

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

Ref: <u>CED/TFL/12/4290</u> Dated: <u>04-12-2023</u>

Date of Test: <u>08-12-2023</u>

To,

Resident Engineer Icon Gold Valley, Faisalabad

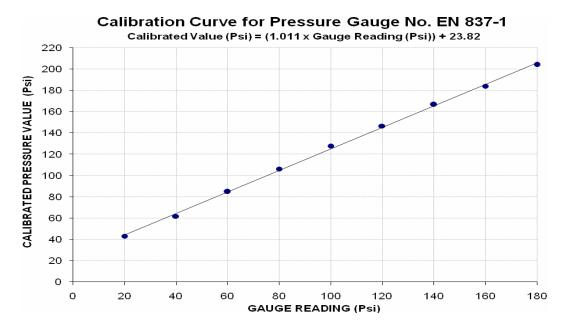
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/11/4290) (Page # 1/2)

Reference to your Letter No. IGV/01/2023, Dated: 03/12/2023 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 - 230 (Psi) Calibrated Range : Zero - 180 (Psi)

Pressure Gauge Reading (Psi)	20	40	60	80	100	120	140	160	180
Calibrated Load (kg)	600	860	1180	1480	1780	2040	2320	2560	2840
Calibrated Pressure (Psi)	43	62	85	106	128	147	167	184	204

The Ram Area for Calibration = 198 cm^2



I/C Testing Laboratoires UET Lahore, Pakistan.

- 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





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

Ref: <u>CED/TFL/12/4290</u> Dated: <u>04-12-2023</u>

Date of Test: 08-12-2023

To,

Resident Engineer Icon Gold Valley, Faisalabad

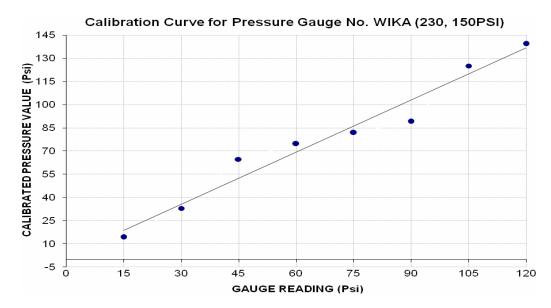
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/11/4290) (Page # 2/2)

Reference to your Letter No. IGV/01/2023, Dated: 03/12/2023 on the subject cited above. One Pressure Gauge No. WIKA (230, 150Psi) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 150 (Psi) Calibrated Range : Zero - 120 (Psi)

Pressure Gauge Reading (Psi)	15	30	45	60	75	90	105	120
Calibrated Load (kg)	200	460	900	1040	1140	1240	1740	1940
Calibrated Pressure (Psi)	14	33	65	75	82	89	125	139

The Ram Area for Calibration = 198 cm^2



* It is not recommended to use the pressure gauge due to inconsistent gauge readings.

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

Material Engineer NESPAK – EPCM-PICIIP

Punjab Intermediated Cities Improvement Investment Program (PICIIP)

Consultancy Services for Engineering, Procurement and Construction Management Trunk Main Sewer Conduit, Effluent Pumping Station and Allied Worked (NCB-

WORKS/PICIIP-03)(Lot-03)

Reference # CED/TFL 4308 (Dr. M Kashif)

Reference of the request letter # 3976/11/MS/SWL/Lot-03/01/538

Dated: 05-12-2023 Dated: 05-12-2023

Tension Test Report (Page -1/3)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze	Aı (iı	rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	₩ E	Re
1	0.369	3	0.372	0.11	0.109	3410	4760	68400	69240	95400	96700	1.30	16.3	00
2	0.365	3	0.370	0.11	0.107	3430	4760	68800	70460	95400	97800	1.50	18.8	Sheikhoo Steel
-	1	1	ı	1	-	-	1	-	-	-	-	-	1	She
-	ı	ı	ı	ı	-	-	ı	-	-	-	-	-	ı	
-	ı	ı	ı	ı	-	-	ı	-	•	-	•	-	ı	
-	-	-	1	-	-	-	-	-	-	-	-	-	1	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1		
							Bend T	est						

#3 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

Material Engineer NESPAK – EPCM-PICIIP

Punjab Intermediated Cities Improvement Investment Program (PICIIP) Consultancy Services for Engineering, Procurement and Construction Management Trunk Main Sewer Lines and Allied Work (Lot-02)

Reference # CED/TFL **4308** (Dr. M Kashif)

Reference of the request letter # 3976/11/MS/SWL/Lot-02/01/542

Dated: 05-12-2023

Dated: 05-12-2023

Tension Test Report (Page -2/3)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)			Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.367	3	0.371	0.11	0.108	3470	4790	69600	70860	96000	97900	1.40	17.5	0
2	0.366	3	0.370	0.11	0.108	3410	4760	68400	69840	95400	97500	1.30	16.3	Sheikhoo Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	She
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			1
щ2	Rar Ren	1 T 4 5	Γ1 1	1000:	Catiaf	-t	Bend T	est						

#3 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

Material Engineer NESPAK – EPCM-PICIIP

Punjab Intermediated Cities Improvement Investment Program (PICIIP) Consultancy Services for Engineering, Procurement and Construction Management Trunk Main Sewer Lines and Allied Work (Lot-02)

Reference # CED/TFL 4308 (Dr. M Kashif)

Dated: 05-12-2023

Reference of the request letter # 3976/11/MS/SWL/Lot-02/01/543 Dated: 05-12-2023

Tension Test Report (Page -1/3)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
<i>S</i> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	₩ E	Re
1	0.184	2	0.263		0.054	1910	2520		77720		102600	0.90	11.3	el
2	0.203	2	0.276		0.060	2140	2570		78910		94800	1.50	18.8	A.F. Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	1	A.F
-	-	-	-	-	-	ı	-	-	-	-	-	-	1	
-	-	-	-	-	-	ı	-	-	-	-	-	-	1	
-	-	-	-	-	-	ı	-	-	-	-	-	-	ı	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	 'est						
#2	Rar Ren	d Test '	Through	180° is	s Satisfa	ctory	Delia 1	CSI						

#2 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

M/S Riaz Construction Company

Lahore

(Construction of New TCF Secondary School Building in 209 Chak Faisalabad.)

