

Ref: CED/TFL/07/7296

Dated: 30-07-2025

Dated of Test: 07-08-2025 (Dr. RizwanRiaz)

To

**M/S National Heritage Contractors
Lahore**

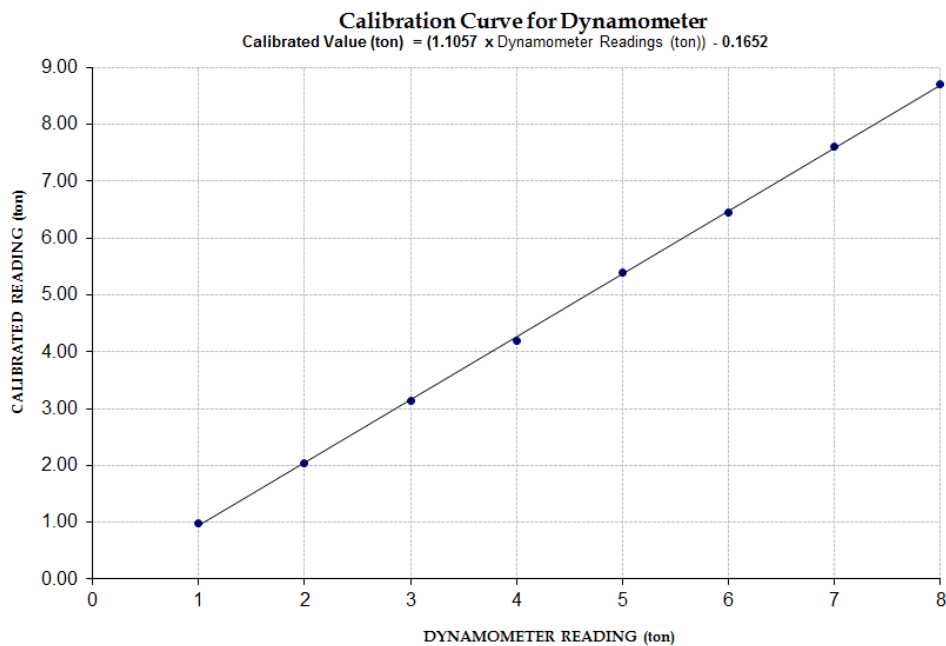
Subject: - CALIBRATION OF DYNAMOMETER (MARK: TFL/07/7296) (Page -1/1)

Ref: Your letter No. NHC/W-170/10949, dated: 30/07/2025 on the subject cited above. One Dynamometer (Brand PIAB, Model No. WS-1348) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 10 (ton)
Calibrated Range : Zero - 8 (ton)

Dynamometer Readings (ton)	1	2	3	4	5	6	7	8	
Calibrated Readings	(kg)	900	1850	2850	3800	4900	5850	6900	7900
	(ton)	0.99	2.04	3.14	4.18	5.40	6.44	7.60	8.70

1000 kg = 1.1011 Ton



Test Performed and Verified by:

To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-02)

Reference # CED/TFL **7298** (Dr. M. Kashif)
Reference of the request letter # 4713/RRR/IUK/25/241

Dated: 31-07-2025
Dated: 29-07-2025

Tension Test Report (Page -1/10)

Date of Test 07-08-2025
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416

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	782.0	17600	172.66	19600	192.28	198	>3.50	26768
2	12.70 (1/2")	780.0	781.0	18000	176.58	19500	191.30	196	>3.50	26893
3	12.70 (1/2")	780.0	782.0	17600	172.66	19400	190.31	197	>3.50	26898
4	12.70 (1/2")	780.0	784.0	17700	173.64	19300	189.33	197	>3.50	27204
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Only four 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:

