STRUCTURAL ENGINEERING DIVISION

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

To,

Executive Project Manager
China Civil Engineering Construction Corporation
Dasu KKH-01
(Wire and Cable Products.)

Reference # CED/TFL **5712** (Dr. Ali Ahmed) Dated: 25-09-2024
Reference of the request letter # CCECC/PAK/DASUFIELD/KKH-01/24-179 Dated: 19-09-2024

Tension Test Report

Date of Test 02-10-2024
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)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	**15.24 (0.6")**	**1100.0**	**1178**	**23500**	**230.54**	**28800**	**282.53**	**>3.50**	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only one sample for 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,

Lab In Charge
CMEC
NESPAK - Punjab Thermal Power (Pvt) Ltd.
Construction of 1263MW Punjab Thermal Power Plant, Jhang.

Reference # CED/TFL **5738, 5739** (Dr. Usman Akmal) Dated: 30-09-2024
Reference of the request letter # CMEC/UET/24092502 Dated: 25-09-2024

Tension Test Report (Page # 1/1)

Date of Test 01-10-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615 (FF Steel)

Sr. No.	Weight	Diameter/ Size (mm)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Heat No.
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.410	10	9.94	0.12	0.120	4100	5400	75324	75070	99207	98900	1.20	15.0	200
2	0.399	10	9.82	0.12	0.117	4100	5400	75324	77040	99207	101500	1.20	15.0	
3	0.418	10	10.05	0.12	0.123	4200	5500	77161	75360	101044	98700	1.30	16.3	
4	0.395	10	9.77	0.12	0.116	3700	5200	67975	70160	95533	98600	1.10	13.8	
5	0.394	10	9.75	0.12	0.116	3700	5200	67975	70440	95533	99000	1.00	12.5	
6	0.400	10	9.83	0.12	0.118	3700	5200	67975	69340	95533	97500	1.10	13.8	
Note: only six samples for tensile and three samples for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180º is Satisfactory														
10mm Dia Bar Bend Test Through 180º is Satisfactory														
10mm Dia Bar Bend Test Through 180º 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
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/09/5743 Dated: 30-09-2024
Dated of Test: 02-10-2024

To

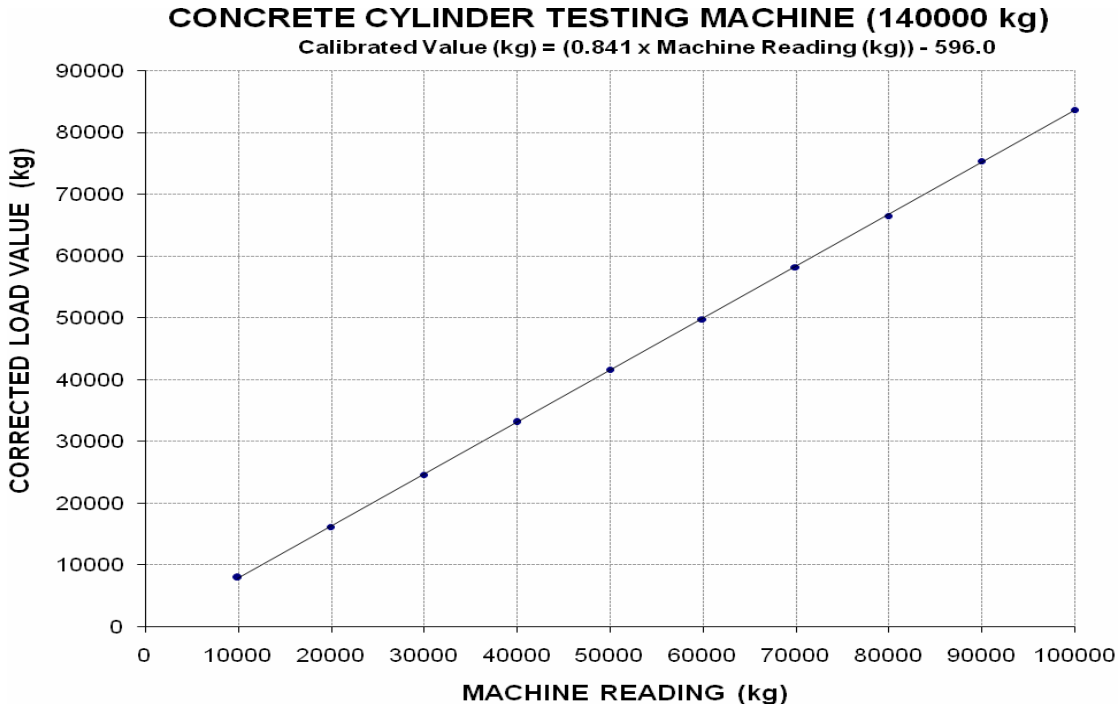
M/S Unze Trading (Pvt) Limited
Lahore.
(Leasing out MEPCO PC Pole Plant Lodhran)

Subject:- **CALIBRATION OF CONCRETE CYLINDER TESTING MACHINE**
(MARK: CED/TFL/10/5743)

Reference to your letter No. UNZE/MEPCO/16/2024, dated: 30/09/2024 on the subject cited above. One Concrete Cylinder Testing Machine has been calibrated by using standard calibration device. The results are tabulated as under:

Total Range : Zero – 140000 (kg)
Calibrated Range : Zero – 120000 (kg)

Machine Reading (kg)	10000	20000	30000	40000	50000	60000	70000	80000	90000	100000
Corrected Load Value (kg)	7958	16164	24554	33094	41584	49784	58175	66443	75334	83616



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

To,

Resident Engineer
NESPAK (RRR)
Construction of Rawalpindi Ring Road (RRR) (38.3 km) Main Carriageway (MCW) from Banth (N-5) to Thalian (M-2)(Group-1)(United Wire)

Reference # CED/TFL **5746** (Dr. Ali Ahmed) Dated: 30-09-2024
Reference of the request letter # 4713/RRR/IUK/24/152 Dated: 27-09-2024

Tension Test Report (Page -1/6)

Date of Test 02-10-2024
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**	**782.0**	**17100**	**167.75**	**19400**	**190.31**	**198**	**>3.50**	**4635**
2	**12.70 (1/2")**	**780.0**	**781.0**	**17300**	**169.71**	**19600**	**192.28**	**199**	**>3.50**	**4639**
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
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.

Note:
1- You can See your reports On Internet in the following web site
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2. The above results pertain to sample /samples supplied to this laboratory.
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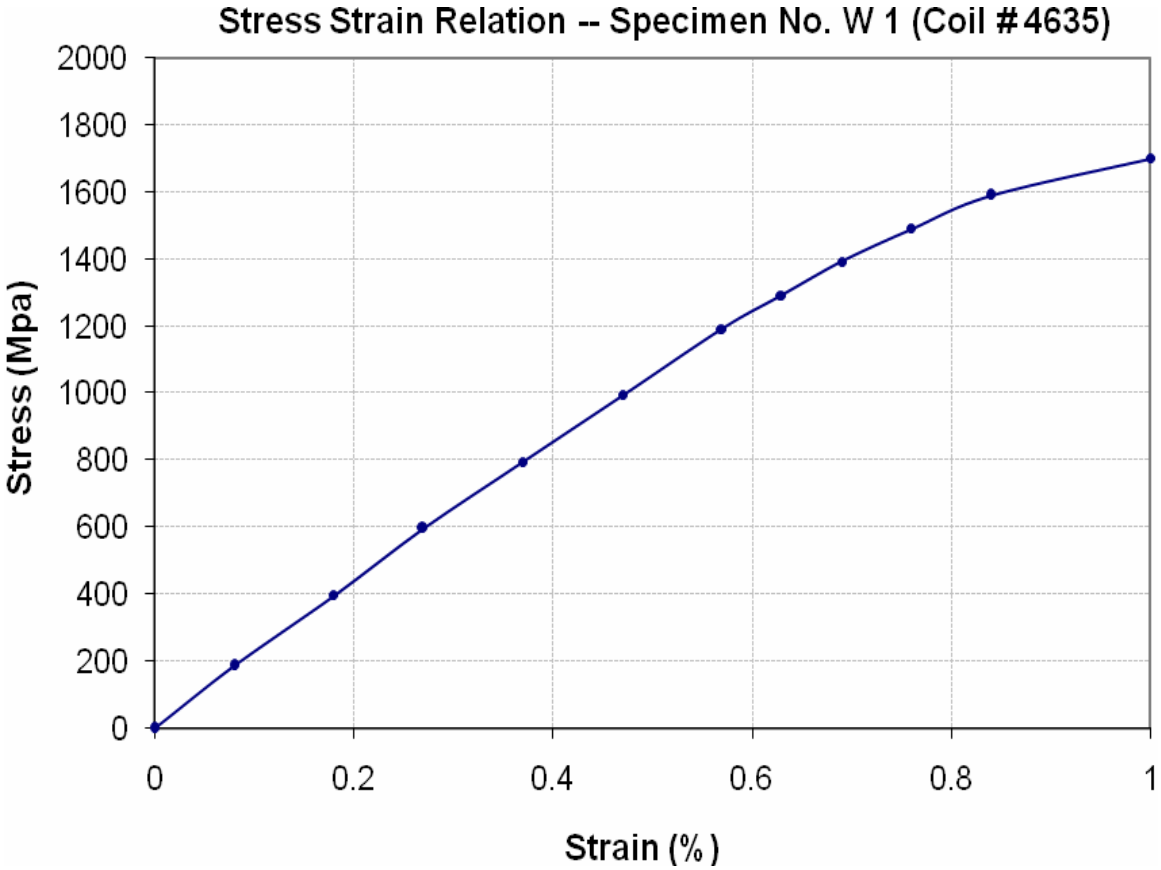
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
NESPAK (RRR)
Construction of Rawalpindi Ring Road (RRR) (38.3 km) Main Carriageway (MCW) from Banth (N-5) to Thalian (M-2)(Group-1)(United Wire)

Reference # CED/TFL **5746** (Dr. Ali Ahmed) Dated: 30-09-2024
Reference of the request letter # 4713/RRR/IUK/24/152 Dated: 27-09-2024

Graph (Page – 2/6)



I/C Testing Laboratoires
UET Lahore, Pakistan.

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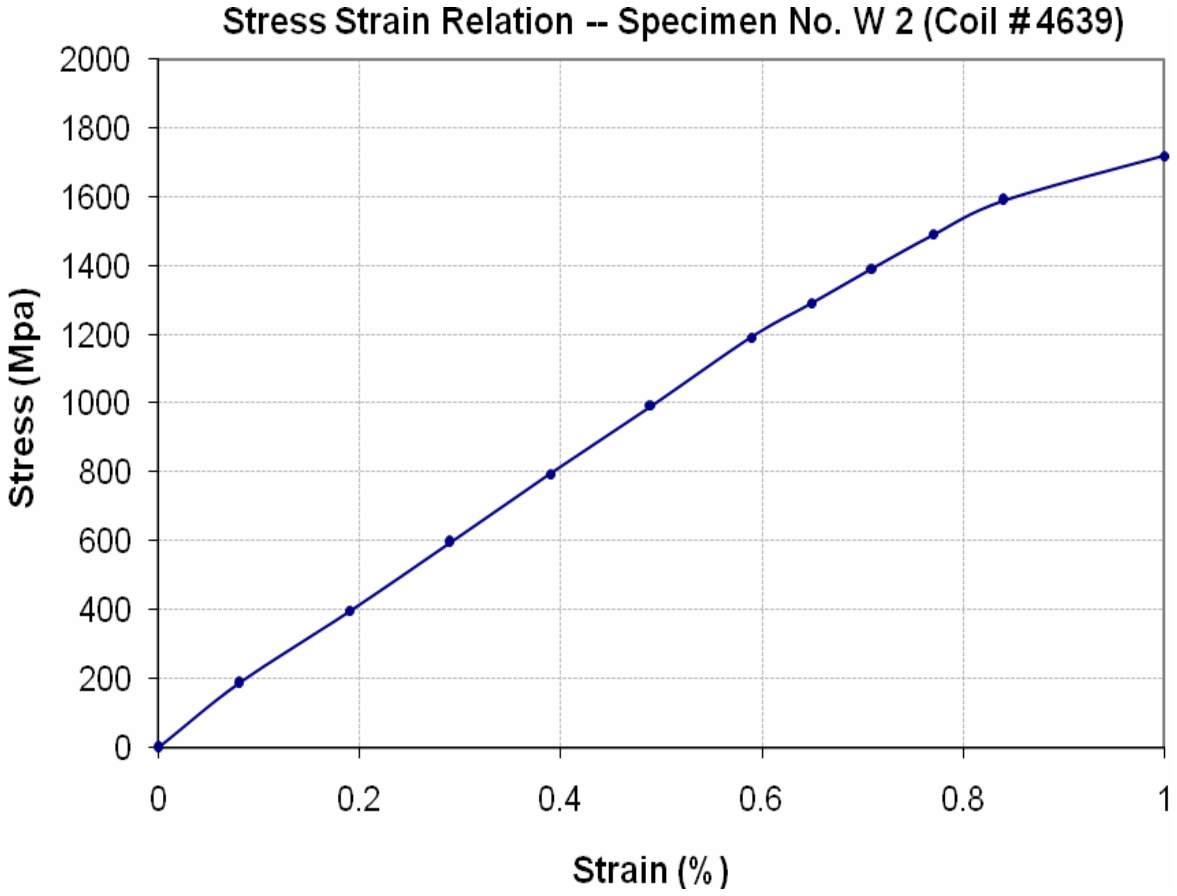
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
NESPAK (RRR)
Construction of Rawalpindi Ring Road (RRR) (38.3 km) Main Carriageway (MCW) from Banth (N-5) to Thalian (M-2)(Group-1)(United Wire)

Reference # CED/TFL **5746** (Dr. Ali Ahmed) Dated: 30-09-2024
Reference of the request letter # 4713/RRR/IUK/24/152 Dated: 27-09-2024

Graph (Page – 3/6)



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 (RRR)
Construction of Rawalpindi Ring Road (RRR) (38.3 km) Main Carriageway (MCW) from Banth (N-5) to Thalian (M-2)(Group-1)(Wire & Cable)

Reference # CED/TFL **5746** (Dr. Ali Ahmed) Dated: 30-09-2024
Reference of the request letter # 4713/RRR/IUK/24/152 Dated: 27-09-2024

Tension Test Report (Page -4/6)

Date of Test 02-10-2024
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**	**786.0**	**17800**	**174.62**	**19600**	**192.28**	**199**	**>3.50**	**73A**
2	**12.70 (1/2")**	**780.0**	**787.0**	**18000**	**176.58**	**19800**	**194.24**	**198**	**>3.50**	**73B**
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
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.

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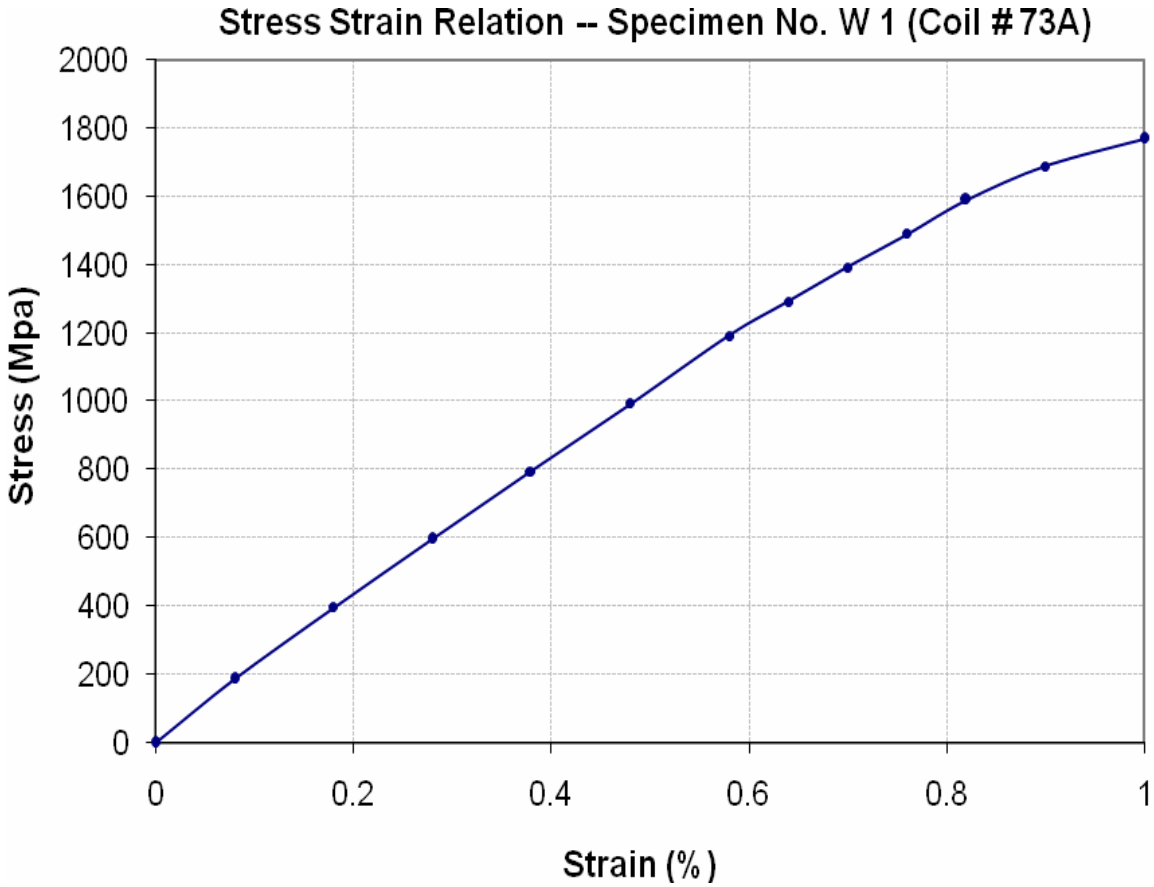
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
NESPAK (RRR)
Construction of Rawalpindi Ring Road (RRR) (38.3 km) Main Carriageway (MCW) from Banth (N-5) to Thalian (M-2)(Group-1)(Wire & Cable)

Reference # CED/TFL **5746** (Dr. Ali Ahmed) Dated: 30-09-2024
Reference of the request letter # 4713/RRR/IUK/24/152 Dated: 27-09-2024

Graph (Page – 5/6)



I/C Testing Laboratoires
UET Lahore, Pakistan.

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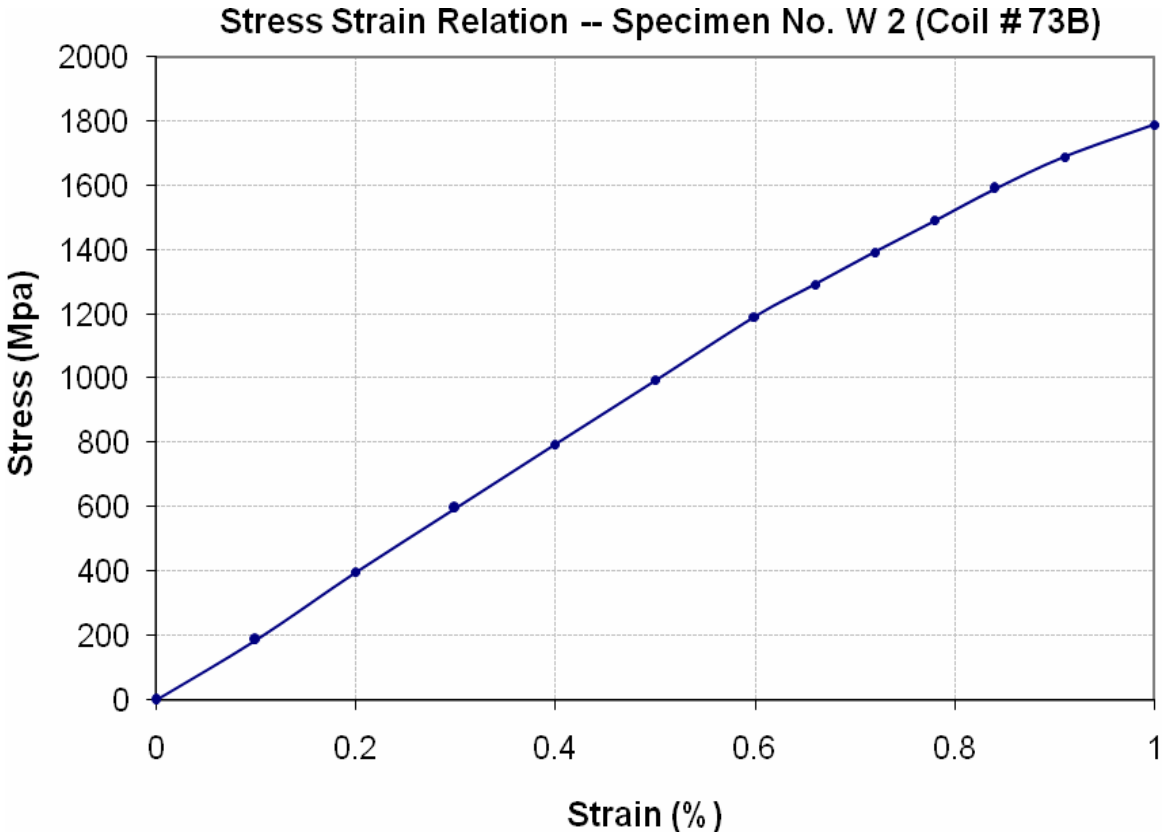
STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Resident Engineer
NESPAK (RRR)
Construction of Rawalpindi Ring Road (RRR) (38.3 km) Main Carriageway (MCW) from Banth (N-5) to Thalian (M-2)(Group-1)(Wire & Cable)

Reference # CED/TFL **5746** (Dr. Ali Ahmed) Dated: 30-09-2024
Reference of the request letter # 4713/RRR/IUK/24/152 Dated: 27-09-2024

Graph (Page – 6/6)



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,

Assistant Resident Engineer
Engineering Consultancy Services Punjab (Pvt) Ltd.
Establishment of District Integrated Command, Control & Communication (DIC3)
Centers in Eighteen Cities (Smart Safe Cities Project Phase-I)

Reference # CED/TFL **5748** (Dr. M Kashif) Dated: 01-10-2024
Reference of the request letter # ECSP/DIC3/24-30 Dated: 24-09-2024

Tension Test Report (Page -1/1)

Date of Test 02-10-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.377	10	9.54	0.12	0.111	3900	4900	71650	77550	90021	97500	1.00	12.5	
2	0.374	10	9.50	0.12	0.110	3900	4900	71650	78180	90021	98300	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Bend Test

10mm Dia Bar Bend Test Through 180º is Satisfactory

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

To,

Resident Engineer
NESPAK – TURPAK jv
Reconstruction of Old P&D Building, Lahore.

Reference # CED/TFL **5749** (Dr. M Kashif) Dated: 01-10-2024
Reference of the request letter # 4647/P&D/13/09/AZL/54 Dated: 23-09-2024

Tension Test Report (Page -1/1)

Date of Test 02-10-2024
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	0.375	0.11	0.110	3300	5000	66200	66010	100200	100100	1.20	15.0	Aziz Steel
2	0.377	3	0.376	0.11	0.111	3300	5000	66200	65560	100200	99400	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:
1- You can See your reports On Internet in the following web site
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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,

Sub Divisional Officer
Highway Sub Division
Bhera
(Special Repair of Road from Chawa to Chak Qazi Length 21.00 km in District Sargodha.)

Reference # CED/TFL **5750** (Dr. Ali Ahmed) Dated: 01-10-2024
Reference of the request letter # 102/Bhr Dated: 05-08-2024

Tension Test Report (Page -1/1)

Date of Test 02-10-2024
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	0.383	3	0.379	0.11	0.113	4300	5700	86200	84110	114300	111500	0.90	11.3	
2	0.382	3	0.378	0.11	0.112	4200	5400	84200	82430	108200	106000	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

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
Dualization of Muzaffargarh Road (Jauharabad Chowk Girote) Length 25.25 km in District Khushab 1. Group –I km no. 0.00 to 8.00 = 8 km, 2. Group-II & III km no. 8.00 to 25.25 =17.25 km.

Reference # CED/TFL **5751** (Dr. Ali Ahmed) Dated: 01-10-2024
Reference of the request letter # 4376/JQK/24/6988 Dated: 06-09-2024

Tension Test Report (Page -1/1)

Date of Test 02-10-2024
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	0.380	3	0.377	0.11	0.112	4500	5500	90200	88730	110200	108500	0.80	10.0	Batala Super
2	0.381	3	0.378	0.11	0.112	4400	5400	88200	86640	108200	106400	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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:
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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3- Sealed sample / Unsealed sample / Marked sample/Signed Samples

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/10/5752 Dated: 01-10-2024

Dated: 02-10-2024

To

M/S CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/5752)** (Page -1/4)

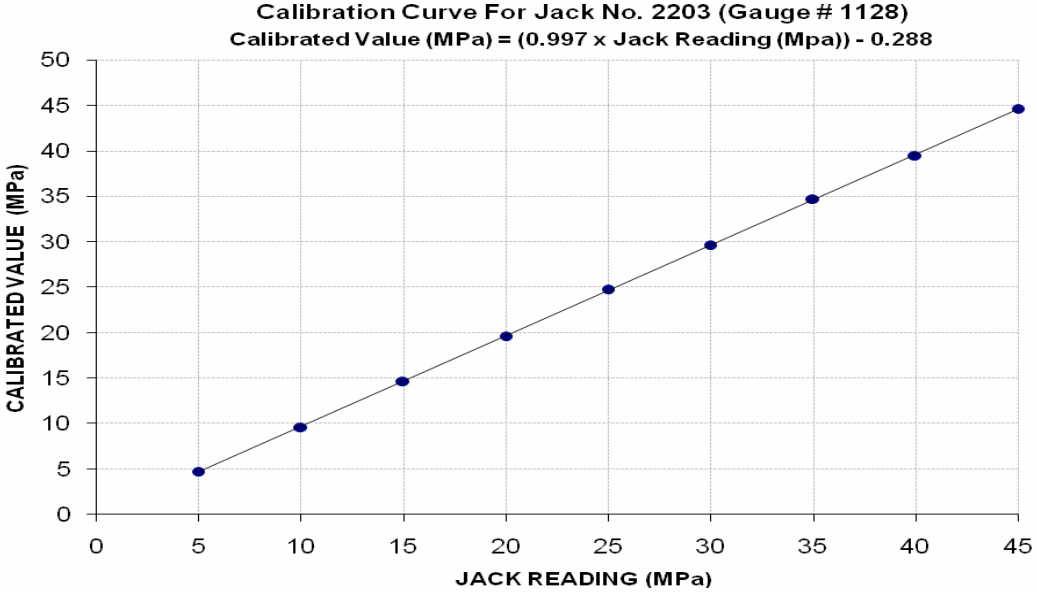
Reference to your Letter No. Nil, dated: 01/10/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2203, Gauge No. 1128) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	14400	29200	44600	59600	75200	90000	105400	120000	135600
Calibrated Pressure (Mpa)	4.74	9.61	14.68	19.61	24.75	29.62	34.69	39.49	44.63

The Ram Area of Jack = 298 cm^2

(Witness by Fawad Ali (XEN WAPDA), Tariq Javid (DHC) and Amjad Yaqoob (Asst. Manager CGGC))



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/10/5752 Dated: 01-10-2024

Dated: 02-10-2024

To

M/S CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/5752)** (Page -2/4)

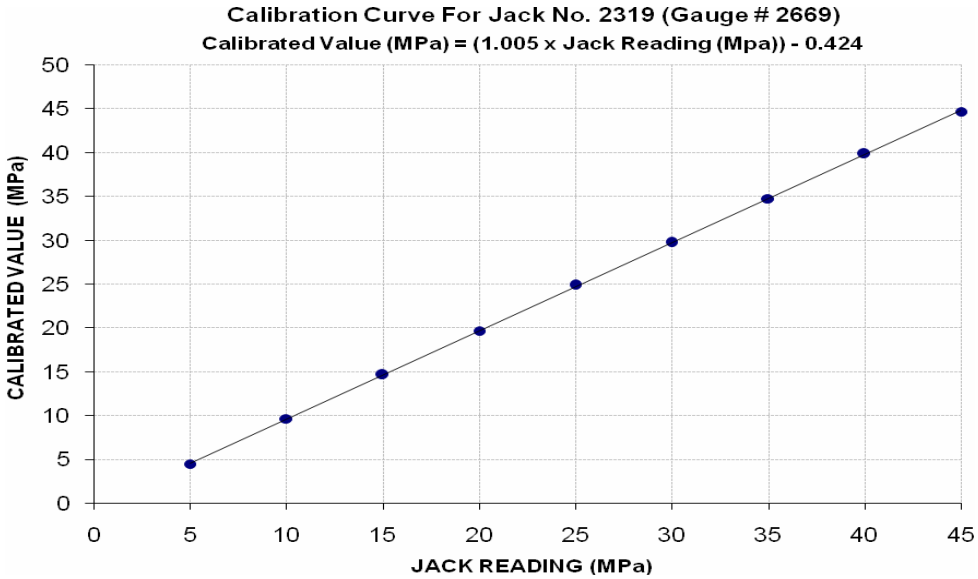
Reference to your Letter No. Nil, dated: 01/10/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2319, Gauge No. 2669) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	13600	29400	44600	59800	75600	90400	105600	121200	135800
Calibrated Pressure (Mpa)	4.48	9.68	14.68	19.68	24.88	29.75	34.75	39.89	44.69

The Ram Area of Jack = 298 cm^2

(Witness by Fawad Ali (XEN WAPDA), Tariq Javid (DHC) and Amjad Yaqoob (Asst. Manager CGGC))



I/C Testing Laboratoires
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Ref: CED/TFL/10/5752 Dated: 01-10-2024

Dated: 02-10-2024

To

M/S CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/5752)** (Page -3/4)

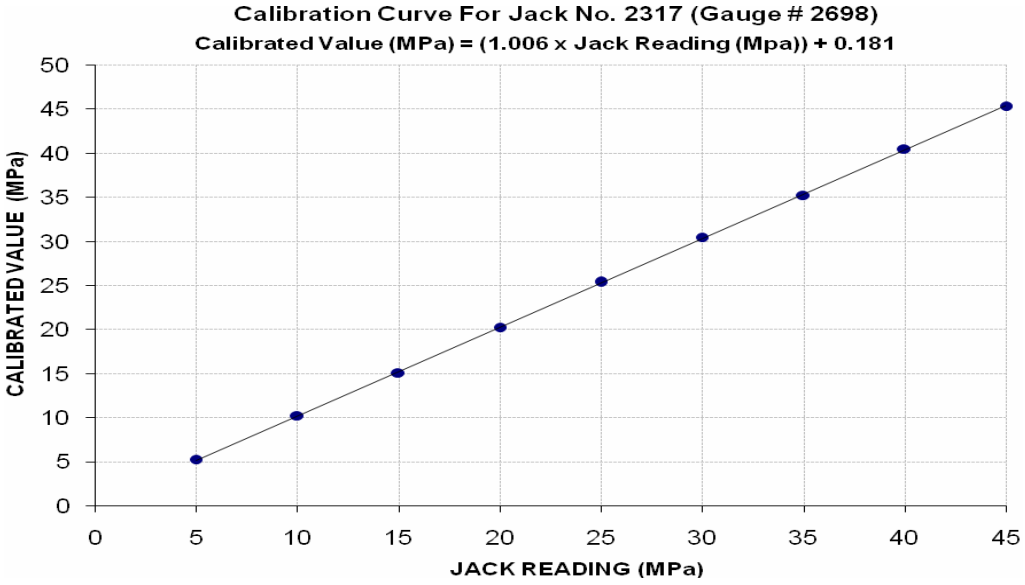
Reference to your Letter No. Nil, dated: 01/10/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2317, Gauge No. 2698) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	16000	31200	46000	61600	77200	92600	107200	123200	138000
Calibrated Pressure (Mpa)	5.27	10.27	15.14	20.27	25.41	30.47	35.28	40.54	45.41

The Ram Area of Jack = 298 cm^2

(Witness by Fawad Ali (XEN WAPDA), Tariq Javid (DHC) and Amjad Yaqoob (Asst. Manager CGGC))



I/C Testing Laboratoires
UET Lahore, Pakistan.

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

Ref: CED/TFL/10/5752 Dated: 01-10-2024

Dated: 02-10-2024

To

M/S CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/5752)** (Page -4/4)

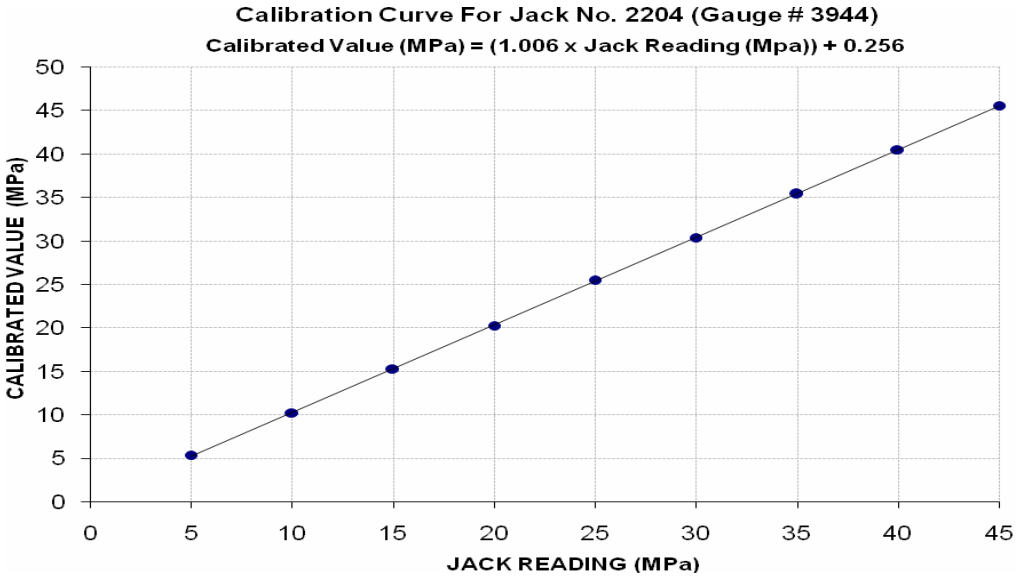
Reference to your Letter No. Nil, dated: 01/10/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2204, Gauge No. 3944) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	16400	31200	46600	61600	77600	92400	107600	123200	138600
Calibrated Pressure (Mpa)	5.40	10.27	15.34	20.27	25.54	30.41	35.41	40.54	45.61

The Ram Area of Jack = 298 cm^2

(Witness by Fawad Ali (XEN WAPDA), Tariq Javid (DHC) and Amjad Yaqoob (Asst. Manager CGGC))



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,

M/S Inter - Fab
Lahore

Reference # CED/TFL **5753** (Dr. Ali Ahmed) Dated: 02-10-2024
Reference of the request letter # Nil Dated: 02-10-2024

Tension Test Report (Page – 1/1)

Date of Test 02-10-2024
Description Wire Rope Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	
1	**12**	**0.53**	**8700**	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
Only one sample for Test				

To,

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

Engineer's Representative
NESPAK - TurkPak JV
Construction of Green Building for EMC, EPD and Allied New Entities Established under PGDP (DLI-2, PGDP) Lahore

Reference # CED/TFL **5754, 5756** (Dr. Ali Ahmed) Dated: 02-10-2024
Reference of the request letter # 4731/MAA/03/101 Dated: 01-10-2024

Tension Test Report (Page -1/1)

Date of Test 02-10-2023
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	3100	5100	62200	62070	102200	102100	1.00	12.5	Markhor
2	0.371	3	0.373	0.11	0.109	3400	5300	68200	68640	106200	107000	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

Witness by Imran (NESPAK)

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,

Project Manager
HMB Developers (Pvt) Ltd.
Commercial Tower, FTC Lahore. "DC # 8036"

Reference # CED/TFL **5759** (Dr. M Kashif) Dated: 02-10-2024
Reference of the request letter # HMBDPL/S.O/10/24/135 (LHR) Dated: 02-10-2024

Tension Test Report (Page -1/1)

Date of Test 02-10-2024
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	0.364	3	0.369	0.11	0.107	3820	4640	76600	78630	93000	95500	1.30	16.3	
2	0.361	3	0.368	0.11	0.106	3790	4690	76000	78700	94000	97400	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.

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