Reference # CED/TFL 4317 (Dr. M Kashif)

Reference of the request letter # Nil Dated: 07-12-2023

Tension Test Report (Page -1/1)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight			rea 1 ²)	Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Nominal Actual Actual		(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.371	3	0.372	0.11	0.109	3640	5050	73000	73660	101200	102200	1.50	18.8	eel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ittefaq Steel
-	-	1	ı	1	-	-	-	-	-	-	1	-	1	Ittef
-	-	1	ı	ı	-	-	-	-	-	-	ı	ı	ı	
-	-	-	1	-	-	-	-	-	-	-	-	1	1	
-	-	-		-	-	-	-	-	-	_	-	-	-	
			N	ote: on	ly one s	ample fo	or tensile	and one	sample f	or bend t	est			
#3	Bar Ben	d Test T	Through	1800 i	Satisfa	ctory	Bend T	est						

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 07-12-2023

- 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

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

To,

Engineer
Paidar Builders (Pvt) Ltd
Lahore
(Construction of TCF Primary School Unit - I Kot Addu Muzaffargarh.)

Reference # CED/TFL 4318 (Dr. M Kashif)

Reference of the request letter # PBL/UET/2023

Dated: 07-12-2023

Dated: 05-12-2023

Tension Test Report (Page -1/1)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ze ch)	Aı (iı	rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.371	3/8	0.373	0.11	0.109	3590	5010	72000	72500	100400	101200	1.20	15.0	faq sel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ittefaq Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					No	te: only o	ne samp	le for ten	sile test					
						_	Bend T	est	-		-			

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

Resident Engineer
ESS-I-AAR Consultant

Rehabilitation / Improvement of Sewerage System District Jhang. (Phase-I)

Reference # CED/TFL <u>4321 (Dr. M Kashif)</u> Reference of the request letter # 1990/PHE

Tension Test Report (Page -1/1)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.390	3	0.382	0.11	0.115	3430	5250	68800	66020	105200	101100	1.40	17.5	ad ie
2	0.384	3	0.379	0.11	0.113	3430	5170	68800	67020	103600	101100	0.90	11.3	Islamabad Supreme
-	-	-	-	-	-	-	-	-	-	_	-	-	-	Isla Su _j
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	for bend 1	test			
							Bend T	est						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 07-12-2023

Dated: 28-11-2023

- 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



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

To,

Assistant Director Defence Housing Authority, Gujranwala "Construction of 5 Marla Villas (Block C)"

Reference # CED/TFL 4322 (Dr. M Kashif)

Reference of the request letter # 111/3/AD Bldgs/Gen/62

Dated: 07-12-2023

Dated: 28-11-2023

Tension Test Report (Page -1/2)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight				rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.363	3	0.369	0.11	0.107	3260	4740	65400	67330	95000	97900	1.30	16.3	e
2	0.355	3	0.364	0.11	0.104	3180	4710	63800	67220	94400	99600	1.30	16.3	Siraj Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sira
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1		I
112	D D	1.75	D1 1	1000:			Bend T	est						
#3	Bar Ben	d Test	I hrough	1 180° 1	s Satisfa	ictory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

Assistant Director Defence Housing Authority, Gujranwala "Construction of 5 Marla Villas (Block C)"

Reference # CED/TFL 4322 (Dr. M Kashif)

Reference of the request letter # 111/3/AD Bldgs/Gen/61

Dated: 07-12-2023

Dated: 28-11-2023

Tension Test Report (Page -2/2)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	(ft) Meight Size			rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal			(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.356	3	0.365	0.11	0.105	3180	4710	63800	67000	94400	99300	1.30	16.3	e
2	0.355	3	0.365	0.11	0.104	3160	4690	63400	66690	94000	99000	1.20	15.0	Siraj Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sira
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1	No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend 1	test			
							Bend T	est est						<u> </u>
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

Construction Manager

Barqaab Consulting Services (Pvt) Limited

Procurement of Plant, Design, Supply, Installation, Testing and Commissioning of 500/220/132kV Lahore North Substation and Extension Works at 500/220/132kV Nokhar Substation Under ADB Loan-3677-Pak Second Power Transmission Enhancment Ivestment Program Trench-III.

Reference # CED/TFL 4324 (Dr. Asad Ali) Dated: 07-12-2023 Reference of the request letter # 500kV/SS/N-LHR/BQB/177 Dated: 04-12-2023

Tension Test Report (Page -1/1)

Date of Test 08-12-2023 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea 1 ²)	Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
<i>S</i> ₂	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal Actual		(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	I %	Re
1	0.381	3	0.377	0.11	0.112	3770	4990	75600	74280	100000	98400	1.20	15.0	ء el
2	0.380	3	0.377	0.11	0.112	3790	5010	76000	74700	100400	98800	1.10	13.8	FF Steel
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test	1	ı	
							D 15							
#2	Bar Ben	d Togt	Fh.manal	. 1900:	Coticfo	atom.	Bend T	est						

#3 Bar Bend Test Through 180° is Satisfactory

Witness by Jamshed Ali (S.D.O NTDC) & Muhammad Farhan (Barqaab)

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

- 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.
- Sealed sample / Unsealed sample / Marked sample/Signed Samples