



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

To,

Chief Resident Engineer
 NESPAK

Construction of Dual Carriageway from GT Road (Benazir Chowk) to Lahore-Sialkot
 Motorway (Wando Interchange) L = 15.20 km, District Gujranwala.

Reference # CED/TFL **3738** (Dr. Rizwan Azam)

Dated: 15-08-2023

Reference of the request letter # 103/EW/GRW/NT/Lab/17

Dated: 15-08-2023

Tension Test Report (Page -1/1)

Date of Test 21-08-2023

Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		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	0.085	3/16	0.179	-----	0.025	1010	1110	-----	88880	-----	97700	0.80	10.0	Feature Pipe
2	0.080	3/16	0.173	-----	0.023	810	930	-----	75980	-----	87300	1.00	12.5	
3	0.147	1/4	0.234	-----	0.043	1000	1280	-----	51090	-----	65400	1.40	17.5	
4	0.150	1/4	0.237	-----	0.044	1390	1800	-----	69550	-----	90100	1.20	15.0	
5	0.074	3/16	0.166	-----	0.022	930	960	-----	94850	-----	98000	0.80	10.0	3 - H Pipe
6	0.079	3/16	0.172	-----	0.023	1000	1080	-----	94800	-----	102400	0.70	8.8	
7	0.131	1/4	0.222	-----	0.039	1120	1550	-----	63880	-----	88400	0.90	11.3	
8	0.125	1/4	0.217	-----	0.037	1190	1650	-----	71120	-----	98700	1.10	13.8	

Note: only eight samples for tensile and four samples for bend test

Bend Test

3/16" Dia Bar Bend Test Through 180° is Satisfactory

1/4" Dia Bar Bend Test Through 180° is Satisfactory

3/16" Dia Bar Bend Test Through 180° is Satisfactory

1/4" Dia Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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Test Floor Laboratory
Department of Civil Engineering
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To,

Construction Manager
Barqaab Consulting Services (Pvt) Limited
Procurement of Plant, Design, Supply, Installation, Testing and Commissioning of
500/220/132kV Lahore North Substation and Extension Works at 500/220/132kV Nokhar
Substation.

Reference # CED/TFL **3748** (Dr. Rizwan Azam)

Dated: 16-08-2023

Reference of the request letter # 500kV/SS/N-LHR/BQB/120

Dated: 07-08-2023

Tension Test Report (Page -1/1)

Date of Test 21-08-2023

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 ²)		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	0.369	3	0.372	0.11	0.108	3540	4710	71000	71960	94400	95800	1.00	12.5	FF Steel
2	0.374	3	0.374	0.11	0.110	3520	4890	70600	70610	98000	98100	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and two samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														

Witness by Aamir Sohail (CET and Rana Zahid (F.M EHVF)

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Test Floor Laboratory
Department of Civil Engineering
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Pakistan. Ph: 92-42-99029202

To,

Construction Manager
 Thaheem Construction Company
 “Washing Extension Building Project at Mater Textile Mills Facility.”

Reference # CED/TFL **3763** (Dr. Rizwan Azam)
 Reference of the request letter # Nil

Dated: 18-08-2023
 Dated: 08-08-2023

Tension Test Report (Page -1/1)

Date of Test 21-08-2023
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		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	0.363	3/8	0.369	0.11	0.107	3330	4840	66800	68710	97000	99900	0.90	11.3	FF Steel
2	0.378	3/8	0.376	0.11	0.111	3470	4940	69600	68910	99000	98100	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia 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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To,
M/S Usman Ibrahim Construction
Lahore

Reference # CED/TFL **3764** (Dr. Rizwan Azam)
2023

Dated: 18-08-

Reference of the request letter # UICP/11/3A/GULBERG/LHE/AUG23-1 Dated: 18-08-2023

Tension Test Report (Page -1/1)

Date of Test 21-08-2023

Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		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	4.362	32	32.45	1.25	1.282	42800	58800	75486	73580	103704	101100	1.50	18.8	
2	4.356	32	32.43	1.25	1.280	42600	58800	75133	73330	103704	101300	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
32mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
Material Engineer
Banu Mukhtar Contracting (Pvt) Ltd
Burj – 1 by Ajwa Builders.

Reference # CED/TFL **3765** (Dr. Rizwan Azam)
Reference of the request letter # DOC-BMC/AJWA/096

Dated: 18-08-2023
Dated: 18-08-2023

Tension Test Report (Page -1/1)

Date of Test 21-08-2023
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 ²)		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	0.368	3	0.371	0.11	0.108	3520	4740	70600	71770	95000	96700	1.00	12.5	
2	0.377	3	0.375	0.11	0.111	3620	4860	72600	72080	97400	96800	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,

Resident Engineer
 NesPak – Turk Pak Jv
 Establishment of 200 Bedded Mothe and Child Hospital & Nursing College at District
 Bahawalnagar

Reference # CED/TFL **3768** (Dr. Rizwan Azam)
 Reference of the request letter # 4460/13/MA/04/311

Dated: 21-08-2023
 Dated: 20-08-2023

Tension Test Report (Page # 1/1)

Date of Test 21-08-2023
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		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	0.379	3	0.376	0.11	0.111	3690	4690	74000	73080	94000	92900	1.10	13.8	Faizan Steel
2	0.379	3	0.377	0.11	0.111	3790	4790	76000	75020	96000	94900	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,

Chief Resident Engineer
 NESPAK
 Construction of Dual Carriageway from GT Road (Benazir Chowk) to Lahore-Sialkot
 Motorway (Wando Interchange) L = 15.20 km, District Gujranwala.

Reference # CED/TFL **3769** (Dr. M Rizwan Riaz)
 Reference of the request letter # 103/EW/GRW/NT/Lab/18

Dated: 21-08-2023
 Dated: 21-08-2023

Tension Test Report (Page -1/1)

Date of Test 21-08-2023
 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 ²)		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	4.224	10	1.257	1.27	1.241	47800	57000	83000	84860	99000	101200	1.60	20.0	Amreli Steel
2	4.221	10	1.257	1.27	1.241	47400	56800	82300	84200	98600	100900	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

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