



**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  
 State Grid  
 Design, Supply, Installation, Testing & Commissioning of 500kV/D/C Transmission Line Nokhar  
 S/S – Lahore North S/S- Lahore HVDC Switching / Converter Station  
 (Kamran Steel (Noshehra Virka Warehouse))

Reference # CED/TFL **37889** (Dr. Ali Ahmed) Dated: 15-02-2022  
 Reference of the request letter # CET/ADB-301A//SEC-I/UET-22-318 Dated: 14-02-2022

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

Date of Test 18-02-2022  
 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	4.137	10	1.244	1.27	1.216	43000	55800	74700	77930	96900	101200	1.40	17.5	Kamran Steel
2	4.131	10	1.243	1.27	1.214	41400	54800	71900	75160	95200	99500	1.50	18.8	
3	4.198	10	1.253	1.27	1.234	41200	55500	71500	73600	96400	99200	1.40	17.5	
4	4.203	10	1.254	1.27	1.235	41000	55600	71200	73150	96500	99200	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only four samples for tensile and four samples for bend test</b>														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														

Witness by Basharat Ali (Civil Engr. NESPAK)

**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



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**Department of Civil Engineering**  
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To,  
 Project Manager  
 State Grid  
 Design, Supply, Installation, Testing & Commissioning of 500kV/D/C Transmission Line Nokhar S/S – Lahore  
 North S/S- Lahore HVDC Switching / Converter Station  
 (Kamran Steel (Sharqpur Warehouse))

Reference # CED/TFL **37889** (Dr. Ali Ahmed) Dated: 15-02-2022  
 Reference of the request letter # CET/ADB-301A//SEC-I/UET-22-317 Dated: 14-02-2022

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

Date of Test 18-02-2022  
 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	0.373	3	0.374	0.11	0.110	3400	4900	68200	68320	98200	98500	1.50	18.8	Kamran Steel
2	0.374	3	0.374	0.11	0.110	3300	4900	66200	66090	98200	98200	1.40	17.5	
3	4.108	10	1.240	1.27	1.208	36000	51400	62500	65710	89300	93900	1.40	17.5	
4	4.111	10	1.240	1.27	1.208	38600	53000	67000	70410	92000	96700	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only four samples for tensile and four samples for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														

Witness by Basharat Ali (Civil Engr. NESPAK)

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

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

To,  
 Procurement Officer  
 Bismillah Housing Scheme  
 Manawan Bank Stop G.T Road, Lahore  
 (Al-Raziq Garden)

Reference # CED/TFL **901** (Engr. Amina Rajput)  
 Reference of the request letter # Nil

Dated: 17-02-2022  
 Dated: 16-02-2022

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

Date of Test 18-02-2022  
 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	0.375	3	0.374	0.11	0.110	3410	5010	68400	68270	100400	100300	1.10	13.8	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.**

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

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

Reference # CED/TFL **903** (Engr. Amina Rajput)  
 Reference of the request letter # 111/3/APE Bldg/Gen/11

Dated: 17-02-2022  
 Dated: 17-02-2022

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

Date of Test 18-02-2022  
 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	0.387	3	0.381	0.11	0.114	3620	4690	72600	70080	94000	90800	1.20	15.0	FF Steel
2	0.369	3	0.372	0.11	0.109	3380	4380	67800	68600	87800	88900	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.**

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

To,  
 M/S Beacon Impex  
 34 – km Sheikhpura Road, Faisalabad  
 (Construction of R.C.C. Structure Type Building for Ware House at Beacon Impex - II.)  
 (M/s M. Saleem Construction Company)

Reference # CED/TFL **906** (Engr. Amina Rajput)  
 Reference of the request letter # Nil

Dated: 17-02-2022  
 Dated: 16-02-2022

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

Date of Test 18-02-2022  
 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	0.420	3	0.396	0.11	0.123	3420	4690	68600	61080	94000	83800	1.50	18.8	Mehran Metro
2	0.417	3	0.395	0.11	0.123	3440	4690	69000	61810	94000	84300	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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**  
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To,  
 Resident Engineer  
 ACE Limited jv ACC (Pvt) Ltd.  
 Construction of Lodhran - Multan Project section (N-5) (North Bound 62 km)

Reference # CED/TFL 907 (Dr. Usman Akmal)  
 Reference of the request letter # RE/ACE/LMP/2022/165

Dated: 18-02-2022  
 Dated: 16-02-2022

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

Date of Test 18-02-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile 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	3.609	32	29.52	1.25	1.061	29600	46800	52205	61500	82540	97300	1.30	16.3	Mujahid Steel
2	3.579	32	29.40	1.25	1.052	29800	46800	52558	62430	82540	98100	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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**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  
 Construction of Library, Campus Mosque, Sports Gymnasium. Medical Centre & Shops and  
 Faculty & Staff Residences at New Campus of Ghazi University, Dera Ghazi Khan

Reference # CED/TFL **909** (Dr. Ali Ahmed) Dated: 18-02-2022  
 Reference of the request letter # 4026/325/MU/Misc/002 Dated: 16-02-2022

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

Date of Test 18-02-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.418	3	0.396	0.11	0.123	4300	5800	86200	77080	116300	104000	1.00	12.5	Sj Steel
2	0.454	3	0.412	0.11	0.133	3900	5200	78200	64410	104200	85900	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

**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  
 Pillar & Sons  
 Rumanza Golf & Country Club, DHA Multan

Reference # CED/TFL **910** (Dr. Asif Hameed)  
 Reference of the request letter # P&S/OTH/GEN/00068

Dated: 18-02-2022  
 Dated: 17-02-2022

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

Date of Test 18-02-2022  
 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	0.331	3	0.352	0.11	0.097	2800	3900	56200	63410	78200	88400	1.50	18.8	SJ Steel
2	0.371	3	0.373	0.11	0.109	3100	4500	62200	62590	90200	90900	1.40	17.5	
3	0.345	3	0.360	0.11	0.102	3100	4500	62200	67300	90200	97700	1.50	18.8	
4	4.451	10	1.291	1.27	1.308	36600	51800	63600	61660	89900	87300	1.50	18.8	
5	4.259	10	1.263	1.27	1.252	36800	51800	63900	64790	89900	91200	1.50	18.8	
6	4.291	10	1.267	1.27	1.261	41400	56000	71900	72350	97200	97900	1.20	15.0	
<b>Note: only six samples for tensile and three samples for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														

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

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

To,  
Resident Engineer  
Orbit Housing  
The Spring Apartment Homes

Reference # CED/TFL **913** (Engr. Amina Rajput)  
Reference of the request letter # Nil

Dated: 18-02-2022  
Dated: 17-02-2022

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

Date of Test 18-02-2022  
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	0.376	3	0.375	0.11	0.111	4000	5560	80200	79700	111500	110800	1.00	12.5	
2	0.375	3	0.374	0.11	0.110	3740	5350	75000	74850	107200	107100	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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**Test Floor Laboratory**  
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**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Manager  
 Sunshine by Style International  
 Construction of Sunshine Project

Reference # CED/TFL **914** (Engr. Amina Rajput)  
 Reference of the request letter # SPS/BML/006/2022

Dated: 18-02-2022  
 Dated: 18-02-2022

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

Date of Test 18-02-2022  
 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	0.390	3	0.382	0.11	0.115	3920	5070	78600	75420	101600	97600	1.30	16.3	
2	0.380	3	0.377	0.11	0.112	3790	4910	76000	74810	98400	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.**

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