

Ref: CED/TFL/04/6838

Dated: 18-04-2025

Date of Calibration: 24-04-2025

To

Raees Ahmed Khan

Engineer Planning

**Jam Sadiq Bridge Yellow Corridor Segment-3, Karachi Mobility Project (Yellow Line)
Package-4**

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/04/6838) (Page – 1/1)

Reference to your Letter No. 524/25/002, dated: 09/04/2025 on the subject cited above. One Hydraulic Jack (Jack No. 025 G400, Pump No. B-2, 975) as received by us has been calibrated. The results are tabulated as under:

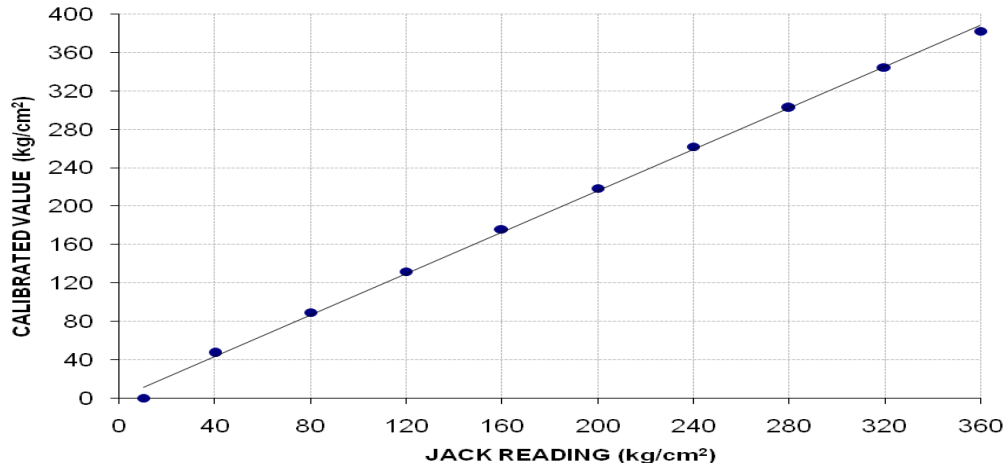
Total Range : Zero - 1000 (kg/cm²)
Calibrated Range : Zero - 360 (kg/cm²)

Hydraulic Jack Reading (kg/cm ²)	10	40	80	120	160	200	240	280	320	360
Calibrated Load (kg)	0	23200	43900	64800	86500	107400	128800	148800	169400	188000
Calibrated Pressure (kg/cm ²)	0	47	89	132	176	218	262	303	345	382

The Ram Area of Jack = 491.70 cm²

Calibration Curve For Jack No. 025

Calibrated Value ((kg/cm²) = (1.0906 x Jack Reading (kg/cm²)) - 1.0821



Test Performed and Verified by:

Ref: CED/TFL/04/6839

Dated: 18-04-2025

Date of Calibration: 24-04-2025

To

**Resident Engineer
CAMEOS Consultants,
Construction or Flyover at the Junction of N-5 and N-65 Sukkar.**

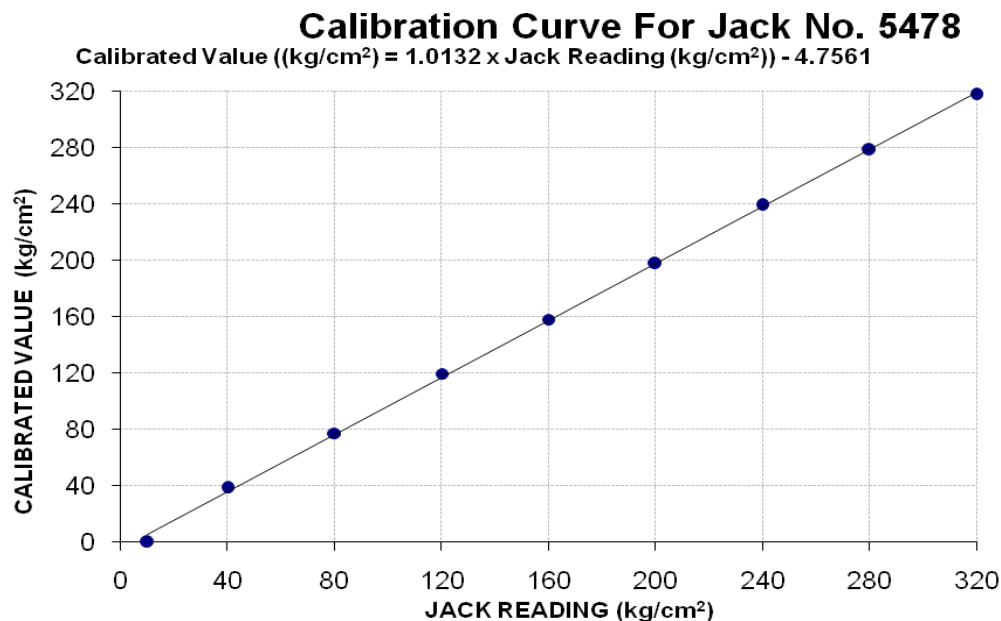
Subject: - **CALIBRATION OF HYDRAULIC JACK (MARK: TFL/04/6839)** (Page – 1/2)

Reference to your Letter No. CFJNS,65/RE/050A, dated: 14/04/2025 on the subject cited above. One Hydraulic Jack (Jack No. 5478 G420, Pump No. 965 B-2) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (kg/cm²)
Calibrated Range : Zero - 320 (kg/cm²)

Hydraulic Jack Reading (kg/cm ²)	10	40	80	120	160	200	240	280	320
Calibrated Load (kg)	0	23200	46600	72000	95200	119000	144400	167800	191400
Calibrated Pressure (kg/cm ²)	0	39	77	120	158	198	239	279	318

The Ram Area of Jack = 602.4 cm²



Test Performed and Verified by:

Ref: CED/TFL/04/6839

Dated: 18-04-2025

Date of Calibration: 24-04-2025

To

**Resident Engineer
CAMEOS Consultants,
Construction or Flyover at the Junction of N-5 and N-65 Sukkar.**

Subject: - **CALIBRATION OF HYDRAULIC JACK (MARK: TFL/04/6839)** (Page – 2/2)

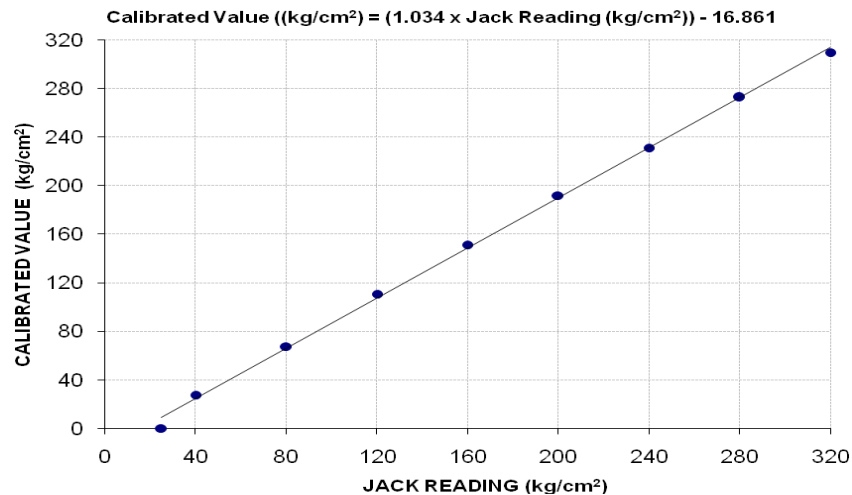
Reference to your Letter No. CFJNS,65/RE/050A, dated: 14/04/2025 on the subject cited above. One Hydraulic Jack (Jack No. 038 G420, Pump No. 960 B-1) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (kg/cm²)
Calibrated Range : Zero - 320 (kg/cm²)

Hydraulic Jack Reading (kg/cm ²)	25	40	80	120	160	200	240	280	320
Calibrated Load (kg)	0	16600	40700	66700	91200	115600	139300	164300	186700
Calibrated Pressure (kg/cm ²)	0	28	68	111	151	192	231	273	310

The Ram Area of Jack = 602.4 cm²

Calibration Curve For Jack No. 038



Test Performed and Verified by:

To,
Mr. Tariq Mehmood

-
-

Reference # CED/TFL

6843 (Dr. Ali Ahmad)

Dated: 21-04-2025

Reference of the request letter #

Nil

Dated: 21-04-2025

Tension Test Report

(Page-1/1)

Date of Test 24-04-2025

Gauge Length 2 inches

Description Angle Iron Steel Strips Tensile Test Report

Sr. No.	Designation	Size of Strip	X Section Area	Yield Load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(Inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(inch)		
1	-	25.10 x 5.80	145.58	4900	7700	330.2	518.9	0.6	30.0	-
2	-	25.50 x 9.80	249.90	8100	12100	318.0	475.0	0.5	25.0	-
3	-	25.90 x 11.90	308.21	12400	16600	394.7	528.4	0.7	35.0	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Note: Only 3 Samples for Tensile and 0 Samples for Bend test										

Bend Test

Test Performed and Verified by:

To,

Muhammad Zubair
Team Leader-JIPIC
Project Implementation Consultants (PICs)
Construction of Jalapur Irrigation Canal and its System (RD 52+000 to RD 225+500 & RD 225+500 to RD 3379+750) Package No. JIP/WKS/ICB-P2 & P3.

Reference # CED/TFL **6844** (Dr. Ali Ahmed)
Reference of the request letter # JIPIC/2.18/8207

Dated: 21-04-2025
Dated: 08-04-2025

Tension Test Report (Page – 1/1)

Date of Test 24-04-2025
Description Steel Wire Rope

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	
1	12	0.56	8900	
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
Only One samples for Test				

Test Performed and Verified by:

To,

Supervisor Engineer (Health Component-PHCIP)

Punjab Human Capital Project, (PHCIP)

Construction of Burial Pits in the Districts of Muzaffargarh, Mianwali, Rajanpur, Rahim Yar Khan, DG Khan
Bahawalnagar, Bahawalpur, Khushab, Bhakkar, Layyah and Lodhran

Reference # CED/TFL 6846 (Dr. Ali Ahmad)

Dated: 21-04-2025

Reference of the request letter # PIU-H/PHCIP/PM/788

Dated: 14-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025

Gauge Length 8 inches

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

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.367	3	0.370	0.110	0.108	3300	4700	66120	67478	94171	96105	1.3	16.3	-
2	0.366	3	0.370	0.110	0.108	3500	4600	70127	71668	92167	94192	1.1	13.8	-
3	0.365	3	0.370	0.110	0.107	3200	4600	64116	65723	92167	94477	1.3	16.3	-
4	0.368	3	0.371	0.110	0.108	3400	4600	68124	69379	92167	93865	1.3	16.3	-
5	0.365	3	0.369	0.110	0.107	3400	4600	68124	69886	92167	94551	1.3	16.25	-
6	0.365	3	0.37	0.110	0.107	3500	4600	70127	71862	92167	94447	1	12.5	-
Note: Only 6 Samples for Tensile and 0 Samples for Bend test														

Bend Test														

Test Performed and Verified by:

To,
 Syed Talal Tariq (Senior Portfolio Manager)
 IK Associates
 Construction of HMB Building Jail Road Faisalabad

Reference # CED/TFL **6849** (Dr. Ali Ahmad)
 Reference of the request letter # IKA/HMB/S.T/02/2025

Dated: 21-04-2025
 Dated: 21-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025
 Gauge Length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.380	3	0.377	0.110	0.112	3600	4900	72131	71100	98178	96775	1.3	16.3	3"/8
2	0.374	3	0.374	0.110	0.11	3600	4900	72131	72143	98178	98194	1.2	15.0	3"/8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Aziz ur Rehman (Assistance Resident Engineer)
Architectural & Town Planning Services Limited (ACE-Arts)
Karachi Steel

Reference # CED/TFL 6850 (Dr. Ali Ahmad)
Reference of the request letter # NZEB/ACE/LAB/2025/38

Dated: 21-04-2025
Dated: 21-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025

Gauge Length 8 inches

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

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.363	3	0.368	0.110	0.107	2900	4600	58105	59943	92167	95083	1.6	20.0	-
2	0.367	3	0.371	0.110	0.108	3000	4600	60109	61314	92167	94015	1.5	18.8	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Abdullah (P&C Engineer)
Ittefaq Bulding Solutions (Pvt.) Ltd.
A.M International, Raiwind Road, Lahore
(Kamran Steel)

Reference # CED/TFL 6853 (Dr. Ali Ahmad)
Reference of the request letter # Nil

Dated: 22-04-2025
Dated: 22-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.369	3	0.372	0.110	0.109	3500	4800	70127	71066	96175	97462	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 1 Samples for Bend test														

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Suleman Basharat (Site Civil Engineer)
AAA Partnership Pvt. Ltd.
JDW Tower Lahore

Reference # CED/TFL **6854** (Dr. Ali Ahmad)
Reference of the request letter # AAA/SO/MSB/113/2025

Dated: 22-04-2025
Dated: 14-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025

Gauge Length 8 inches

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

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.373	3	0.374	0.110	0.11	3200	4900	64116	64272	98178	98417	1.4	17.5	-
2	0.370	3	0.372	0.110	0.109	3300	4900	66120	66855	98178	99269	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,
 Noor Fatima
 100-B-III, Gulberg-III, Lahore
 -

Reference # CED/TFL 6855 (Dr. Ali Ahmad)
 Reference of the request letter # ST/FF/5336/07/25

Dated: 22-04-2025
 Dated: 22-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025
 Gauge Length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.370	3	0.372	0.110	0.109	3300	4600	66120	66957	92167	93334	1.5	18.8	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 1 Samples for Bend test														

Bend Test														
# 3 Bar Bend Test Through 180 Degree is Satisfactory														

Test Performed and Verified by:

To,

Mr. Baber Baig (Resident Engineer, QA/QC Engineer)
Bahria Town (Pvt.) Ltd. Lahore
(Sheikhoo Steel)

Reference # CED/TFL **6857** (Dr. Ali Ahmad)
Reference of the request letter # QA/QC-Steel-3932

Dated: 23-04-2025
Dated: 14-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025

Gauge Length 8 inches

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

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.374	3	0.374	0.110	0.11	3200	4800	64116	64191	96175	96286	1.3	16.3	-
2	0.374	3	0.374	0.110	0.11	3200	4800	64116	64233	96175	96349	1.6	20.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Sub Divisional Officer
Buildings Sub Division No.2, Gujranwala
Improvement Workforce Readiness in Punjab Project (IWRPP)
Government College of Technology Gujranwala

Reference # CED/TFL 6859 (Dr. Ali Ahmad)
Reference of the request letter # 1201/G-21

Dated: 23-04-2025
Dated: 19-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.373	3	0.373	0.110	0.11	3300	5000	66120	66391	100182	100592	0.9	11.3	SJ
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 1 Samples for Bend test														

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Akash Shahzad Khan (XEN)

GE (Army)-II Okara Cantt.

Const. of 8 x Sldrs Flats (G+3) Block No.1, HQ 2 ALRG at Okara-ENC.A-54/2025

Const. of 8 x Sldrs Flats (G+3) Block No.3, HQ 2 ALRG at Okara-ENC.A-55/2025

Reference # CED/TFL **6860** (Dr. Ali Ahmad)

Dated: 23-04-2025

Reference of the request letter # 6000/Gen/08/E-6

Dated: 08-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025

Gauge Length 8 inches

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

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.371	3	0.372	0.110	0.109	2600	3600	52095	52587	72131	72813	1.1	13.8	3"/8
2	0.377	3	0.376	0.110	0.111	2600	3600	52095	51725	72131	71619	1.5	18.8	3"/8
3	0.379	3	0.377	0.110	0.111	2600	3700	52095	51465	74135	73238	1.5	18.8	3"/8
4	0.373	3	0.373	0.110	0.11	3000	4700	60109	60352	94171	94552	1.4	17.5	3"/8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 4 Samples for Tensile and 2 Samples for Bend test														

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Akhtar Ali (Project Director)
Rab Nawaz & Co.
Construction of ABL Building at Khairpur (0590), Chakwal
Construction of New Building Branch Khairpur (0590), Regional Chakwal

Reference # CED/TFL **6861** (Dr. Ali Ahmad)
Reference of the request letter # R&C/05-51/2025

Dated: 23-04-2025
Dated: 16-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.370	3	0.372	0.110	0.109	3500	4800	70127	70898	96175	97232	1.2	15.0	FF Steel
2	0.371	3	0.372	0.110	0.109	3200	4700	64116	64782	94171	95148	1.3	16.3	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,

Mr. Muhammad Saleem (Material Engineer Nespak)
NESPAK (Pvt.) Ltd.
Annual Development Program-WASA (ADP 2024-25) (AK-Supreme Steel)
Rainwater Management-Drainage Arrangement for Sore Point at Tikka Chowk, Lahore

Reference # CED/TFL 6862 (Dr. Ali Ahmad) Dated: 23-04-2025
Reference of the request letter # Nespak/Wasa/ADP/UGWT/TikkaChowk/Me/ Dated: 15-04-2025

Tension Test Report (Page-1/1)

Date of Test 24-04-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (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			
1	0.375	3	0.375	0.110	0.11	3700	5100	74135	73955	102185	101939	0.9	11.3	-
2	0.373	3	0.373	0.110	0.11	3900	4900	78142	78465	98178	98584	0.8	10.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by: