To,
Mr. Muhammad Jamil Alam (Head Quality Assuarance)
FF Steel Ltd.
Solar Project

Reference # CED/TFL **7106** (Dr. Rizwan Riaz) Dated: 19-06-2025
Reference of the request letter # Nil Dated: 19-06-2025

Tension Test Report (Page-1/2)

Date of Test 25-06-2025
Gauge Length 2 inches
Description Aluminium Rail 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	**Aluminium Rail**	**2.20 x 26.10**	**57.42**	**1270**	**1430**	**217.0**	**244.3**	**0.2**	**10.0**	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 0 Samples for Bend test										

Bend Test

Test Performed and Verified by:

To,
Mr. Muhammad Jamil Khan (Head Quality Assurance)
FF Steel Ltd.
Solar Project

Reference # CED/TFL **7106** (Dr. Rizwan Riaz) Dated: 19-06-2025
Reference of the request letter # Nil Dated: 19-06-2025

Weight &Size Test Report (Page – 2/2)

Date of Test 25-06-2025
Description Unit Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Width	Height	Thickness	Remark
	(inch)	(g)	(mm)	(kg/m)	(mm)	(mm)	(mm)	
1	**Aluminium Rail**	**137**	**151.4**	**0.90**	**40.1**	**50.0**	**2.20**	**-**
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
Only one sample for Test								

Test Performed and Verified by:

To,

Lt. Col. Muhammad Foad Bashir Saeed (AD QA & QC MTL)
M/s DHA Lahore
Const of Bridge on Hudiara Drain Link Between Phase-VII to Village Karbath
Witness by:Mr. Ahmad Hassan (DHA Lab) & Mr. Muhammad Ilyas (Sub Engr.)

Reference # CED/TFL **7107 & 7108** (Dr. Rizwan Riaz) Dated: 19-06-2025
Reference of the request letter # 408/241/32/Lab/11/137 Dated: 19-06-2025

Tension Test Report (Page -1/2)

Date of Test 25-06-2025
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/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**780.0**	**786.0**	**18000**	**176.58**	**18100**	**177.56**	**199**	**<3.50 Not ok**	**-**
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	
Only one 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

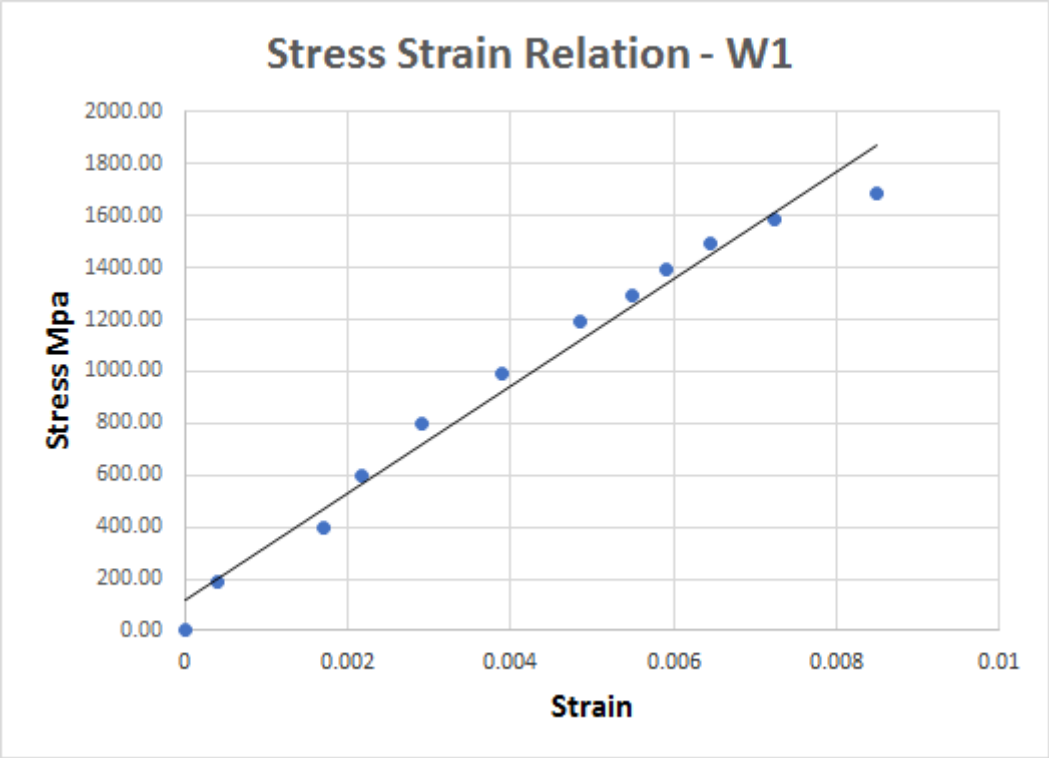
Test Performed and Verified by:

To,

Lt. Col. Muhammad Foad Bashir Saeed (AD QA & QC MTL)
M/s DHA Lahore
Const of Bridge on Hudiara Drain Link Between Phase-VII to Village Karbath
Witness by:Mr. Ahmad Hassan (DHA Lab) & Mr. Muhammad Ilyas (Sub Engr.)

Reference # CED/TFL **7107 & 7108** (Dr. Rizwan Riaz) Dated: 19-06-2025
Reference of the request letter # 408/241/32/Lab/11/137 Dated: 19-06-2025

Graph (Page – 2/2)



Test Performed and Verified by:

To,

Mr. Waqas Khan (Assistant Resident Engineer Package-01 PCP)
MM Pakistan (Pvt.) Ltd.
Strom Water Drainage Facilities at Wazirabad City
(Mehboob Steel) Witness by: Mr. Muhammad Abdul Shoaib (Inspector, MM Paksitan Pvt. Ltd.)

Reference # CED/TFL **7115** (Dr. Usman Akmal) Dated: 20-06-2025
Reference of the request letter # MMP/WZD/SWD/10/2025 Dated: 21-05-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.357**	**3**	**0.365**	**0.110**	**0.105**	**27.00**	**38.20**	**55158**	**57850**	**78039**	**81847**	**1.7**	**21.3**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Resident Engineer
Engineering Consultants Services Punjab
Construction of the Artwild Life Hospital Safari Zoo Lahore
(Kamran Steel)

Reference # CED/TFL **7116** (Dr. Usman Akmal) Dated: 20-06-2025
Reference of the request letter # RE/ECSP/VHSZ/03 Dated: 02-06-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.362**	**3**	**0.368**	**0.110**	**0.106**	**32.00**	**44.70**	**65373**	**67620**	**91318**	**94457**	**1.3**	**16.3**	-
2	**0.369**	**3**	**0.371**	**0.110**	**0.108**	**32.20**	**45.70**	**65781**	**66757**	**93361**	**94746**	**1.1**	**13.8**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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:

Ref: CED/TFL/06/7123 **Dated: 24-06-2025**
Dated of Test: 25-06-2025 (Dr. Usman Akmal)

To,

Mr. Manohar Lal (Resident Engineer),
NESPAK (Pvt.) Ltd.
Construction of Flyover at GT Road- Chan da Qila Chowk in District Gujranwala

