



**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 / Team Leader  
 Prime Engineering Consultancy  
 Kallurkot Bridge Project  
 Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

Reference # CED/TFL **35494** (Dr. Ali Ahmed) Dated: 13-10-2020  
 Reference of the request letter # KK-DIK--BR-PJ/2020/196 Dated: 12-10-2020

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

Date of Test 14-10-2020  
 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	3.994	32	31.06	1.25	1.174	34000	50200	59965	63830	88537	94300	1.50	18.8	Abbas Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
32mm 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



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To,  
 Resident Engineer / Team Leader  
 Prime Engineering Consultancy  
 Kallurkot Bridge Project  
 Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

Reference # CED/TFL **35494** (Dr. Ali Ahmed) Dated: 13-10-2020  
 Reference of the request letter # KK-DIK--BR-PJ/2020/195 Dated: 12-10-2020

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

Date of Test 14-10-2020  
 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	4.168	32	31.73	1.25	1.225	39600	55400	69842	71240	97708	99700	1.50	18.8	Pak Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
32mm Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
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To,  
 Project Manager  
 Aujla & Associates  
 Warehouse Building Slab – Royal Palm City Housing Scheme Gujranwala

Reference # CED/TFL **35497** (Dr. Ali Ahmed)  
 Reference of the request letter # Nil

Dated: 13-10-2020  
 Dated: 13-10-2020

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

Date of Test 14-10-2020  
 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	0.362	3	0.368	0.11	0.106	3300	4000	66200	68340	80200	82900	1.00	12.5	Afco Steel
2	0.369	3	0.372	0.11	0.109	3500	4200	70200	71060	84200	85300	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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.**

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To,  
M/S Techforce Engineers & Contractors  
Lahore  
(Construction of Sterling Residences at 21-Main Gulberg Lahore)

Reference # CED/TFL **35498** (Dr. Ali Ahmed)  
Reference of the request letter # TF/S.T-09/20

Dated: 13-10-2020  
Dated: 12-10-2020

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

Date of Test 14-10-2020  
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	0.410	3	0.392	0.11	0.120	4700	6000	94200	85980	120300	109800	0.80	10.0	
2	0.404	3	0.389	0.11	0.119	4500	5700	90200	83450	114300	105700	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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.**

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To,  
 Material Engineer  
 Defence Housing Authority Multan  
 (Construction of DHA Shopping Mall)(M/s CM Developers)

Reference # CED/TFL **35499** (Dr. Ali Ahmed)  
 Reference of the request letter # 701/70/P&D/DHA

Dated: 13-10-2020  
 Dated: 09-10-2020

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

Date of Test 14-10-2020  
 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	0.369	3	0.372	0.11	0.109	3500	5300	70200	71060	106200	107700	1.10	13.8	Ittefaq Steel
2	0.369	3	0.371	0.11	0.108	3500	5300	70200	71190	106200	107800	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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To,  
 Material Engineer  
 Defence Housing Authority Multan  
 (Construction of Bilal Mosque)(M/s Umer Jan & Co)

Reference # CED/TFL **35500** (Dr. Ali Ahmed)  
 Reference of the request letter # 701/52/P&D/DHA

Dated: 13-10-2020  
 Dated: 09-10-2020

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

Date of Test 14-10-2020  
 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	0.415	10	10.01	0.12	0.122	4400	6200	80835	79500	113904	112100	1.00	12.5	FF Steel
2	0.414	10	10.00	0.12	0.122	4300	6200	78998	77910	113904	112400	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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To,  
 Sub Divisional Officer  
 Buildings Sub Division Arifwala  
 Establishment of Single Suit Bachelor Accommodation at Judicial Complex at Arifwala

Reference # CED/TFL **35501** (Dr. Ali Ahmed)  
 Reference of the request letter # 1622/SDO-A

Dated: 13-10-2020  
 Dated: 20-08-2020

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

Date of Test 14-10-2020  
 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	0.380	3/8	0.377	0.11	0.112	3800	5100	76200	74890	102200	100600	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.**

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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  
 Professional Construction Services (Pvt) Ltd  
 ABL DHA Phase-8C Ex Park View Lahore

Reference # CED/TFL **35503** (Dr. Ali Ahmed)  
 Reference of the request letter # PCS/2020/Eng-75

Dated: 13-10-2020  
 Dated: 13-10-2020

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

Date of Test 14-10-2020  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile 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	0.386	3	0.380	0.11	0.114	3700	5100	74200	71830	102200	99100	1.20	15.0	
2	0.385	3	0.379	0.11	0.113	3900	5200	78200	76020	104200	101400	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

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

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

To,  
 General Manager Operations  
 Model Steel Enterprises (Pvt) Limited  
 Lahore

Reference # CED/TFL **35505** (Dr.Ali Ahmed)  
 Reference of the request letter # Nil

Dated: 14-10-2020  
 Dated: 13-10-2020

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

Date of Test 14-10-2020  
 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	0.385	3/8	0.380	0.11	0.113	3300	5000	66200	64250	100200	97400	1.00	12.5	
2	0.388	3/8	0.381	0.11	0.114	3400	5100	68200	65790	102200	98700	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