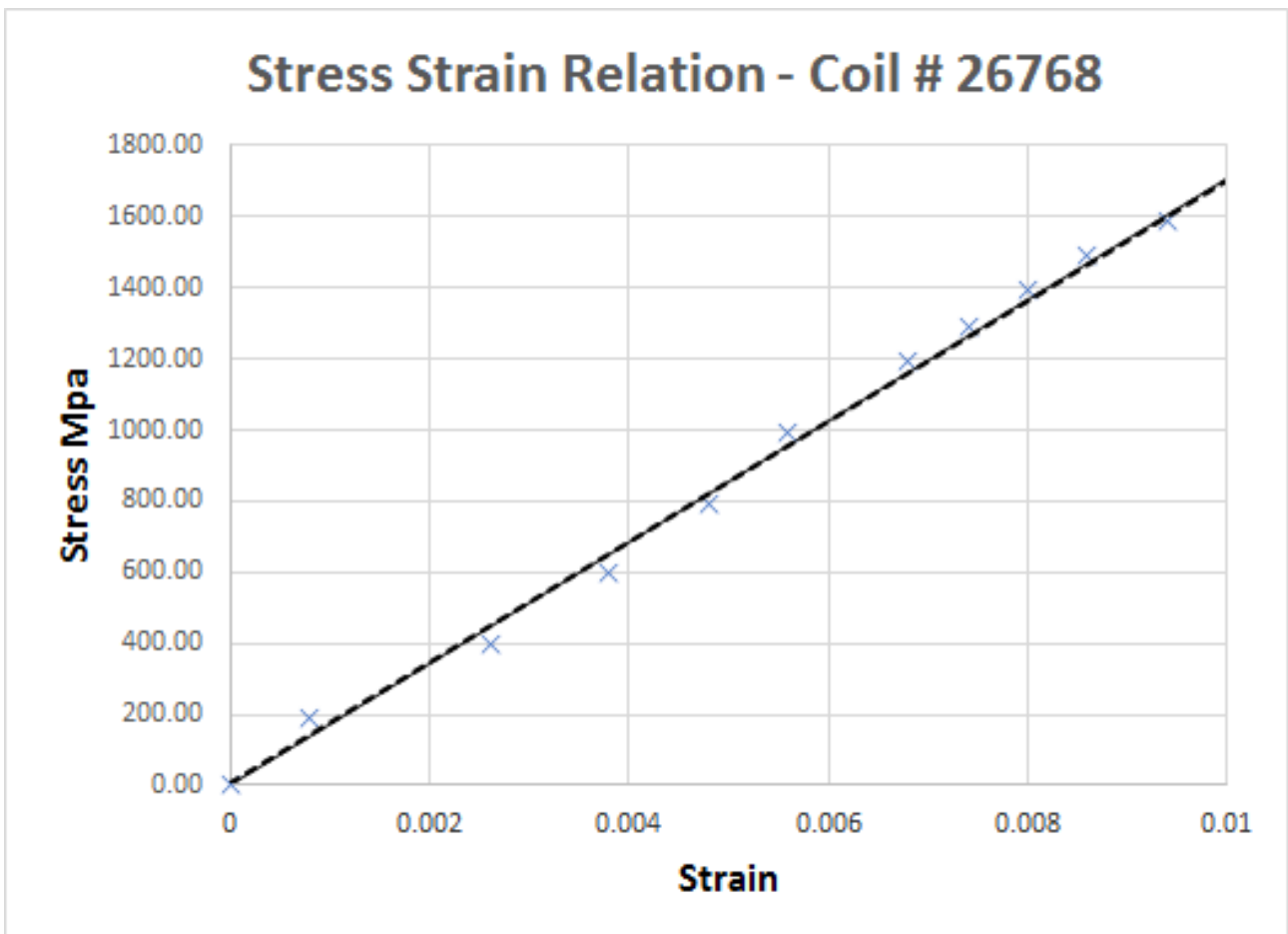
To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-02)

Reference # CED/TFL 7298 (Dr. Rizwan Riaz)
Reference of the request letter # 4713/RRR/IUK/25/241

Dated: 31-07-2025
Dated: 29-07-2025

Graph (Page – 2/10)



Test Performed and Verified by:

