Test Performed by: Engr. Asad Ali Gillani

Ali Umair Anwar
Manager NDT & II
Velosi Integrity & Safety Pakistan (Pvt) Ltd. Lahore

Client Reference No.: Nil Dated: 20-08-2025
SOM Lab Ref: CED/SOM/1722(Page-1/2) Dated: 03-09-2025
Test: Impact Test
Sample Type: Welded Pipe (6" Dia)

IMPACT Test Results

Machine Used	Charpy's Impact Testing Machine
Weight of Hammer	50.5 Lbs = 22.91 kg
Height of fall	4.924ft = 1.309 m
Radius at center of fork	700 mm =
Angle of fall without specimen	146^{o}
Sample	Standard Charpy (Bending Type)

Sr. No	Sample Identification	Angle of fall after Rupture	Energy (N-mm)
1	Welded Pipe (6" Dia)	104^{o}	92308.27

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: Engr. Asad Ali Gillani

Ali Umair Anwar
Manager NDT & II
Velosi Integrity & Safety Pakistan (Pvt) Ltd. Lahore

Client Reference No.: Nil Dated: 20-08-2025
SOM Lab Ref: CED/SOM/1722(Page-2/2) Dated: 03-09-2025
Test: Impact Test
Sample Type: Welded Pipe (2" Dia)

IMPACT Test Results

Machine Used	Charpy's Impact Testing Machine
Weight of Hammer	50.5 Lbs = 22.91 kg
Height of fall	4.924ft = 1.309 m
Radius at center of fork	700 mm =
Angle of fall without specimen	146^{o}
Sample	Standard Charpy (Bending Type)

Sr. No	Sample Identification	Angle of fall after Rupture	Energy (N-mm)
1	Welded Pipe (2" Dia)	124^{o}	42434.23

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: .S. Asad Ali Gillani

Riaz Ahmad
GM Nation Technocommercial Services Pvt.Ltd.
Lahore.

Client Reference No.: /RFK/NTS/25-33 Dated: 03-09-2025

SOM Lab Ref: CED/SOM/1728 (Page 1/2) Dated: 03-09-2025

Sample Type: Aluminum 6061

Test Type: Hardness Test

Hardness Test Details:

Machine used: Avery Rockwell Hardness Testing Machine
(Minor Load: 10 Kgf Major Load: 60.0 kgf Scale: A)

Hardness Test Results

Sample No.	Sample Type	Marks	Hardness avg
2	Aluminum (t 7.85mm)	RFK/CL/06	HR – 34.50– A

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: .S. Asad Ali Gillani

Riaz Ahmad
GM Nation Technocommercial Services Pvt.Ltd.
Lahore.

Client Reference No.: /RFK/NTS/25-34 Dated: 03-09-2025

SOM Lab Ref: CED/SOM/1728 (Page 2/2) Dated: 03-09-2025

Sample Type: Aluminum 6061

Test Type: Hardness Test

Hardness Test Details:

Machine used: Avery Rockwell Hardness Testing Machine
(Minor Load: 10 Kgf Major Load: 60.0 kgf Scale: A)

Hardness Test Results

Sample No.	**Sample Type**	**Marks**	**Hardness** avg
1	Aluminum (t 7.85mm)	RFK/CL/06-1	HR – 36.83– A

Note: Please always confirm the results on web www.uet-civil.edu.pk

Mr. Liu Zhe, SCM **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

CMEC .(Extension of Water Resources Project for Faisalabad City, Ph-II)

Client Reference: CMEC/Lab/25/0039 **Dated:** 02-09-2025

SOM Lab Ref: CED/SOM/1726(Page-1/3) **Dated:** 03-09-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A 615

Sample Type: Deformed Bar **Gauge Length:** 200 mm

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)				
	kg/m	mm	mm	mm^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.804	25	24.85	491	485	281.20	324.00	573	580	660	669	32.5	200	16.3	SJ
2	3.838	25	24.95	491	489	279.00	321.20	568	571	654	657	35.0	200	17.5	SJ
3	3.882	25	25.09	491	494	234.00	317.00	477	474	646	642	37.5	200	18.8	FF
4	3.800	25	24.83	491	484	229.20	314.50	467	474	641	650	37.5	200	18.8	FF
5	3.010	22	22.10	380	383	187.20	248.70	492	489	654	649	35.0	200	17.5	FF
6	3.034	22	22.18	380	387	189.20	249.70	498	490	657	647	37.5	200	18.8	FF
7	2.921	22	21.77	380	372	164.20	229.20	432	442	603	617	35.0	200	17.5	Aziz
8	2.956	22	21.90	380	377	179.20	242.50	471	476	638	644	35.0	200	17.5	Aziz
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
25mm	Sample bend through 180 degrees Satisfactorily without any crack
22mm	Sample bend through 180 degrees Satisfactorily without any crack
22mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Twelve Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Mr. Liu Zhe, SCM **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

CMEC .(Extension of Water Resources Project for Faisalabad City, Ph-II)

Client Reference: CMEC/Lab/25/0039 **Dated:** 02-09-2025

SOM Lab Ref: CED/SOM/1726(Page-2/3) **Dated:** 03-09-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A 615

Sample Type: Deformed Bar **Gauge Length:** 200 mm

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)				
	kg/m	mm	mm	mm^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.139	19	18.61	284	272	125.00	169.50	441	460	598	624	37.5	200	18.8	FF
2	2.205	19	18.91	284	281	130.00	177.20	459	463	625	631	42.5	200	21.3	FF
3	2.204	19	18.91	284	281	142.50	203.70	503	508	718	726	30.0	200	15.0	Kamran
4	2.217	19	18.96	284	282	145.00	208.20	511	514	734	738	32.5	200	16.3	Kamran
5	1.538	16	15.80	201	196	88.70	130.50	441	453	649	666	32.5	200	16.3	Kamran
6	1.539	16	15.80	201	196	93.00	136.00	463	475	676	694	30.0	200	15.0	Kamran
7	1.576	16	15.99	201	201	102.50	129.70	510	511	645	647	30.0	200	15.0	SJ
8	1.566	16	15.94	201	199	103.00	130.50	512	517	649	655	27.5	200	13.8	SJ
9	1.560	16	15.91	201	199	94.00	130.50	468	473	649	657	35.0	200	17.5	FF
10	1.549	16	15.85	201	197	92.70	130.00	461	470	647	659	40.0	200	20.0	FF

BEND TEST:

19mm	Sample bend through 180 degrees Satisfactorily without any crack
19mm	Sample bend through 180 degrees Satisfactorily without any crack
16mm	Sample bend through 180 degrees Satisfactorily without any crack
16mm	Sample bend through 180 degrees Satisfactorily without any crack
16mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Fifteen Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Mr. Liu Zhe, SCM **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

CMEC .(Extension of Water Resources Project for Faisalabad City, Ph-II)

Client Reference: CMEC/Lab/25/0039 **Dated:** 02-09-2025

SOM Lab Ref: CED/SOM/1726(Page-3/3) **Dated:** 03-09-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A 615

Sample Type: Deformed Bar **Gauge Length:** 200 mm

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)				
	kg/m	mm	mm	mm^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.055	13	13.06	133	134	63.50	83.20	478	474	627	621	27.5	200	13.8	FF
2	0.987	13	12.65	133	126	59.20	78.50	446	472	591	625	35.0	200	17.5	FF
3	0.972	13	12.55	133	124	61.00	81.90	460	493	617	662	32.5	200	16.3	Kamran
4	0.997	13	12.71	133	127	63.20	87.00	476	498	655	686	27.5	200	13.8	Kamran
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BEND TEST:

13mm	Sample bend through 180 degrees Satisfactorily without any crack
13mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Director **Test Performed By:** **Dr. /Engr.** Nauman Khurram

Punjab Public Health Engg Deptt Lahore.(Mega Sewerage Scheme City Liaqatpur Distt R.Y.Khan)

Client Reference: CEC **SOM Lab Ref:** 1724 (Page-1/1)

Dated: 03-09-2025 **Dated:** 03-09-2025

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.534	4	0.447	0.20	0.157	4.15	6.03	45750	58280	66550	84770	0.90	8.0	11.3	
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BEND TEST:

--	No Bend test performed

Note:-

Only One Sample Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Muhammad Khalid Bashir **Test Performed By:** **Dr. /Engr.** Ubaid Mughal

CEO Ittefaq Building Solution Pvt Ltd.(Project: UBL DHA 105 A/CC Ph-9 Lahore)

Client Reference: IBS/UBL/Steel/Ph-6 **SOM Lab Ref:** 1725 (Page-1/1)

Dated: 03-09-2025 **Dated:** 03-09-2025

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.572	8	0.981	0.79	0.756	25.48	33.81	71150	74350	94400	98640	1.60	8.0	20.0	
2	1.474	6	0.743	0.44	0.433	14.53	18.17	72810	73990	91050	92520	1.70	8.0	21.3	
3	0.652	4	0.494	0.20	0.192	6.49	8.33	71610	74590	91840	95670	1.00	8.0	12.5	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Engr. Muhammad Javaid Butt
Modern Engineers & Contractors Lahore.