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

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

Ref: CED/TFL/10/35509

Dated: 14-10-2020

Dated of Test: 14-10-2020

To,  
Incharge  
Strength of Materials Lab.  
Department of Civil Engineer  
University of Engineering & Technology, Taxila

Subject: - CALIBRATION OF LOAD CELL (MARK: TFL/10/35509) (Page – 1/2)

Reference to your Letter No. CED/ST/2020/12, Dated: 13/10/2020 on the subject cited above. One Load Cell Make: ELE International Ltd., Serial No. 1052-9-6080, Capacity: 3000 kN as received by us has been calibrated. The results are tabulated as under:

Load Cell Reading	Calibrated Laod (kg)
50	11200
100	23200
150	34800
200	46600
250	57800
300	69800
350	81000
400	92600
450	104100
500	116000
550	127200
600	140200
650	153200
700	163800
750	175400

**NOTE: The load cell is calibrated with the standard calibration device. It is recommended that this device can be used as load cell but should not be used to calibrate any other device or machine.**

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

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Ref: CED/TFL/10/35509  
Dated of Test: 14-10-2020

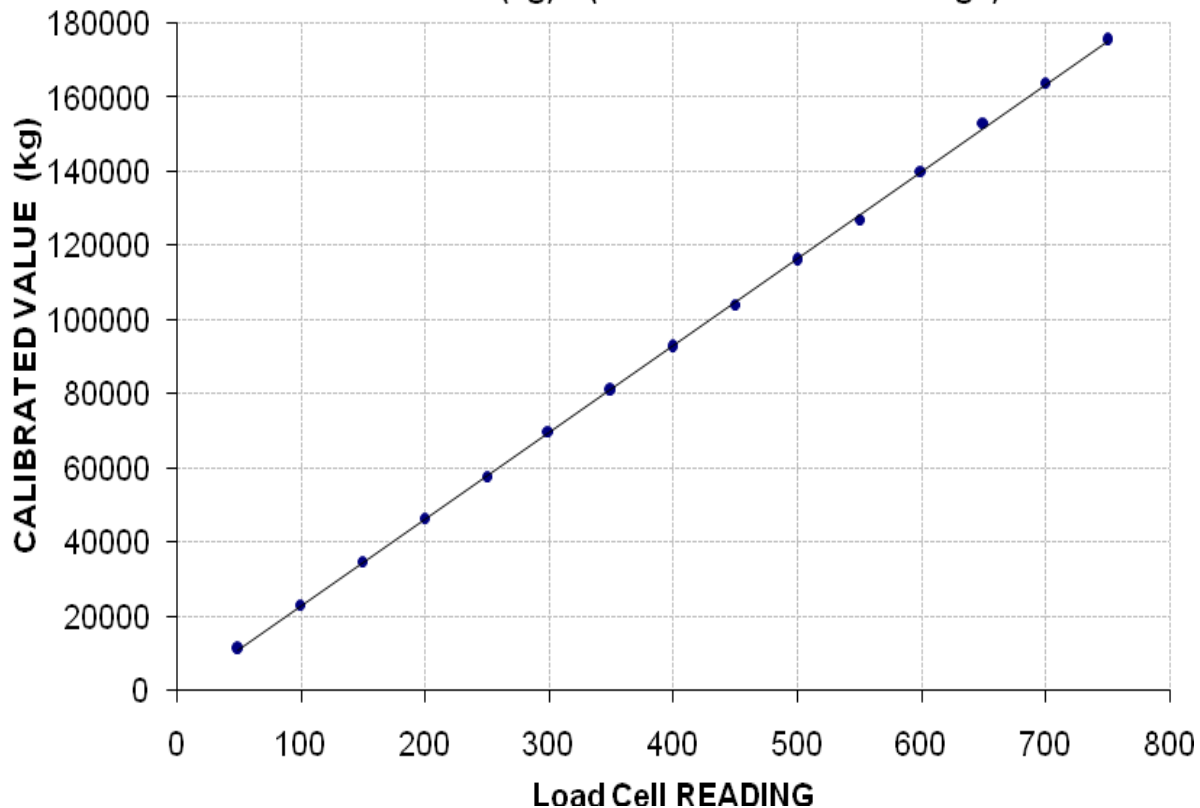
Dated: 14-10-2020

To,  
Incharge  
Strength of Materials Lab.  
Department of Civil Engineer  
University of Engineering & Technology, Taxila

Subject: - CALIBRATION OF LOAD CELL (MARK: TFL/10/35509) (Page – 2/2)

### Calibration Curve For Load Cell

$$\text{Calibrated Value (kg)} = (234.5 \times \text{Load Cell Readings}) - 676.1$$



**NOTE: The load cell is calibrated with the standard calibration device. It is recommended that this device can be used as load cell but should not be used to calibrate any other device or machine.**

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

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