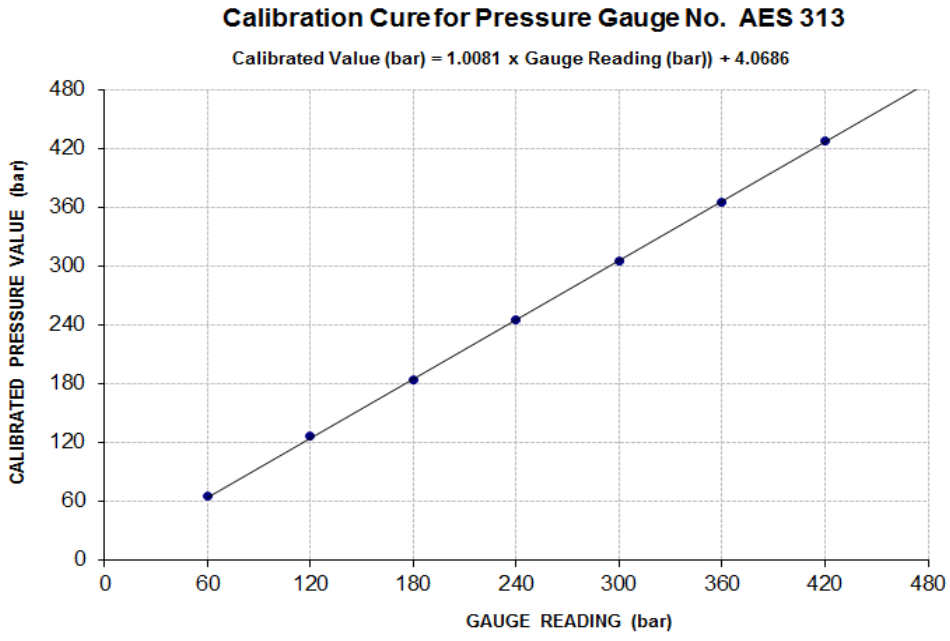
Subject: **- CALIBRATION OF PRESSURE GAUGE (MARK: TFL/06/7123)** (Page -1/2)

Reference to your Letter No. 4834/103/CQF/ML/Lab/28, Dated: 23/06/2025 on the subject cited above. One Pressure Gauge No. AES 313 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 480 (bar)

Pressure Gauge Reading (bar)	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**
Calibrated Load (kg)	**13200**	**25600**	**37200**	**49600**	**61600**	**73600**	**86400**	**99000**
Calibrated Pressure (bar)	**65**	**127**	**184**	**246**	**305**	**365**	**428**	**490**

The Ram Are use for Calibration = 198 cm^2



Test Performed and Verified by:

Ref: CED/TFL/06/7123 **Dated: 24-06-2025**
Dated of Test: 25-06-2025 (Dr. Usman Akmal)

To,

Mr. Manohar Lal (Resident Engineer),
NESPAK (Pvt.) Ltd.
Construction of Flyover at GT Road- Chan da Qila Chowk in District Gujranwala

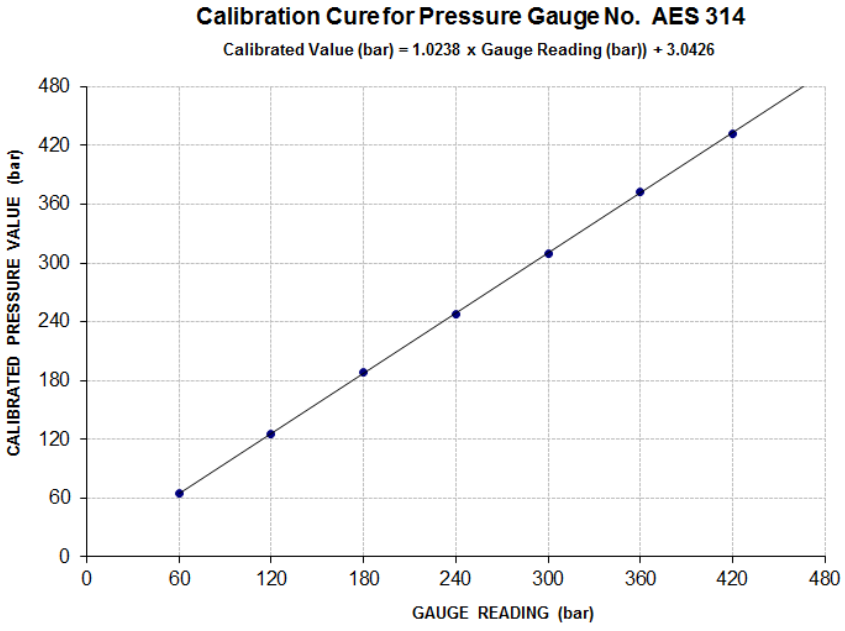
Subject: **- CALIBRATION OF PRESSURE GAUGE (MARK: TFL/06/7123)** (Page -2/2)

