)  
 Defence Housing Authority  
 Gujranwala  
 Construction of Villas (Block-B)

Reference # CED/TFL **2058** (Dr. M Rizwan Riaz)  
 Reference of the request letter# 111/3/AD Bldgs/Gen/22

Dated: 04-10-2022  
 Dated: 03-10-2022

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

Date of Test 10-10-2022  
 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	0.371	3	0.373	0.11	0.109	3100	4800	62200	62690	96200	97100	1.10	13.8	Siraj Steel
2	0.375	3	0.374	0.11	0.110	3200	4800	64200	64070	96200	96200	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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:

- 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](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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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 Elite Engineering Pvt. Ltd  
113-L1 Valancia Town, Lahore

Reference # CED/TFL **2060** (Dr. M Rizwan Riaz)  
Reference of the request letter# Nil

Dated: 04-10-2022  
Dated: 03-10-2022

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

Date of Test 10-10-2022  
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	0.367	3	0.371	0.11	0.108	3200	4700	64200	65330	94200	96000	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**Note: only one sample for tensile and one sample for bend test**

**Bend Test**

#3 Bar Bend Test Through 180° is Satisfactory

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

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

To,  
 Resident Engineer,  
 NESPAK  
 Development of Undergroud External Electrification Network in LDA City Housing Scheme,  
 Lahore (Development Area – I)(Package -02 & Package – 04)

Reference # CED/TFL **2062** (Dr. M Rizwan Riaz)  
 Reference of the request letter# 4047/13/MA/04/30

Dated: 04-10-2022  
 Dated: 29-09-2022

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

Date of Test 10-10-2022  
 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	0.360	3	0.367	0.11	0.106	3200	4700	64200	66740	94200	98100	1.30	16.3	Ittefaq Steel
2	0.367	3	0.371	0.11	0.108	3300	4800	66200	67410	96200	98100	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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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**University of Engineering and Technology Lahore, 54890**  
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To,  
 Director  
 Innovative (R) Construction Company  
 Construction of Tim Hortons, Phase 6 DHA Lahore

Reference # CED/TFL **2067** (Dr. Rizwan Azam)  
 Reference of the request letter # ICL/TH/1022/004

Dated: 05-10-2022  
 Dated: 03-10-2022

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

Date of Test 10-10-2022  
 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	0.380	3	0.377	0.11	0.112	3680	4800	73800	72650	96200	94800	1.00	12.5	
2	0.372	3	0.373	0.11	0.109	4000	5100	80200	80690	102200	102900	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**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
M/S Henan D.R. Construction Group Co., Ltd  
Challenge Special Economic Zone  
Bedian Distributary, Pandoki Village, Lahore

Reference # CED/TFL **2068** (Dr. Rizwan Azam)  
Reference of the request letter # Nil

Dated: 05-10-2022  
Dated: 05-10-2022

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

Date of Test 10-10-2022  
Gauge length 8 inches  
Description Plain Steel Bar Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	0.238	6.48	6.21	-----	30.3	-----	2300	-----	746	0.60	7.5	
2	0.238	6.48	6.21	-----	30.3	-----	2400	-----	777	0.60	7.5	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>												
Bend Test												
6.48mm Dia Bar Bend Test Through 180° is Satisfactory												

**I/C Testing Laboratories**  
**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,  
 Resident Engineer  
 ESAC  
 Civil Infrastructure Development Works Package-2 Sector-A (Remaining Portion) Including MC  
 between T&P, D&E and MC between F&G – DHA Multan

Reference # CED/TFL **2070 (Dr. Rizwan Azam)** Dated: 05-10-2022  
 Reference of the request letter # ESAC/Sec A(Extn) Civ Work/0121 Dated: 03-10-2022

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

Date of Test 10-10-2022  
 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	0.386	10	9.65	0.12	0.113	3400	5000	62464	66120	91858	97300	0.90	11.3	SJ Steel
2	0.386	10	9.65	0.12	0.113	3400	5000	62464	66040	91858	97200	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
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**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Resident Engineer  
 ESAC  
 Civil Infrastructure Works Sector U (Part-2) Including MC between Sector L & P, and Service Road along MC Sector T & X (Package 3) in DHA, Multan (DHAM)

Reference # CED/TFL **2070** (Dr. Rizwan Azam)  
 Reference of the request letter # ESAC/CW/CP/003

Dated: 05-10-2022  
 Dated: 04-09-2022

**Tension Test Report** (Page -2/4)

Date of Test 10-10-2022  
 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	0.368	10	9.43	0.12	0.108	3200	4500	58789	65150	82673	91700	1.20	15.0	FF Steel
2	0.370	10	9.45	0.12	0.109	3300	4500	60627	66890	82673	91300	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
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**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Resident Engineer  
 ESAC  
 Civil Infrastructure Works Sector U (Part-2) Including MC between Sector L & P, and Service Road along MC Sector T & X (Package 3) in DHA, Multan (DHAM)

Reference # CED/TFL **2070 (Dr. Rizwan Azam)**  
 Reference of the request letter # ESAC/CW/CP/006

Dated: 05-10-2022  
 Dated: 04-09-2022

**Tension Test Report** (Page -3/4)

Date of Test 10-10-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test

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	0.135	6	5.71	-----	0.040	1120	1480	-----	62200	-----	82200	1.00	12.5	Ali Steel
2	0.134	6	5.68	-----	0.039	1160	1440	-----	65070	-----	80800	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
6mm Dia Bar Bend Test Through 180° is Satisfactory														

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

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**Pakistan. Ph: 92-42-99029202**

To,  
 Resident Engineer  
 ESAC  
 Civil Infrastructure Development Works Package-2 Sector-A (Remaining Portion) Including MC  
 between T&P, D&E and MC between F&G – DHA Multan

Reference # CED/TFL **2070** (Dr. Rizwan Azam) Dated: 05-10-2022  
 Reference of the request letter # ESAC/Sec A(Extn) Civ Work/0127 Dated: 04-10-2022

**Tension Test Report** (Page -4/4)  
 Date of Test 20-12-2021  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test

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	0.074	5	4.22	-----	0.022	940	1040	-----	95660	-----	105900	0.60	7.5	Ali Steel
2	0.073	5	4.20	-----	0.021	-----	1000	-----	-----	-----	102800	0.20	2.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
5mm 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](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,  
 Assistant Director (Building Section)  
 Defence Housing Authority  
 Gujranwala  
 Construction of Villas (Block - A & D)

Reference # CED/TFL **2072** (Dr. M Rizwan Riaz)  
 Reference of the request letter# 111/3/AD Bldgs/Gen/23

Dated: 06-10-2022  
 Dated: 03-10-2022

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

Date of Test 10-10-2022  
 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	0.372	3	0.373	0.11	0.109	3400	5000	68200	68560	100200	100900	1.20	15.0	Siraj Steel
2	0.386	3	0.380	0.11	0.113	3600	5200	72200	69930	104200	101100	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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:

- 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](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  
 Buildings Sub Division No. 6,  
 Lahore  
 (Construction of Office Complex for Directorate General Punjab Probation and Parole Service  
 Lahore)  
 Reference # CED/TFL **2073** (Dr. Rizwan Azam) Dated: 06-10-2022  
 Reference of the request letter # 82/Sd-6<sup>th</sup> Dated: 26-09-2022

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

Date of Test 10-10-2022  
 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	0.368	3/8	0.371	0.11	0.108	3500	4600	70200	71260	92200	93700	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample 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:

- 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](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,  
 PM Project  
 Majeed Associates Ltd  
 Construction of ABL Expo Centre Johar Town

Reference # CED/TFL **2075** (Dr. M Rizwan Riaz)  
 Reference of the request letter # Nil

Dated: 06-10-2022  
 Dated: 06-10-2022

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

Date of Test 10-10-2022  
 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	0.374	10	9.50	0.12	0.110	4300	5200	78998	86230	95533	104300	0.80	10.0	Afco Steel
2	0.371	10	9.47	0.12	0.109	3400	4400	62464	68700	80835	88900	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
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](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  
 ACE  
 Establishment of Daanish School (Boys & Girls) at Mankera District Bhakkar (M/s  
 ZKHB)(PKGE#1)

Reference # CED/TFL **2076** (Dr. M Rizwan Riaz) Dated: 06-10-2022  
 Reference of the request letter # ACE/RE-PDS/MNK/BHK/22/551 Dated: 27-09-2022

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

Date of Test 10-10-2022  
 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	0.374	3/8	0.374	0.11	0.110	3400	4900	68200	68210	98200	98300	1.00	12.5	
2	0.371	3/8	0.373	0.11	0.109	3300	4900	66200	66680	98200	99100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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:

- 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](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  
 Renaissance International Pvt. Ltd.  
 Construction of Grid Station at Lahore Motorway City Project, Sheikhpura Road, Lahore

Reference # CED/TFL **2077** (Dr. M Rizwan Riaz)  
 Reference of the request letter# QC/22/038

Dated: 06-10-2022  
 Dated: 05-10-2022

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

Date of Test 10-10-2022  
 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	0.387	3	0.380	0.11	0.114	4600	5600	92200	89210	112300	108600	0.90	11.3	Afco Steel
2	0.386	3	0.380	0.11	0.113	4600	5500	92200	89330	110200	106900	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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:

- 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](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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- 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,  
 Deputy Project Manager  
 United Lifestyle (Pvt) Ltd  
 A High Rise Building “Skyscraper by United” at Johar Town, Lahore

Reference # CED/TFL **2078** (Dr. Rizwan Azam)  
 Reference of the request letter # ULS/2021-22/008

Dated: 07-10-2022  
 Dated: 06-10-2022

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

Date of Test 10-10-2022  
 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	0.382	3	0.378	0.11	0.112	3900	5000	78200	76500	100200	98100	1.10	13.8	
2	0.371	3	0.373	0.11	0.109	3600	4800	72200	72710	96200	97000	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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:

- 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](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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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,  
 Project Manager  
 Izhar Construction (Pvt) Ltd  
 OMBRe' Holdings Pvt Ltd Raiwind, Lahore

Reference # CED/TFL **2082** (Dr. Rizwan Azam)  
 Reference of the request letter # OMBRe'/Mughal/Steel/010

Dated: 07-10-2022  
 Dated: 07-10-2022

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

Date of Test 10-10-2022  
 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	0.408	10	9.92	0.12	0.120	3900	4900	71650	71700	90021	90100	1.50	18.8	Mughal Steel
2	0.406	10	9.90	0.12	0.119	3900	4900	71650	72010	90021	90500	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
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](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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- 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,  
M/S Al-Hadeed Corporation  
Lahore  
(Construction of Commercial Building Plot # 39 Block G, Gulberg II, Lahore)

Reference # CED/TFL **2084** (Dr. Rizwan Azam)  
Reference of the request letter # AHC/553/10

Dated: 07-10-2022  
Dated: 07-10-2022

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

Date of Test 10-10-2022  
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	0.355	3/8	0.365	0.11	0.104	2700	4000	54100	57010	80200	84500	1.20	15.0	
2	0.352	3/8	0.363	0.11	0.104	2700	4000	54100	57440	80200	85100	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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 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](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 (QA/QC Department)  
 Bahria Town Private Limited  
 Main Gate at Sector "G" Bahria Town Lahore

Reference # CED/TFL **2086** (Dr. Rizwan Azam)  
 Reference of the request letter # QA/QC/Steel/2841

Dated: 07-10-2022  
 Dated: 04-10-2022

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

Date of Test 10-10-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Ben;d 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	0.372	3	0.373	0.11	0.109	3700	4800	74200	74540	96200	96700	1.00	12.5	
2	0.375	3	0.375	0.11	0.110	4000	5000	80200	80010	100200	100100	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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:

- 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](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  
 Buildings Sub Division No. 16,  
 Lahore  
 (Construction of Police Station Hanjarwal District Lahore)

Reference # CED/TFL **2088** (Dr. Rizwan Azam)  
 Reference of the request letter # 185/16<sup>th</sup>

Dated: 07-10-2022  
 Dated: 04-05-2022

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

Date of Test 10-10-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile 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	0.360	3/8	0.367	0.11	0.106	3000	4200	60200	62470	84200	87500	1.20	15.0	
2	0.363	3/8	0.369	0.11	0.107	2900	4100	58200	59910	82200	84700	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

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

To,  
 Procurement Manager  
 Premier Developers & Builders  
 Lyallpur Galleria-II near Four Season Colony Samundri Road, Faisalabad

Reference # CED/TFL **2089** (Dr. Rizwan Azam)  
 Reference of the request letter # LG-II/027

Dated: 07-10-2022  
 Dated: 06-10-2022

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

Date of Test 10-10-2022  
 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	0.418	3	0.396	0.11	0.123	3900	5400	78200	69960	108200	96900	1.40	17.5	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample 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:

- 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](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/10/2090

Dated: 10-10-2022

Dated of Test: 10-10-2022

To

**Deputy Director (QCD)**  
**Water and Sanitation Agency**  
**Faisalabad**  
**(M/s United (I-II) RCC Pipe Manufacturing Factory New Grace Hosiery,**  
**117/JB, Faisalabad)**

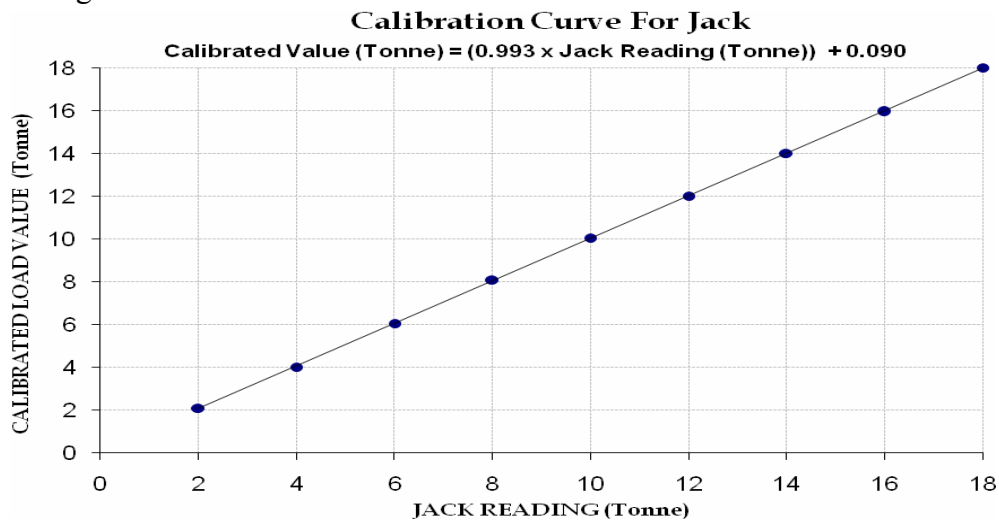
**Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE**  
**(MARK: TFL/10/2090)**

Reference to your Letter No. 122/DD (QCD)/WASA/2022, Dated: 01/10/2022 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

**Total Range : Zero - 20 (Tonne)**  
**Calibrated Range : Zero - 18 (Tonne)**

Hydraulic Jack Reading (Tonne)	2	4	6	8	10	12	14	16	18	
Calibrated Load	(kg)	2100	4000	6050	8100	10050	12000	14000	15950	18000
	(Tonne)	2.10	4.00	6.05	8.10	10.05	12.00	14.00	15.95	18.00

1000 kg = 1 Tonne



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

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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