

Muhammad Saleem Shahid

Test Performed By: Dr. /Engr. Asad Ali Gillani

CM State Grid CEPET.(500/220/132KV Nokhar Substation Under ADB Loan No.3677)

Client Reference: CET/ADB-300AR/S/2023-295

Dated: 25-07-2023

Test: Tension Test & Bend Test Test Specification:

Gauge Length: 8 inch

Sample Type:

SOM Lab

Ref: 2624 (Page-1a/1)

Dated: 26-07-2023

ASTM-A-615

Deformed

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.643	8	0.995	0.79	0.777	25.20	34.58	70350	71530	96530	98150	1.30	8.0	16.3	
2	2.677	8	1.001	0.79	0.787	25.33	34.61	70720	70990	96620	96980	1.60	8.0	20.0	
3	2.661	8	0.998	0.79	0.782	25.28	34.25	70580	71300	95620	96600	1.40	8.0	17.5	
4	2.636	8	0.993	0.79	0.775	25.08	34.58	70010	71360	96530	98400	1.50	8.0	18.8	
5	2.650	8	0.996	0.79	0.779	24.72	34.27	69010	69990	95680	97030	1.60	8.0	20.0	
6	2.647	8	0.995	0.79	0.778	25.61	34.25	71490	72590	95620	97090	1.60	8.0	20.0	
7	2.667	8	0.999	0.79	0.784	25.81	34.25	72060	72610	95620	96350	1.50	8.0	18.8	
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Witnessed By: Waqas Ahmad (Sub Engr), M.Adnan (Civil Engr)

**BEND TEST:**

Sr.(1-7)	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:- Only Fourteen Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Muhammad Saleem Shahid

Test Performed By: Dr. /Engr. Asad Ali Gillani

CM State Grid CEPET.(500/220/132KV Nokhar Substation Under ADB Loan No.3677)

Client Reference: CET/ADB-300AR/S/2023-295

Dated: 25-07-2023

Test: Tension Test & Bend Test Test Specification:

Gauge Length: 8 inch

Sample Type:

SOM Lab

Ref:

2624 (Page-1b/1)

Dated:

26-07-2023

ASTM-A-615

Deformed

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.473	6	0.743	0.44	0.433	14.44	20.00	72400	73570	100250	101870	1.30	8.0	16.3	
2	1.471	6	0.742	0.44	0.432	14.37	20.00	72050	73380	100250	102110	1.40	8.0	17.5	
3	1.521	6	0.754	0.44	0.447	14.85	20.51	74450	73280	102800	101190	1.40	8.0	17.5	
4	1.477	6	0.743	0.44	0.434	14.34	19.93	71890	72890	99890	101270	1.30	8.0	16.3	
5	1.502	6	0.749	0.44	0.441	13.83	18.91	69340	69180	94780	94570	1.40	8.0	17.5	
6	1.080	5	0.635	0.31	0.317	10.21	13.76	72670	71060	97910	95740	1.30	8.0	16.3	
7	1.071	5	0.633	0.31	0.315	10.01	13.61	71220	70090	96820	95280	1.40	8.0	17.5	
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Witnessed By: Waqas Ahmad (Sub Engr), M.Adnan (Civil Engr)

**BEND TEST:**

Sr.(1-5)	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Thirteen Samples Received and Tested</b>
Sr.(6)	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Javaid Iqbal

Riz Builders Lahore.(Din Plaza,Jojar Town Lahore)

Test Performed By:

Dr. /Engr.

Waseem Abbas

Client Reference: Nil

Dated: 26-07-2023

Test: Tension Test & Bend Test Test Specification:

Gauge Length: 8 inch

Sample Type:

SOM Lab

Ref: 2625 (Page-1/1)

Dated: 26-07-2023

ASTM-A-615

Deformed

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.489	6	0.747	0.44	0.438	15.24	20.08	76390	76740	100660	101120	1.10	8.0	13.8	
2	0.672	4	0.501	0.20	0.197	6.75	9.33	74420	75550	102860	104420	1.00	8.0	12.5	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Four Samples Received and Tested</b>
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Shahzad Muneer,RE

G3 Engg Consulting.(Master P/Designning &Resident Type Supv,Strengthening Of Uni Of Narowal)

Test Performed By:

Dr. /Engr. Asad Ali Gillani

Client Reference: G3/237/RE/63

Dated: 19-07-2023

Test: Tension Test & Bend Test Test Specification:

Gauge Length: 8 inch

Sample Type:

SOM Lab

Ref: 2626 (Page-1/1)

Dated: 26-07-2023

ASTM-A-615

Deformed

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.586	8	0.984	0.79	0.760	23.72	33.03	66220	68840	92210	95840	1.30	8.0	16.3	
2	2.581	8	0.982	0.79	0.758	23.65	32.82	66020	68810	91640	95500	1.50	8.0	18.8	
3	1.490	6	0.747	0.44	0.438	14.02	18.67	70260	70580	93610	94030	1.40	8.0	17.5	
4	1.511	6	0.752	0.44	0.444	13.61	18.65	68210	67600	93510	92660	1.30	8.0	16.3	
5	0.670	4	0.501	0.20	0.197	6.01	8.33	66320	67330	91840	93240	1.40	8.0	17.5	
6	0.669	4	0.501	0.20	0.197	5.96	8.31	65760	66760	91610	93010	1.30	8.0	16.3	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:- Only Nine Samples Received and Tested</b>
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Assistant Director (Technical)  
Anti-Corruption Estb.Multan Region,Multan.

Test Performed By: Dr. /Engr. Asad Ali Gillani

Client Reference: ACE.MR-(220)/23/5091

SOM Lab 2627 (Page-1/1)

Dated: 25-07-2023

Test: Tension Test & Bend Test Test Specification:

Gauge Length: 8 inch

Ref:

Dated: 26-07-2023

ASTM-A-615  
Deformed Bar (S-J  
Steel)

Sample Type:

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.671	8	1.000	0.79	0.785	25.28	35.47	70580	71030	99030	99670	1.40	8.0	17.5	
2	2.691	8	1.004	0.79	0.791	25.38	35.68	70860	70770	99600	99480	1.50	8.0	18.8	
3	1.508	6	0.751	0.44	0.443	14.90	18.42	74700	74200	92330	91700	1.30	8.0	16.3	
4	1.493	6	0.748	0.44	0.439	14.14	19.24	70870	71030	96420	96640	1.40	8.0	17.5	
5	0.670	4	0.501	0.20	0.197	5.81	8.74	64080	65050	96340	97800	1.10	8.0	13.8	
6	0.670	4	0.501	0.20	0.197	5.79	8.58	63850	64820	94650	96090	1.00	8.0	12.5	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Nine Samples Received and Tested</b>
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Test Performed by: S. Asad Ali Gillani

Shehzad Mubarak  
Manager Sales & Mktg Jamal Pipe Industries (Pvt) Ltd.  
(Pakistan Telecommunication Company Limited)

Client Reference No.: Nil

Dated: 26-07-2023

SOM Lab Ref: CED/SOM/2628 (Page 1/1)

Dated: 26-07-2023

Test Type: Tensile Test

Specification: ASTM A-36

Sample Type: Steel Strips

Gauge Length: 2 inches

**Tensile Test Results**

Sr. No.	Size of strip (mm)	X Section Area (mm <sup>2</sup> )	Yield Load (kN)	Ultimate Load (kN)	Yield Stress (MPa)	Ultimate Tensile Stress (MPa)	Elongation (inch)	% Elongation
1	29.4 x 2.0	58.8	19.7	24.7	335	420	0.7	35.0
2	29.0 x 2.0	58.0	19.2	23.7	331	408	0.7	35.0

Note: Please always confirm the results on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Test Performed by: Dr Waseem Abbas

M/S Star Engineering

Lahore.

(Construction of PAF Techno Park Buildings KAMRA)

Client Reference No.: SE-TP-01-R-0

SOM Lab Ref: CED/SOM/2629 (Page 1/2)

Test Type: Tensile Test

Sample Type: MS Plates (24mm,12mm,10mm,8mm,6mm,5mm,4mm) Gauge Length: 2 inches

Dated: 12-06-2023

Dated: 26-07-2023

Specification: ASTM A-36

**Tensile Test Results**

Sr. No.	Size of strip (mm)	X Section Area (mm <sup>2</sup> )	Yield Load (kN)	Ultimate Load (kN)	Yield Stress (MPa)	Ultimate Tensile Stress (MPa)	Elongation (inch)	% Elongation
1	24.9 x24.10	600.09	236.0	302.5	393.27	504.09	0.50	25.0
2	25.4 x12.15	308.61	157.0	195.5	508.7	195.5	0.45	22.5
3	24.9 x 9.5	236.55	79.7	116.7	336.93	493.34	0.45	22.5
4	24.9 x 7.9	196.71	73.5	106.7	373.65	542.42	0.5	25.0
5	24.7 x 6.0	148.2	45.7	66.0	308.37	445.34	0.45	22.5
6	24.9 x 5.1	126.99	38.0	55.0	299.24	433.10	0.45	22.5
7	24.9 x 4.0	99.6	32.5	47.0	326.31	471.89	0.5	25.0

Note: Please always confirm the results on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Test Performed by: Dr Waseem Abbas

M/S Star Engineering

Lahore.

(Construction of ALPHA-12 Building PAF NUR KHAN Base RWP)

Client Reference No.: SE-A12-01-R-0

Dated: 07-06-2023

SOM Lab Ref: CED/SOM/2629 (Page 2/2)

Dated: 26-07-2023

Test Type: Tensile Test

Specification: ASTM A-36

Sample Type: MS Plates (20mm,6mm,5mm,4mm)

Gauge Length: 2 inches

**Tensile Test Results**

Sr. No.	Size of strip (mm)	X Section Area (mm <sup>2</sup> )	Yield Load (kN)	Ultimate Load (kN)	Yield Stress (MPa)	Ultimate Tensile Stress (MPa)	Elongation (inch)	% Elongation
1	25.7 x 20.4	524.28	195.5	287.5	372.89	548.37	0.45	22.5
2	25.2 x 6.0	151.2	49.0	65.2	324.07	431.22	0.45	22.5
3	25.2 x 5.0	126.0	41.0	55.0	325.40	436.51	0.45	22.5
4	25.1 x 4.0	100.4	32.7	46.0	325.70	458.17	0.5	25.0

Note: Please always confirm the results on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)