Reference to your Letter No. 4834/103/CQF/ML/Lab/28, Dated: 23/06/2025 on the subject cited above. One Pressure Gauge No. AES 314 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 480 (bar)

Pressure Gauge Reading (bar)	**60**	**120**	**180**	**240**	**300**	**360**	**420**	**480**
Calibrated Load (kg)	**13200**	**25200**	**38000**	**50000**	**62600**	**75200**	**87200**	**100000**
Calibrated Pressure (bar)	**65**	**125**	**188**	**248**	**310**	**372**	**432**	**495**

The Ram Are use for Calibration = 198 cm^2



Test Performed and Verified by:

To,

Mr. Kashif Shahzad (Manager Technical)
Gahribwal Cement Ltd.
-

Reference # CED/TFL **7125** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # GCL/Purchase/UET/007 Dated: 24-06-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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 (mm)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	**4.250**	**32**	**1.261**	**1.250**	**1.249**	**37800**	**60400**	**66649**	**66718**	**106497**	**106608**	**1.3**	**16.3**	-
2	**4.263**	**32**	**1.263**	**1.250**	**1.253**	**37000**	**60600**	**65238**	**65104**	**106850**	**106629**	**1.3**	**16.3**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test
32mm Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Muhammad Yasin (Project Manager)
Hassan Construction Company
Geniteam Head Office on Plant No. 30-B Zahoor Gulberg-2

Reference # CED/TFL **7126** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # HC/Const-30B/25/146 Dated: 24-06-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.369**	**3**	**0.371**	**0.110**	**0.108**	**36.00**	**46.50**	**73544**	**74673**	**94995**	**96452**	**1.2**	**15.0**	-
2	**0.372**	**3**	**0.373**	**0.110**	**0.109**	**36.00**	**46.50**	**73544**	**74088**	**94995**	**95697**	**1.2**	**15.0**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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,

Resident Engineer
ESS-I-AAR Consultant
Construction of Flyover at Nadirabad Phatak to Industrial Estate, Multan, Group-II,
Construction of Flyover Bridge 3, Tehsil and District Multan

Reference # CED/TFL **7127** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # 551 Dated: 16-06-2025

Tension Test Report (Page-1/2)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.364**	**3**	**0.369**	**0.110**	**0.107**	**31.00**	**46.50**	**63330**	**65147**	**94995**	**97721**	**1.2**	**15.0**	**5 Star**
2	**0.365**	**3**	**0.369**	**0.110**	**0.107**	**31.20**	**47.00**	**63739**	**65404**	**96016**	**98525**	**1.1**	**13.8**	**5 Star**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Resident Engineer
ESS-I-AAR Consultant
Construction of Flyover at Nadirabad Phatak to Industrial Estate, Multan, Group-II,
Construction of Flyover Bridge 3, Tehsil and District Multan

Reference # CED/TFL **7127** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # 551 Dated: 16-06-2025

Tension Test Report (Page-2/2)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	**4.344**	**10**	**1.275**	**1.270**	**1.276**	**36000**	**56000**	**62476**	**62166**	**97184**	**96703**	**1**	**12.5**	**5 Star**
2	**4.350**	**10**	**1.276**	**1.270**	**1.278**	**37400**	**60800**	**64905**	**64487**	**105514**	**104834**	**1.3**	**16.3**	**5 Star**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test
10 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Sub Divisional Officer
Highway Sub Division, Depalpur
Restoration / Improvement of Kasur Khuddian Depalpur Road in District Okara I/C Bypass
L=38.85 KM, District Okara