Test Performed By: **Dr. /Engr.** Nauman Khurram

Client Reference: Nil
Dated: 03-09-2025

SOM Lab Ref: 1727 (Page-1/1)
Dated: 03-09-2025

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.621	8	0.990	0.79	0.770	24.87	35.49	69440	71240	99090	101670	1.30	8.0	16.3	
2	2.613	8	0.989	0.79	0.768	24.92	35.52	69580	71580	99180	102020	1.30	8.0	16.3	
3	1.480	6	0.744	0.44	0.435	14.70	19.67	73680	74530	98610	99750	1.40	8.0	17.5	
4	1.496	6	0.748	0.44	0.440	14.78	14.73	74090	74090	73830	73830	1.50	8.0	18.8	
5	0.679	4	0.505	0.20	0.200	7.21	8.87	79470	79470	97800	97800	1.10	8.0	13.8	
6	0.674	4	0.502	0.20	0.198	7.16	8.89	78910	79710	98020	99010	1.10	8.0	13.8	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Nine Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Muhammad Saleem,ME **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

NESPAK ADP WASA, Lhr.(Rainwater Management-Drainage Arrangement For Sore Point at Tajpura)

Client Reference: NESPAK/WASA/ADP/UGWT/TPME06 **SOM Lab Ref:** 1729 (Page-1/2)

Dated: 15-05-2025 **Dated:** 03-09-2025

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.490	6	0.747	0.44	0.438	16.59	22.53	83130	83510	112920	113440	1.00	8.0	12.5	Isb Supreme
2	1.488	6	0.746	0.44	0.437	16.48	22.55	82620	83190	113020	113800	1.00	8.0	12.5	Isb Supreme
3	1.492	6	0.747	0.44	0.438	16.62	22.75	83290	83670	114040	114570	1.00	8.0	12.5	Pak Steel
4	1.491	6	0.747	0.44	0.438	16.21	22.29	81240	81610	111750	112260	1.10	8.0	13.8	Pak Steel
5	0.670	4	0.501	0.20	0.197	6.47	8.36	71380	72470	92180	93580	1.30	8.0	16.3	Pak Steel
6	0.669	4	0.501	0.20	0.197	6.47	8.33	71380	72470	91840	93240	1.30	8.0	16.3	Pak Steel
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Nine Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Muhammad Saleem,ME **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

NESPAK ADP WASA, Lhr.(Rainwater Management-Drainage Arrangement For Sore Point at Tajpura)

Client Reference: NESPAK/WASA/ADP/UGWT/TPME02 **SOM Lab Ref:** 1729 (Page-2/2)

Dated: 21-04-2025 **Dated:** 03-09-2025

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.666	8	0.998	0.79	0.783	23.04	37.10	64320	64890	103590	104510	1.30	8.0	16.3	Hunza Steel
2	2.667	8	0.999	0.79	0.784	23.55	38.38	65740	66240	107140	107960	1.40	8.0	17.5	Hunza Steel
3	1.494	6	0.748	0.44	0.439	14.37	21.00	72050	72210	105260	105500	1.10	8.0	13.8	Isb Supreme
4	1.488	6	0.746	0.44	0.437	13.25	19.83	66430	66880	99380	100060	1.10	8.0	13.8	Isb Supreme
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Mr. Ahmad Ishaq (Director)
Jaguar (Pvt.) Ltd. (Block A Ground Floor Slab)

Test Performed By: **Dr. /Engr.** Dr. Nauman

Client Reference: Nil
Dated: 03-09-2025

SOM Lab Ref: 1723 (Page-1/1)
Dated: 03-09-2025

Test: Tension Test & Bend Test
Guage Length: 8 inch

Test Specification: ASTM-A-615
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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.581	4	0.467	0.20	0.171	8.31	10.24	91610	107150	112970	132130	0.20	8.0	2.5	
2	0.609	4	0.477	0.20	0.179	8.23	10.06	90720	101360	110950	123960	0.40	8.0	5.0	
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BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk