



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
 Dualization of Road from Salam to Sargodha via Bhalwal Ajnala Road Length 47.00 km in
 District Sargodha

Reference # CED/TFL **1114** (Engr. Amina Rajput)
 Reference of the request letter # SA-466-A/SMH/22/1538

Dated: 24-03-2022
 Dated: 05-03-2022

Tension Test Report (Page -1/1)

Date of Test 25-03-2022
 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	0.370	3	0.372	0.11	0.109	3840	5170	77000	77760	103600	104700	1.30	16.3	
2	0.362	3	0.368	0.11	0.106	3590	5050	72000	74420	101200	104700	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 Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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To,
M/S Riz Builders
Lahore
(Monoo Squash Court, Aitchison College Lahore)

Reference # CED/TFL 1116 (Engr. Amina Rajput)
Reference of the request letter # Nil

Dated: 24-03-2022
Dated: 24-03-2022

Tension Test Report (Page -1/1)

Date of Test 25-03-2022
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	0.386	3	0.380	0.11	0.114	4030	5250	80800	78220	105200	101900	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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,
 Project Engineer
 Century Ventures
 Century 1

Reference # CED/TFL 1117 (Engr. Amina Rajput)
 Reference of the request letter # CV1/SRT/01

Dated: 24-03-2022
 Dated: 21-03-2022

Tension Test Report (Page -1/1)

Date of Test 25-03-2022
 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	0.374	3	0.374	0.11	0.110	3790	5170	76000	76050	103600	103800	1.50	18.8	Kamran Steel
2	0.371	3	0.373	0.11	0.109	3740	4890	75000	75520	98000	98800	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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Test Floor Laboratory
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Ref: CED/TFL/03/1121

Dated: 24-03-2022

Dated of Test: 25-03-2022

To
M/S KAC-NIC-RA jv
Islamabad

Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE
(MARK: TFL/03/1121)

Reference to your Letter No. Nil, Dated: 24/03/2022 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

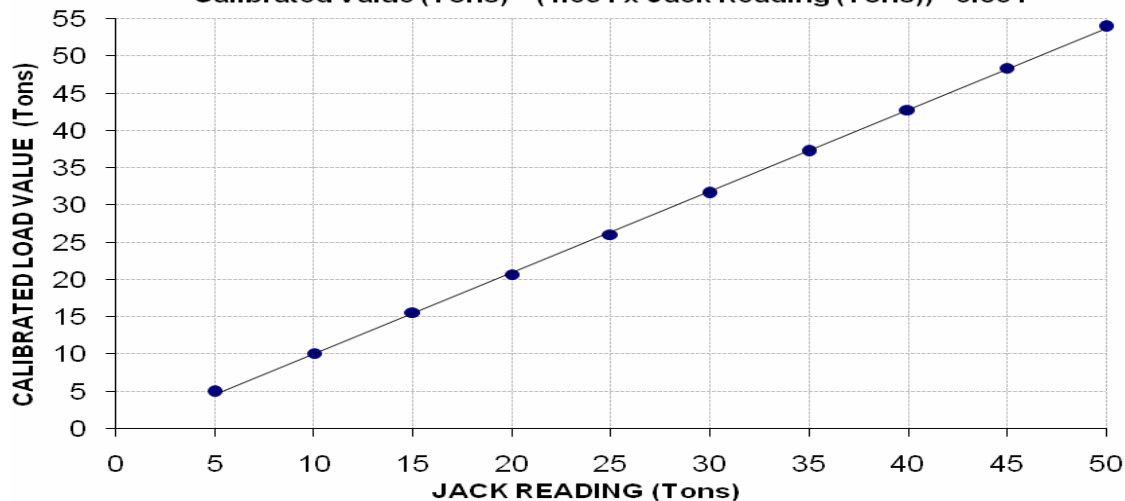
Total Range : Zero - 70 (Ton)
Calibrated Range : Zero - 50 (Ton)

Hydraulic Jack Reading (Ton)	5	10	15	20	25	30	35	40	45	50	
Calibrated Load	(kg)	4500	9200	14200	18800	23700	28700	33800	38900	44000	49000
	(Ton)	4.95	10.13	15.64	20.70	26.10	31.60	37.22	42.83	48.45	53.95

1000 Kg = 1.1011 Ton

Calibration Curve For Jack

Calibrated Value (Tons) = (1.091 x Jack Reading (Tons)) - 0.851



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Test Floor Laboratory
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To,
 Resident Engineer
 ACES
 DHA Multan
 Development of Package – 3 & Service Roads - DHA Multan

Reference # CED/TFL **1122** (Engr. Amina Rajput)
 Reference of the request letter # RE/Pkg-3/Material/02

Dated: 24-03-2022
 Dated: 17-03-2022

Tension Test Report (Page -1/1)

Date of Test 25-03-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		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	0.364	10	9.37	0.12	0.107	3690	4890	67791	76070	89837	100900	1.10	13.8	FF Steel
2	0.365	10	9.39	0.12	0.107	3620	4840	66505	74350	88919	99400	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

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
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To,
Construction Manager
NESPAK-ELECTRA-ICS Joint Venture
Remodeling of Warsak Canal System in Peshawar and Nowshera Districts
(WMI)

Reference # CED/TFL 1123 (Engr. Amina Rajput)
Reference of the request letter # 3379/066/MB/09/1843

Dated: 24-03-2022
Dated: 22-03-2022

Tension Test Report (Page -1/3)

Date of Test 25-03-2022
Gauge length 640 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")	775.0	784.0	18200	178.54	19800	194.24	198	>3.50	23518
2	12.70 (1/2")	775.0	788.0	17200	168.73	18900	185.41	199	>3.50	23521
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

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 Laboratories
UET Lahore, Pakistan.

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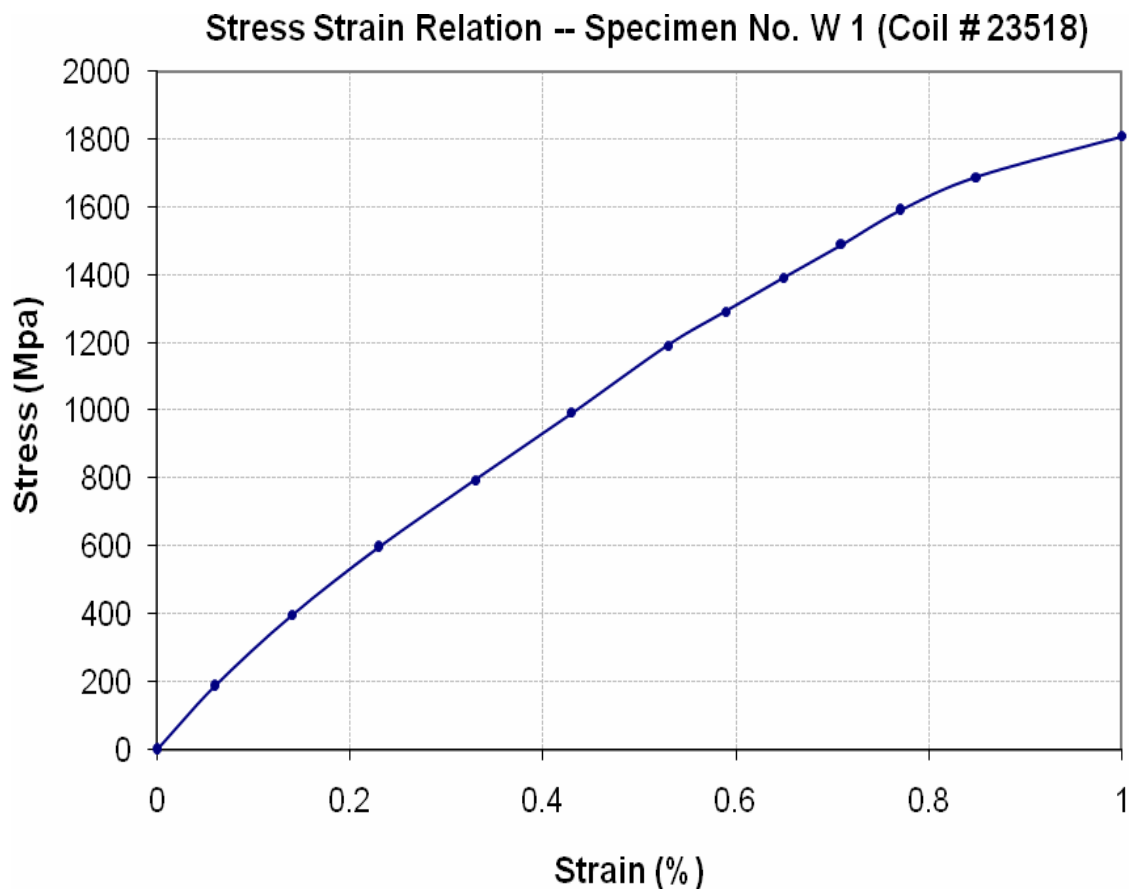
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Construction Manager
NESPAK-ELECTRA-ICS Joint Venture
Remodeling of Warsak Canal System in Peshawar and Nowshera Districts
(WMI)

Reference # CED/TFL 1123 (Engr. Amina Rajput)
Reference of the request letter # 3379/066/MB/09/1843

Dated: 24-03-2022
Dated: 22-03-2022

Graph (Page – 2/3)



I/C Testing Laboratories
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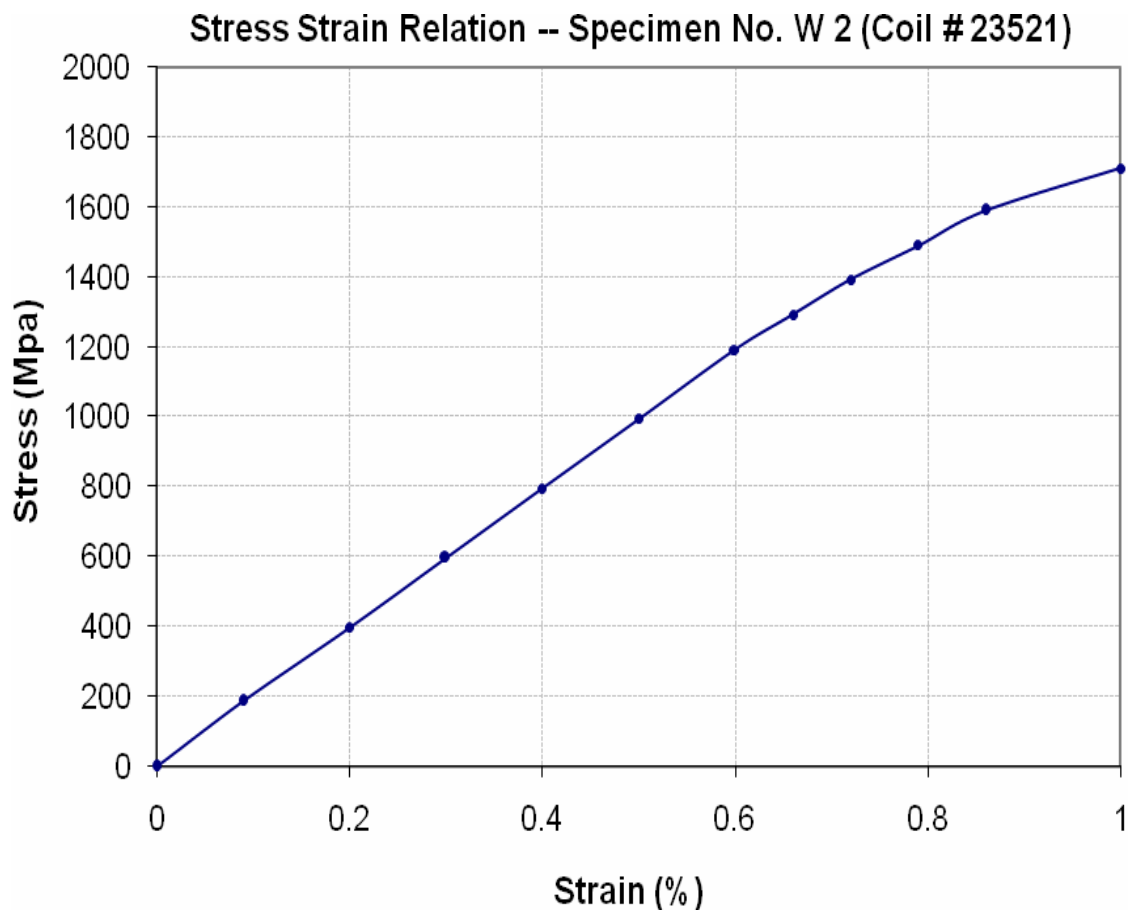
To,
Construction Manager
NESPAK-ELECTRA-ICS Joint Venture
Remodeling of Warsak Canal System in Peshawar and Nowshera Districts
(WMI)

Reference # CED/TFL 1123 (Engr. Amina Rajput)
Reference of the request letter # 3379/066/MB/09/1843

Dated: 24-03-2022

Dated: 22-03-2022

Graph (Page – 3/3)



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To,
 Resident Engineer
 City Survey & Engineering Consultants
 Green View Executive Apartments Phase-V

Reference # CED/TFL **1124** (Engr. Amina Rajput)
 Reference of the request letter # GVA/RE/05/22

Dated: 24-03-2022
 Dated: 24-03-2022

Tension Test Report (Page -1/1)

Date of Test 25-03-2022
 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	0.371	3	0.372	0.11	0.109	4050	4890	81200	81930	98000	99000	1.00	12.5	
2	0.374	3	0.374	0.11	0.110	4100	4860	82200	82200	97400	97500	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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,
 Project Manager
 Liberty Builders.
 Construction of Zee Avenue-Ramada Hotel & Suites 17-A Cooper Rd. Lahore.

Reference # CED/TFL **1129** (Engr. Amina Rajput)
 Reference of the request letter # ST/UET/20220325-A

Dated: 25-03-2022
 Dated: 25-03-2022

Tension Test Report (Page -1/1)

Date of Test 25-03-2022
 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	0.367	3	0.370	0.11	0.108	3520	5200	70600	71980	104200	106400	1.20	15.0	Batala Premium
2	0.378	3	0.376	0.11	0.111	3640	5250	73000	72170	105200	104100	1.20	15.0	
3	0.381	3	0.378	0.11	0.112	3590	5270	72000	70620	105600	103700	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three 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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