Reference # CED/TFL **7128** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # 122/D Dated: 29-04-2025

Tension Test Report (Page-1/2)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.351	3	0.362	0.110	0.103	29.00	43.20	59244	63251	88253	94222	0.8	10.0	-
2	0.348	3	0.361	0.110	0.102	28.50	43.20	58223	62616	88253	94912	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 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,

Sub Divisional Officer
Highway Sub Division, Depalpur
Restoration / Improvement of Kasur Khuddian Depalpur Road in District Okara I/C Bypass
L=38.85 KM, District Okara

Reference # CED/TFL **7128** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # 122/D Dated: 29-04-2025

Tension Test Report (Page-2/2)

Date of Test 25-06-2025
Gauge Length 8 inches
Description Plain 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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	**4.246**	**10**	**1.260**	**1.270**	**1.248**	**26800**	**43400**	**46510**	**47339**	**75318**	**76660**	**1.9**	**23.8**	-
2	**4.204**	**10**	**1.254**	**1.270**	**1.235**	**25600**	**43200**	**44427**	**45673**	**74971**	**77073**	**2**	**25.0**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 2 Samples for Bend test														

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

Test Performed and Verified by:

To,

Mr. Kamlesh Kumar (XEN)
Garrison Engineer (A)-I Bwp
CA No. ENC-A-68/2025 Construction of 8 x Sldrs Flats (G+3) Block No.39 MHS Gar Bwp

Reference # CED/TFL **7129** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # 6400-ENC-68/13/E-6 Dated: 18-04-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.375	3	0.375	0.110	0.11	25.70	35.50	52503	52358	72523	72323	1.6	20.0	3"/8
2	0.380	3	0.377	0.110	0.112	26.20	35.50	53524	52662	72523	71354	1.5	18.8	3"/8
3	0.360	3	0.367	0.110	0.106	31.2	45	63739	66244	91931	95544	1.4	17.5	3"/8
4	0.369	3	0.372	0.110	0.108	31.7	45.7	64760	65708	93361	94727	1.3	16.3	3"/8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 4 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

To,

Mr. Haroon Ur Rasheed (XEN)
GE (Const) SSD Gwa
CA No. CEA/CZ-33/2025 Construction of 1 x Qtr Gd With Kote and Stores (D/S) for Regt No. 2 at SSD

Reference # CED/TFL **7130** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # 6123/16/E-6 Dated: 20-05-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.373**	**3**	**0.374**	**0.110**	**0.11**	**31.70**	**46.00**	**64760**	**64961**	**93973**	**94265**	**1.4**	**17.5**	**3"/8**
2	**0.364**	**3**	**0.369**	**0.110**	**0.107**	**31.20**	**45.00**	**63739**	**65526**	**91931**	**94509**	**1.1**	**13.8**	**3"/8**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

Gwa

To,

Mr. Kamlesh Kumar (XEN)
Garrison Engineer (A)-I Bwp
CA No. ENC-A-68/2025 Construction of 8 x Sldrs Flats (G+3) Block No.39 MHS Gar Bwp

Reference # CED/TFL **7129** (Dr. Usman Akmal) Dated: 24-06-2025
Reference of the request letter # 6400-ENC-68/13/E-6 Dated: 18-04-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.375	3	0.375	0.110	0.11	25.70	35.50	52503	52358	72523	72323	1.6	20.0	3"/8
2	0.380	3	0.377	0.110	0.112	26.20	35.50	53524	52662	72523	71354	1.5	18.8	3"/8
3	0.360	3	0.367	0.110	0.106	31.2	45	63739	66244	91931	95544	1.4	17.5	3"/8
4	0.369	3	0.372	0.110	0.108	31.7	45.7	64760	65708	93361	94727	1.3	16.3	3"/8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 4 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

To,

Mr. Adeel Basharat (General Manager, Engineering)
Sufi City
Construction of Negin Commercial at Sufi City Housing Society, Mandi Bahuddin

Reference # CED/TFL **7134** (Dr. Usman Akmal) Dated: 25-06-2025
Reference of the request letter # Sufi/2025 Dated: 24-06-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.372**	**3**	**0.373**	**0.110**	**0.109**	**32.20**	**49.50**	**65781**	**66204**	**101124**	**101774**	**1.1**	**13.8**	-
2	**0.380**	**3**	**0.377**	**0.110**	**0.112**	**32.20**	**51.50**	**65781**	**64874**	**105209**	**103758**	**1.2**	**15.0**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Proprieter
M/s Malik Taj Din Steel Industry (MTS)
Witness by: Muhammad Shahid Latif (Senior Lab Technician MTS)

Reference # CED/TFL **7135** (Dr. Usman Akmal) Dated: 25-06-2025
Reference of the request letter # Nil Dated: 25-06-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	**3.976**	**10**	**1.220**	**1.270**	**1.168**	**32200**	**46600**	**55881**	**60739**	**80871**	**87901**	**1.5**	**18.8**	-
2	**3.961**	**10**	**1.217**	**1.270**	**1.164**	**33800**	**48600**	**58658**	**64005**	**84342**	**92031**	**1.6**	**20.0**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Bend Test
10 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Shoukat Ali Rana (Project Manager)
Orbit Developers Pvt. Ltd.
The Springs 47, Gulberg Lahore

Reference # CED/TFL **7137** (Dr. Wasim Abbas) Dated: 25-06-2025
Reference of the request letter # Nil Dated: 25-06-2025

Tension Test Report (Page-1/1)

Date of Test 25-06-2025
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	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.364**	**3**	**0.369**	**0.110**	**0.107**	**31.20**	**47.00**	**63739**	**65556**	**96016**	**98754**	**1.1**	**13.8**	-
2	**0.369**	**3**	**0.372**	**0.110**	**0.109**	**33.20**	**49.00**	**67824**	**68747**	**100102**	**101464**	**0.9**	**11.3**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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:

Ref: CED/TFL/07/7200 **Dated: 08-07-2025**
Dated of Test: 09-07-2025 (Dr. Usman Akmal)

To,

Resident Engineer (Nespak RRR)
NESPAK (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (RRR) (38.3 KM) Main Carriageway (MCW) From Baanth (N-5) to thaliana (Group-1)

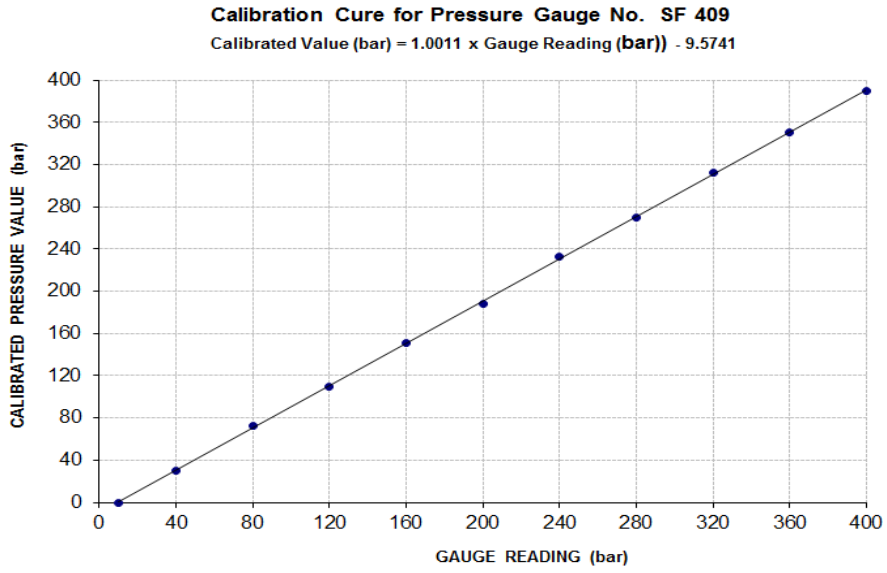
Subject: **- CALIBRATION OF PRESSURE GAUGE (MARK: TFL/07/7200)** (Page -1/2)

Reference to your Letter No. 4713/RRR/IUK/25/236, Dated: 07/07/2025 on the subject cited above. One Pressure Gauge No. SF409 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 480 (bar)

Pressure Gauge Reading (bar)	**10**	**40**	**80**	**120**	**160**	**200**	**240**	**280**	**320**	**360**	**400**
Calibrated Load (kg)	**0**	**6000**	**14600**	**22200**	**30500**	**38000**	**47100**	**54500**	**63000**	**70700**	**78800**
Calibrated Pressure (bar)	**0**	**30**	**72**	**110**	**151**	**188**	**233**	**270**	**312**	**350**	**390**

The Ram Area use for Calibration = 198 cm^2



Test Performed and Verified by:

Ref: CED/TFL/07/7200 **Dated: 08-07-2025**
Dated of Test: 09-07-2025 (Dr. Usman Akmal)

To,

Resident Engineer (Nespak RRR)
NESPAK (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (RRR) (38.3 KM) Main Carriageway (MCW) From Baanth (N-5) to thaliana (Group-1)

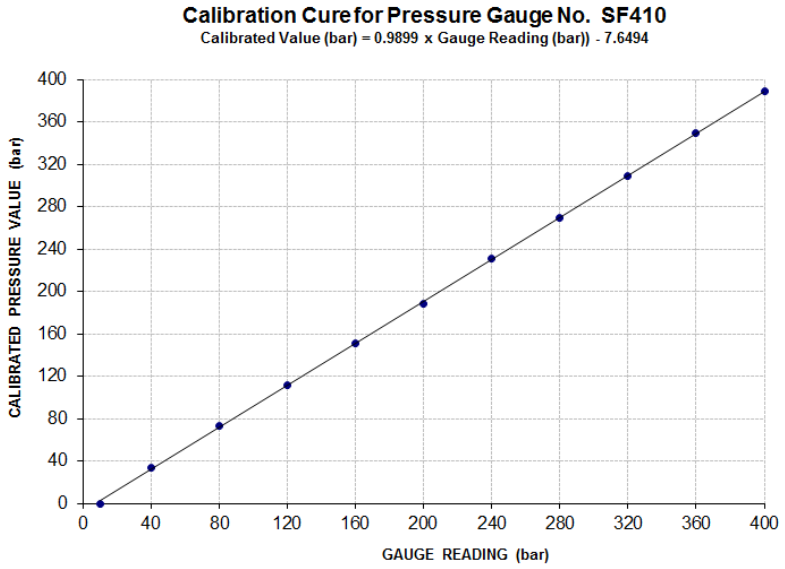
Subject: **- CALIBRATION OF PRESSURE GAUGE (MARK: TFL/07/7200)** (Page -2/2)

Reference to your Letter No. 4713/RRR/IUK/25/236, Dated: 07/07/2025 on the subject cited above. One Pressure Gauge No. SF410 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 480 (bar)

Pressure Gauge Reading (bar)	**10**	**40**	**80**	**120**	**160**	**200**	**240**	**280**	**320**	**360**	**400**
Calibrated Load (kg)	**0**	**6700**	**14700**	**22600**	**30500**	**38100**	**46600**	**54300**	**62300**	**70500**	**78400**
Calibrated Pressure (bar)	**0**	**33**	**73**	**112**	**151**	**189**	**231**	**269**	**309**	**349**	**388**

The Ram Area use for Calibration = 198 cm^2



Test Performed and Verified by: