STRUCTURAL ENGINEERING DIVISION

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

Ref: CED/TFL/05/5153 Dated: 29-05-2024

Dated of Test: 03-06-2024

To

Project Manager/RE
Osmani & Company (Pvt.) Ltd.
EDCS Project, Pakpattan
Engineering, Design & Construction Supervision for Punjab Rural Sustainable Water Supply and Sanitation Project (PRSWSSP) Cluster Central II.

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 – 08a]**

Reference to your letter No. PM/OCL/PRSWSSP/EDCS/Pkg-04/2024/11, dated 16.05.2024 on the subject cited above. Two R.C.C. Pipes as received by us has been tested. The results are tabulated as under.

Sr. No.	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.75	7.36	16.14	12.18	1.98	12000	16800	3543	4960
2	12	7.76	7.36	16.14	11.96	2.09	11200	16000	3366	4808

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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

Ref: CED/TFL/05/5170 Dated: 30-05-2024

Dated of Test: 03-06-2024

To

Assistant Director (QCD)
WASA, LDA, Lahore
(M/s Al Madinah Pipe Industr.)

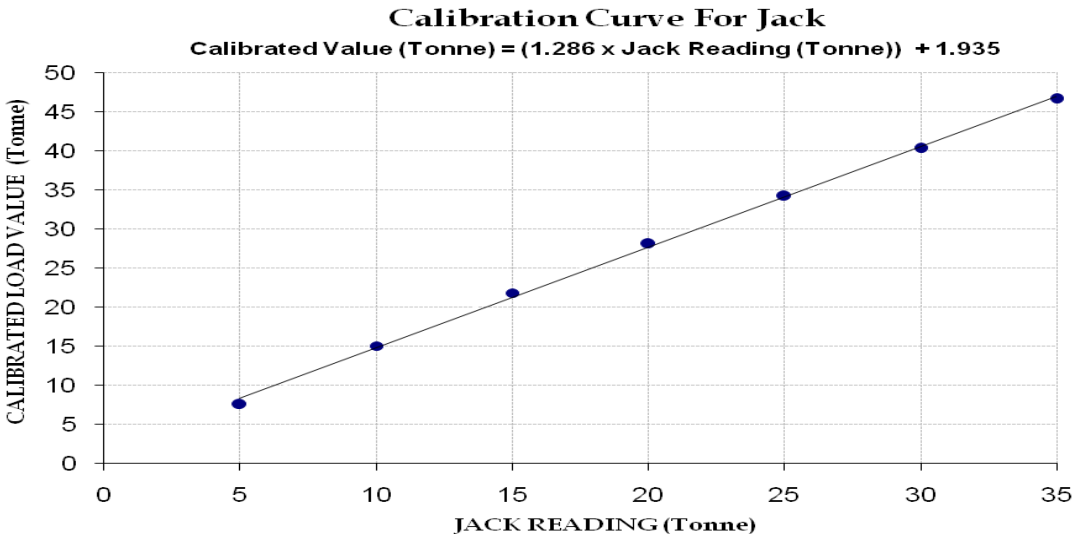
Subject: **- CALIBRATION OF HYDRAULIC JACK. (MARK: TFL/05/5170)**

Reference to your Letter No. QCD/778, Dated: 24/05/2024 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 50 (Tonne)
Calibrated Range : Zero - 35 (Tonne)

Hydraulic Jack Reading (Tonne)		**5**	**10**	**15**	**20**	**25**	**30**	**35**
Calibrated Load	**(kg)**	**7550**	**15050**	**21800**	**28100**	**34200**	**40300**	**46600**
	(Tonne)	**7.55**	**15.05**	**21.80**	**28.10**	**34.20**	**40.30**	**46.60**

1 Tonne = 1000 kg



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
Development of DHA-AWT Land Adyala (RVS Ph-IV)

Reference # CED/TFL **5172** (Dr. M Kashif) Dated: 31-05-2024
Reference of the request letter # 4592/103/DHA-AWT/FM/102/19 Dated: 23-05-2024

Tension Test Report (Page -1/3)

Date of Test 03-06-2024
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**780.0**	**785.0**	**18100**	**177.56**	**19800**	**194.24**	**199**	**>3.50**	**25394**
2	**12.70 (1/2")**	**780.0**	**783.0**	**18100**	**177.56**	**19600**	**192.28**	**198**	**>3.50**	**25398**
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only two samples for Test										

Note:
1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

I/C Testing Laboratoires
UET Lahore, Pakistan.

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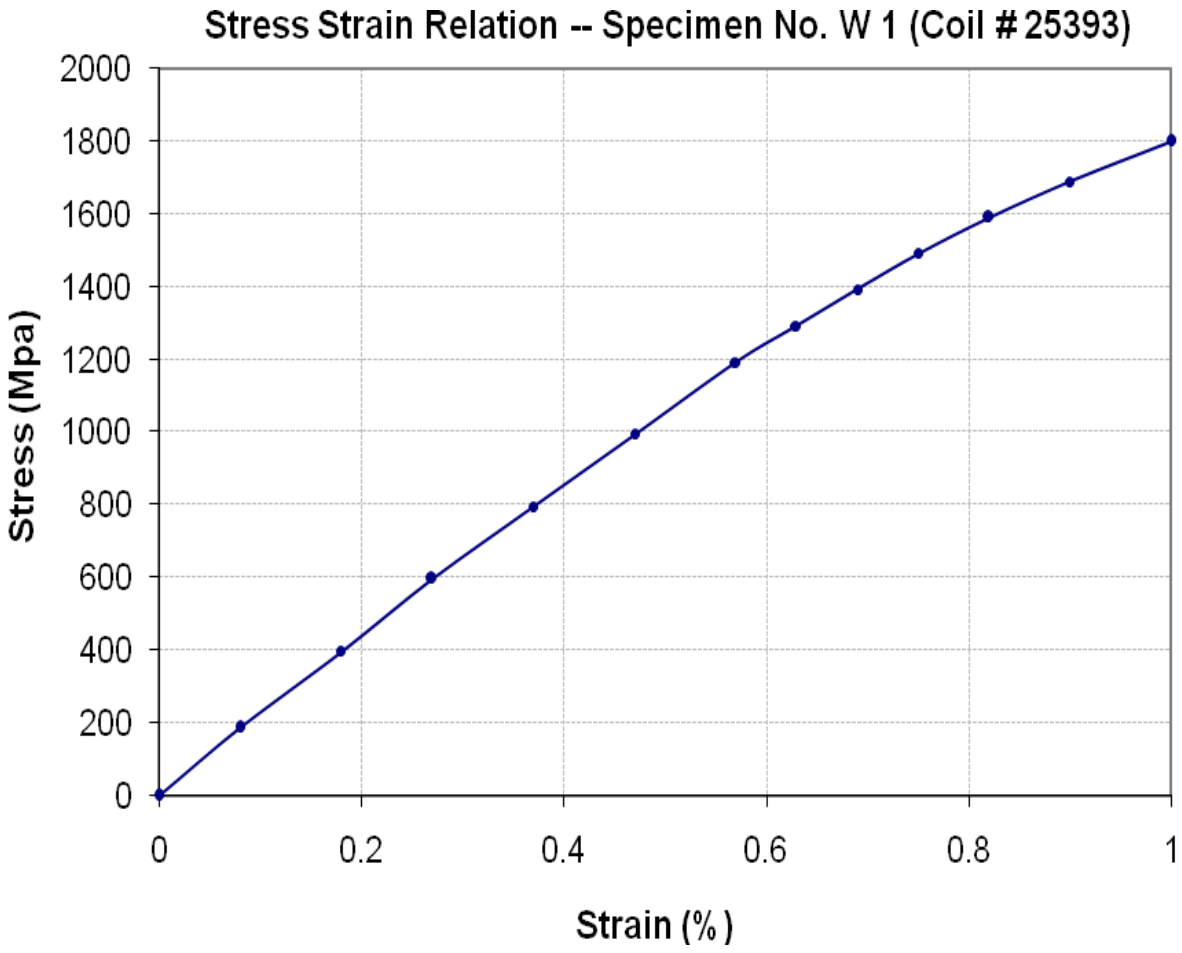
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
NESPAK
Development of DHA-AWT Land Adyala (RVS Ph-IV)

Reference # CED/TFL **5172** (Dr. M Kashif) Dated: 31-05-2024
Reference of the request letter # 4592/103/DHA-AWT/FM/102/19 Dated: 23-05-2024

Graph (Page – 2/3)



I/C Testing Laboratoires
UET Lahore, Pakistan.

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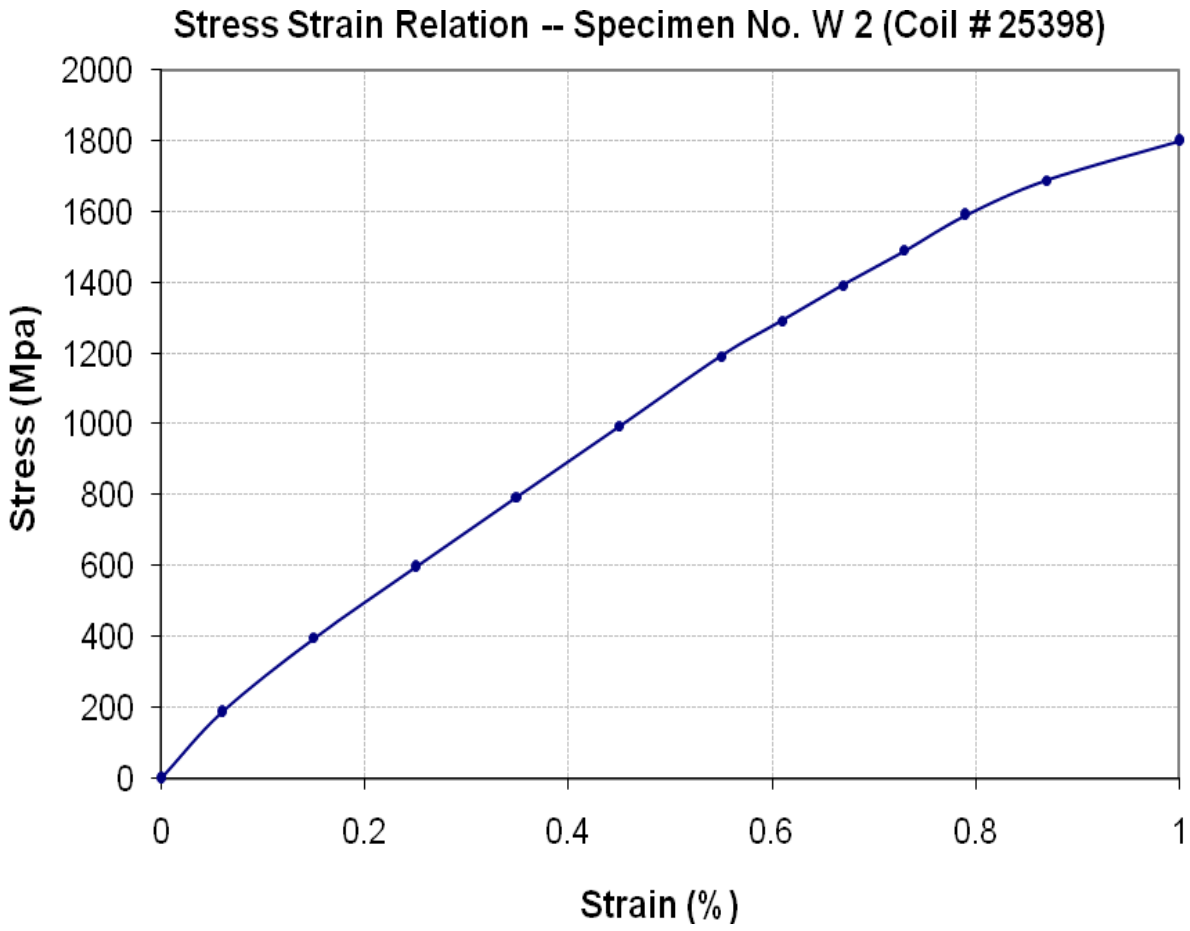
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
NESPAK
Development of DHA-AWT Land Adyala (RVS Ph-IV)

Reference # CED/TFL **5172** (Dr. M Kashif) Dated: 31-05-2024
Reference of the request letter # 4592/103/DHA-AWT/FM/102/19 Dated: 23-05-2024

Graph (Page – 3/3)



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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,
Unicon Consulting Services (Pvt) Ltd.
Math, Stats & Physics Department Building at University of Agriculture, Faisalabad.

Reference # CED/TFL **5174** (Dr. M Rizwan Riaz) Dated: 31-05-2024
Reference of the request letter # Unicon/UAF/M.S/01 Dated: 21-05-2024

Tension Test Report (Page -1/1)

Date of Test 03-06-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		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	0.376	3	0.375	0.11	0.110	3720	4760	74600	74290	95400	95100	1.40	17.5	Aziz Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

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
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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,

M/S Aziz Industries
Muridke, Distt. Sheikhupura

Reference # CED/TFL **5177** (Dr. M Kashif) Dated: 31-05-2024
Reference of the request letter# Nil Dated: 30-05-2024

Tension Test Report (Page -1/1)

Date of Test 03-06-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		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	4.264	10	1.263	1.27	1.253	34000	55600	59100	59790	96500	97800	1.50	18.8	
2	5.057	11	1.376	1.56	1.486	42200	68800	59700	62580	97300	102100	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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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

Ref: CED/TFL/05/5184 Dated: 31-05-2024

Dated of Test: 03-06-2024

To

Resident Engineer
Techno – Consult International (Pvt) Ltd.
PRSWSS Project
"PRSWSSP, Procurement of Civil Works (NPT 04), North Tesil Noorpur Thal, (Village Chak 51 DB, Chak 52 DB, Maikan)"

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 – 08a]**

Reference to your letter No. TCI/PRSWSSP-NORTH/PHASE-III/NPT-04/009, dated 31.05.2024 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No.	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.78	7.37	16.14	11.92	2.11	11500	16500	3464	4970

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:
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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

Ref: CED/TFL/05/5185 Dated: 31-05-2024

Dated of Test: 03-06-2024

To

Resident Engineer
Engineering Consultancy Services Punjab (Pvt) Limited.
Construction of New Grain Market at District Pakpattan.

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 – 08a]**

Reference to your letter No. ECSP/RE/PKPTN/048, dated 27.05.2024 on the subject cited above. Three R.C.C. Pipes as received by us has been tested. The results are tabulated as under.

Sr. No.	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.76	7.36	16.14	12.18	1.98	12000	16500	3543	4872
2	15	7.76	7.33	19.61	14.97	2.32	6500	13500	1566	3253
3	18	7.76	7.38	22.87	17.81	2.53	8500	13500	1712	2718

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION

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

To,

ADH (QA) Centre Lahore
GHQ, AG's Br (Housing Dte)
Askari – XI Lahore

Reference # CED/TFL **5188** (Dr. M Kashif) Dated: 03-06-2024
Reference of the request letter # 24501/HD/QA Dated: 31-05-2024

Tension Test Report (Page -1/1)

Date of Test 03-06-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		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	0.368	3	0.371	0.11	0.108	3210	4590	64400	65410	92000	93600	1.40	17.5	Batala Steel
2	0.374	3	0.374	0.11	0.110	3310	4610	66400	66340	92400	92400	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION

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

To,

Resident Engineer
NESPAK Jv TurkPak
Establishment of General Hospital at District Bahawalnagar.

Reference # CED/TFL **5190** (Dr. M Kashif) Dated: 03-06-2024
Reference of the request letter # 4460/13/MIAC/04/368 Dated: 29-05-2024

Tension Test Report (Page -1/1)

Date of Test 03-06-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		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	0.375	3	0.374	0.11	0.110	3470	4910	69600	69480	98400	98400	1.20	15.0	SJ Steel
2	0.373	3	0.374	0.11	0.110	3440	4890	69000	69140	98000	98300	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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