

Test Performed by: Irfan Ul Hassan

David Guo

JSPDI

China Energy Engineering Group JSPDI.

(220kV Zhob Substation & Associated Extension Works at 220kV D.I.Khan Substation)

Client Reference No.: JSPDI/ADB-200(Lot-II)UET/658

Dated: 23-09-2024

SOM Lab Ref: CED/SOM/4849(Page 1/1)

Dated: 23-09-2024

Test Type: Load Test

Sample Type: D-Shackle and O-Ring

### Load Test Results

Sr No.	Sample Type	Ultimate /Breaking Load	Remarks
1	2 D-Shackle +1 O-Ring	181 kN	D-Shackle breaks before proof Load

Witnessed By : Fahad Manzoor (NESPAK)

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

Engr. Muhammad Irfan

Test Performed By:

Dr. /Engr. Asad Ali Gillani

PM/Dy. Dir PIU-IWRPP Lahore.(Rehb & Additional Works Lot-01: GCT Fsd,GCT (W),GITT Fsd)

Client Reference: ICI&SDD/PIU/IWRPP/CW04/965

SOM Lab

4842 (Page-

Ref:

1b/1)

Dated: 23-09-2024

Dated:

23-09-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

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	0.668	4	0.500	0.20	0.196	6.44	8.66	71040	72490	95550	97500	1.20	8.0	15.0	Kisan
2	0.670	4	0.501	0.20	0.197	6.42	8.58	70820	71900	94650	96090	1.20	8.0	15.0	Kisan
3	0.670	4	0.501	0.20	0.197	6.54	8.66	72170	73270	95550	97000	1.00	8.0	12.5	Kisan
4	0.669	4	0.501	0.20	0.197	6.83	8.63	75320	76460	95210	96660	1.10	8.0	13.8	Aziz
5	0.669	4	0.501	0.20	0.197	6.54	8.38	72170	73270	92400	93810	1.00	8.0	12.5	Aziz
6	0.661	4	0.497	0.20	0.194	6.90	8.41	76100	78460	92740	95610	1.20	8.0	15.0	Aziz
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**BEND TEST:**

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

Engr. Muhammad Irfan

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

PM/Dy. Dir PIU-IWRPP Lahore.(Rehb & Additional Works Lot-01: GCT Fsd,GCT (W),GITT Fsd)

**Client Reference:** ICI&SDD/PIU/IWRPP/CW04/965

**SOM Lab** 4842 (Page-1a/1)

**Dated:** 23-09-2024

**Dated:** 23-09-2024

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** 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	0.659	4	0.497	0.20	0.194	6.12	9.07	67450	69530	100050	103140	1.10	8.0	13.8	Mughal
2	0.659	4	0.497	0.20	0.194	6.19	9.09	68230	70340	100270	103370	1.00	8.0	12.5	Mughal
3	0.674	4	0.502	0.20	0.198	6.09	8.82	67110	67790	97230	98220	1.10	8.0	13.8	Mughal
4	0.666	4	0.500	0.20	0.196	7.10	9.38	78350	79950	103420	105530	1.00	8.0	12.5	FF
5	0.665	4	0.498	0.20	0.195	6.95	9.30	76660	78630	102520	105150	1.10	8.0	13.8	FF
6	0.663	4	0.498	0.20	0.195	6.95	9.38	76660	78630	103420	106070	1.20	8.0	15.0	FF
7	0.672	4	0.501	0.20	0.197	6.07	8.69	66890	67900	95770	97230	1.10	8.0	13.8	Kamran
8	0.672	4	0.501	0.20	0.197	6.29	8.41	69360	70410	92740	94150	1.20	8.0	15.0	Kamran
9	0.669	4	0.501	0.20	0.197	6.12	8.31	67450	68470	91610	93010	1.20	8.0	15.0	Kamran
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**BEND TEST:**

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

Li Wentao

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

CCECC-HCS JV.(Expension of Terminal Building and Allied Facilities at AllAP, Lahore)

Client Reference: CCECCHCSJVIIAP2024-240

SOM Lab

4843 (Page-

Ref:

1/2)

Dated: 20-09-2024

Dated:

23-09-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Markhor Industries)

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	1.503	6	0.750	0.44	0.442	15.16	19.83	75980	75640	99380	98930	1.50	8.0	18.8	
2	1.470	6	0.742	0.44	0.432	13.71	19.01	68730	70000	95290	97060	1.30	8.0	16.3	
3	1.045	5	0.625	0.31	0.307	10.14	13.68	72160	72870	97330	98280	1.30	8.0	16.3	
4	1.045	5	0.625	0.31	0.307	9.60	13.22	68320	68990	94060	94980	1.30	8.0	16.3	
5	0.663	4	0.498	0.20	0.195	6.54	8.82	72170	74020	97230	99730	1.10	8.0	13.8	
6	0.651	4	0.493	0.20	0.191	6.32	8.51	69700	72980	93860	98290	1.00	8.0	12.5	
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Witnessed By:

NESPAK

**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
# 5	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)

Li Wentao

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

CCECC-HCS JV.(Expension of Terminal Building and Allied Facilities at AllAP, Lahore)

Client Reference: CCECCHCSJVIIAP2024-238

SOM Lab

4843 (Page-

Ref:

2/2)

Dated: 19-09-2024

Dated:

23-09-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Markhor Industries)

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	2.615	8	0.989	0.79	0.768	22.78	31.47	63610	65430	87850	90370	1.60	8.0	20.0	
2	2.617	8	0.990	0.79	0.769	24.41	34.40	68160	70020	96050	98670	1.40	8.0	17.5	
3	1.425	6	0.730	0.44	0.419	16.69	19.78	83640	87840	99130	104090	1.00	8.0	12.5	
4	1.439	6	0.734	0.44	0.423	16.59	19.62	83130	86470	98360	102310	1.10	8.0	13.8	
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Witnessed By: NESPAK

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<p><b>Note:-</b></p> <p>Only Six Samples Received and Tested</p>
# 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)

Arsalan Khurshid

Test Performed By:

Dr. /Engr. Irfan Ul Hassan

Site Coordinator Fort (Sufi Muhammad Haroon Haris) Green Fort-1 Plot #01 Raiwind Rd Lahore)

Client Reference: Green Fort-1/UET/Steel Test

SOM Lab 4844 (Page-

Ref: 1/1)

Dated: 23-09-2024

Dated: 23-09-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Sheikhoo Steel)

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	0.645	4	0.492	0.20	0.190	6.42	8.97	70820	74550	98920	104130	1.00	8.0	12.5	
2	0.644	4	0.491	0.20	0.189	6.93	9.07	76440	80890	100050	105870	1.10	8.0	13.8	
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**BEND TEST:**

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

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

Mohsin Abbas

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

QAQC Manager Zameen Development.(Const. Of Zameen Neo at Plot #13,Gulberg III Lhr)

Client Reference: ZD/QAQC/NEO-QUAD&JADE/06

SOM Lab

4845 (Page-

Ref:

1/1)

Dated: 23-07-2024

Dated:

23-09-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

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	2.654	8	0.997	0.79	0.780	25.38	35.09	70860	71770	97950	99210	1.50	8.0	18.8	
2	2.665	8	0.998	0.79	0.783	26.20	35.19	73140	73790	98240	99120	1.50	8.0	18.8	
3	1.499	6	0.749	0.44	0.441	13.91	19.27	69750	69590	96570	96350	1.50	8.0	18.8	
4	1.501	6	0.749	0.44	0.441	13.78	19.22	69080	68930	96320	96100	1.40	8.0	17.5	
5	0.665	4	0.498	0.20	0.195	6.27	8.48	69130	70910	93530	95920	1.20	8.0	15.0	
6	0.668	4	0.500	0.20	0.196	6.09	8.28	67110	68480	91280	93140	1.10	8.0	13.8	
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**BEND TEST:**

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

Tariq Fateh

Test Performed By:

Dr. /Engr.

Irfan UI Hassan

PM Jilani Poly Industries (Pvt) Ltd.(Const Of Jilani Poly-2 Trap Exetension Sheikhpora)

Client Reference: JP-2/UET/2023/S-004

SOM Lab

4846 (Page-

Ref:

1/2)

Dated: 23-09-2024

Dated:

23-09-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Markhor Steel)

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	1.477	6	0.743	0.44	0.434	14.07	18.11	70510	71490	90800	92050	1.00	8.0	12.5	
2	1.482	6	0.745	0.44	0.436	12.64	17.81	63360	63940	89260	90080	1.10	8.0	13.8	
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**BEND TEST:**

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

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



Tariq Fateh

Test Performed By:

Dr. /Engr.

Irfan UI Hassan

PM Jilani Poly Industries (Pvt) Ltd.(Const Of Jilani Poly-2 Trap Exetension Sheikhpora)

Client Reference: JP-2/UET/2023/S-003

SOM Lab 4846 (Page-

Ref: 2/2)

Dated: 23-09-2024

Dated: 23-09-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Markhor Steel)

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	0.666	4	0.500	0.20	0.196	6.60	8.72	72730	74210	96110	98070	1.00	8.0	12.5	
2	0.664	4	0.498	0.20	0.195	6.42	8.33	70820	72640	91840	94190	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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**BEND TEST:**

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

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

Salman Shahid,GM/PM

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

NESPAK Isb.(Platform along with Allied Services for TPS-77,MRR Radar at PAF Base Mushaf)

Client Reference: 4800/321/01/810

SOM Lab 4847(Page-1/1)

Dated: 13-09-2024

Dated: 23-09-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: 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	2.633	8	0.993	0.79	0.774	24.52	31.57	68440	69860	88140	89960	1.40	8.0	17.5	
2	2.625	8	0.991	0.79	0.771	24.62	31.67	68730	70420	88420	90600	1.50	8.0	18.8	
3	1.548	6	0.761	0.44	0.455	15.24	18.96	76390	73870	95040	91900	1.30	8.0	16.3	
4	1.538	6	0.759	0.44	0.452	15.19	18.86	76130	74110	94530	92020	1.20	8.0	15.0	
5	0.658	4	0.496	0.20	0.193	6.65	8.23	73290	75950	90720	94010	1.10	8.0	13.8	
6	0.657	4	0.496	0.20	0.193	6.73	8.41	74190	76880	92740	96100	1.10	8.0	13.8	
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**BEND TEST:**

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

Project Manager  
Tawasul Developers (Pvt) Ltd Lahore (Creek Tower 6-D Upper Mall Lahore)

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

Client Reference: Nil

SOM Lab 4848 (Page-1/1)

Dated: 23-09-2024

Dated: 23-09-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: 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	1.492	6	0.747	0.44	0.438	13.27	18.27	66530	66830	91560	91980	1.40	8.0	17.5	
2	1.492	6	0.747	0.44	0.438	13.53	18.67	67810	68110	93610	94030	1.20	8.0	15.0	
3	0.664	4	0.498	0.20	0.195	5.88	7.61	64860	66530	83970	86120	1.20	8.0	15.0	
4	0.665	4	0.498	0.20	0.195	5.93	7.61	65420	67100	83970	86120	1.20	8.0	15.0	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