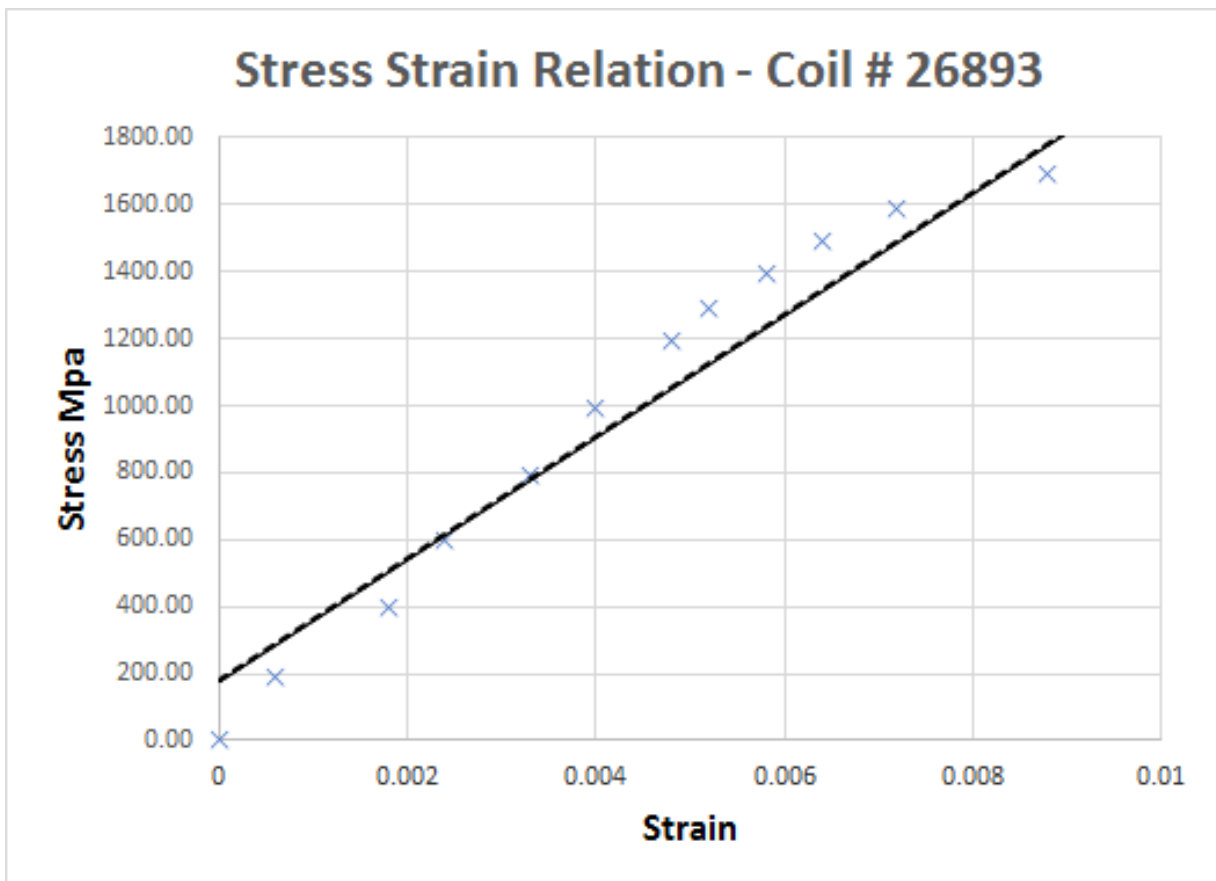
To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-02)

Reference # CED/TFL **7298** (Dr. Rizwan Riaz)
Reference of the request letter # 4713/RRR/IUK/25/241

Dated: 31-07-2025
Dated: 29-07-2025

Graph (Page – 3/10)



Test Performed and Verified by:

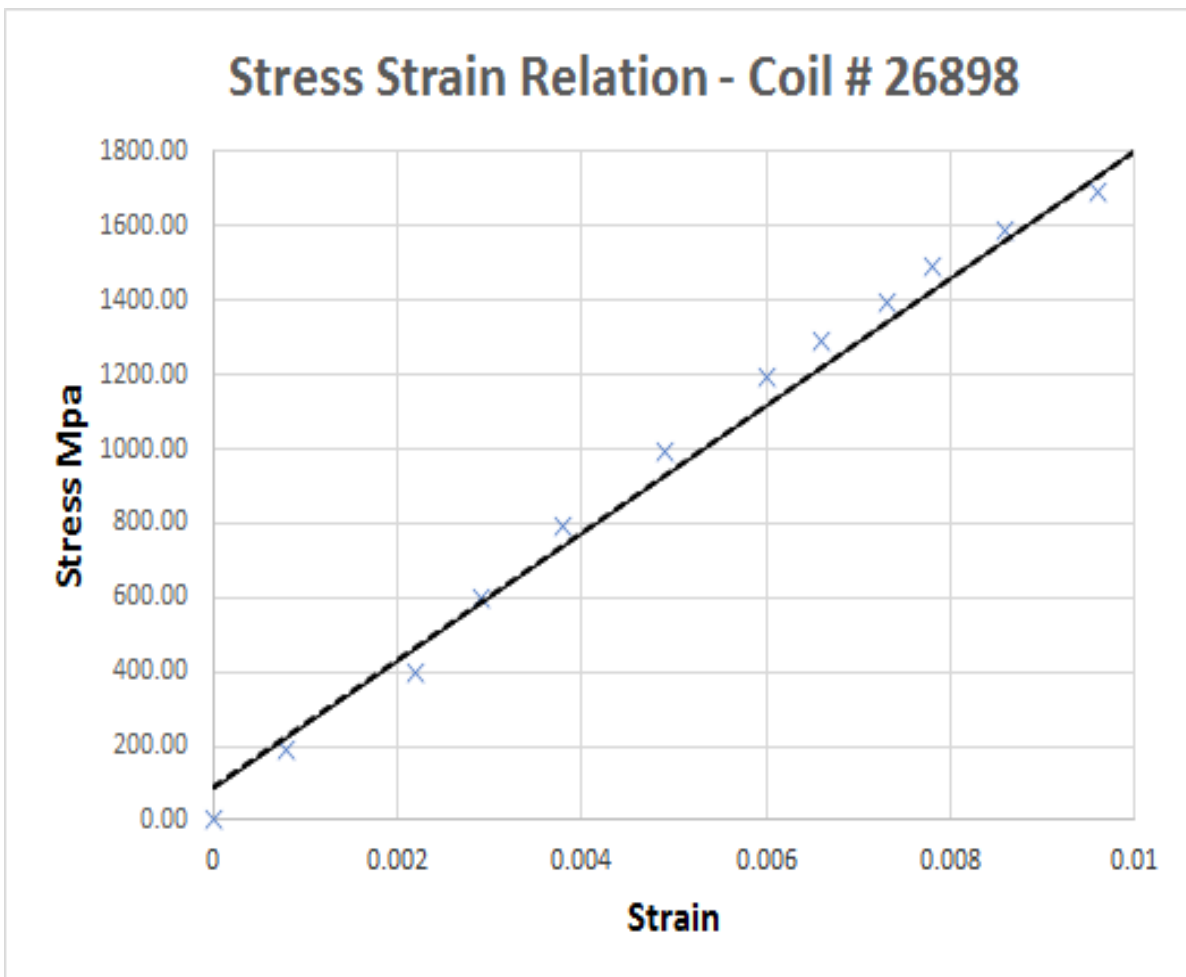
To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-02)

Reference # CED/TFL **7298** (Dr. Rizwan Riaz)
Reference of the request letter # 4713/RRR/IUK/25/241

Dated: 31-07-2025
Dated: 29-07-2025

Graph (Page – 4/10)



Test Performed and Verified by:

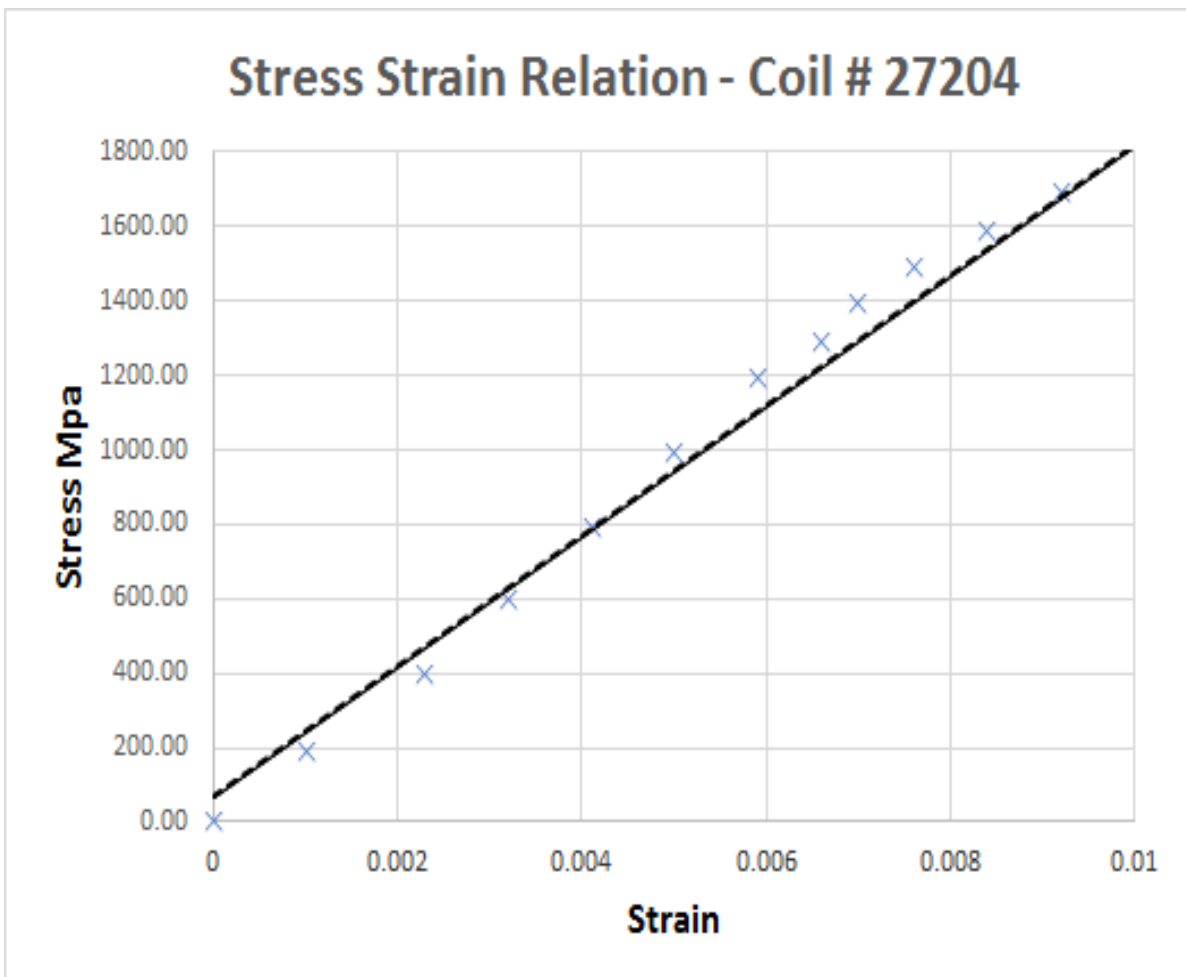
To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-02)

Reference # CED/TFL **7298** (Dr. Rizwan Riaz)
Reference of the request letter # 4713/RRR/IUK/25/241

Dated: 31-07-2025
Dated: 29-07-2025

Graph (Page – 5/10)



Test Performed and Verified by:

To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-01 & 02)

Reference # CED/TFL **7298** (Dr. M. Kashif)
Reference of the request letter # 4713/RRR/IUK/25/239

Dated: 31-07-2025
Dated: 29-07-2025

Tension Test Report (Page -6/10)

Date of Test 07-08-2025
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416

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	782.0	17600	172.66	19200	188.35	199	>3.50	27165
2	12.70 (1/2")	780.0	785.0	17800	174.62	19200	188.35	198	>3.50	27170
3	12.70 (1/2")	780.0	776.0	17400	170.69	19100	187.37	197	>3.50	27177
4	12.70 (1/2")	780.0	779.0	17600	172.66	19100	187.37	198	>3.50	27180
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Only four 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:

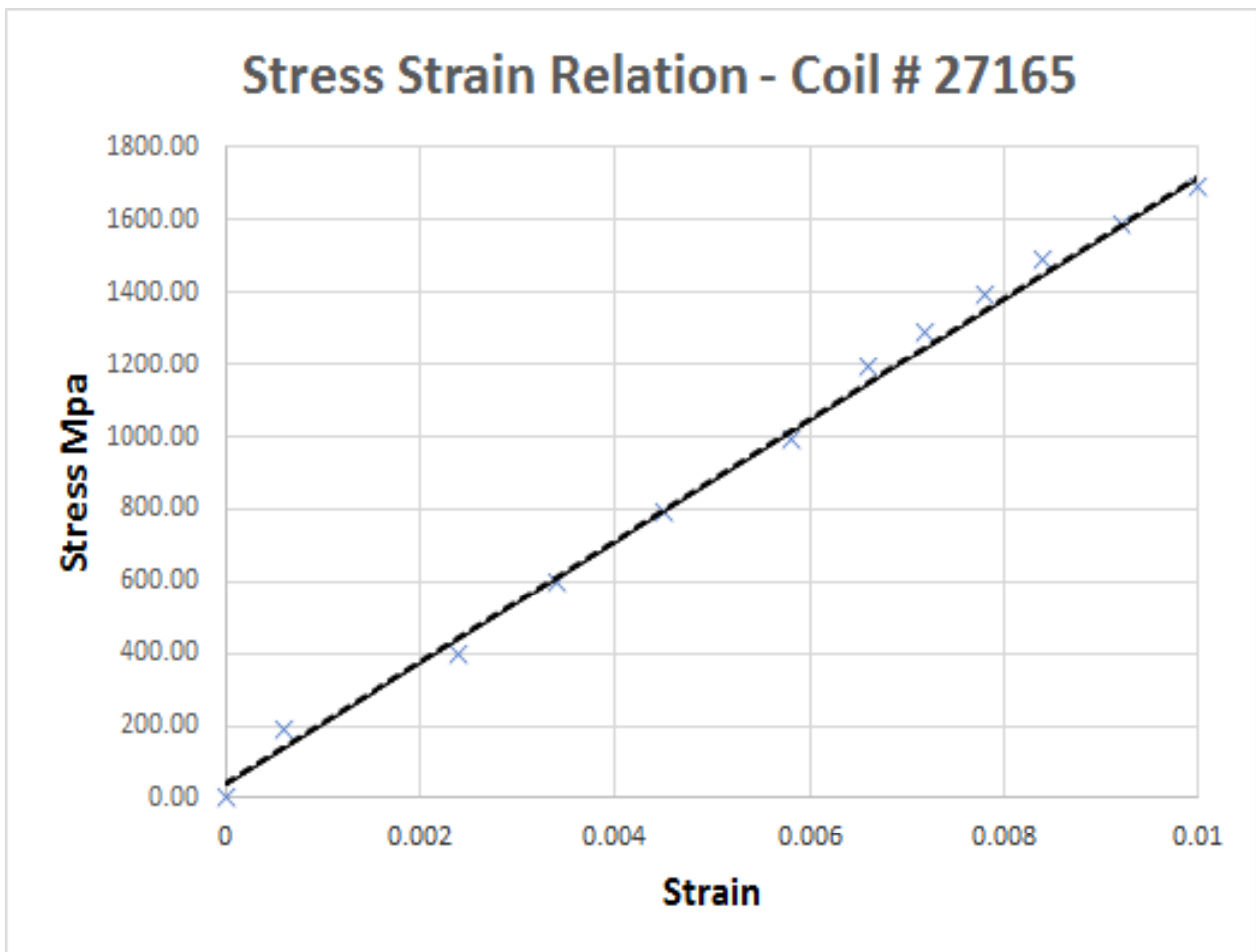
To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-01 & 02)

Reference # CED/TFL **7298** (Dr. M. Kashif)
Reference of the request letter # 4713/RRR/IUK/25/239

Dated: 31-07-2025
Dated: 29-07-2025

Graph (Page – 7/10)



Test Performed and Verified by:

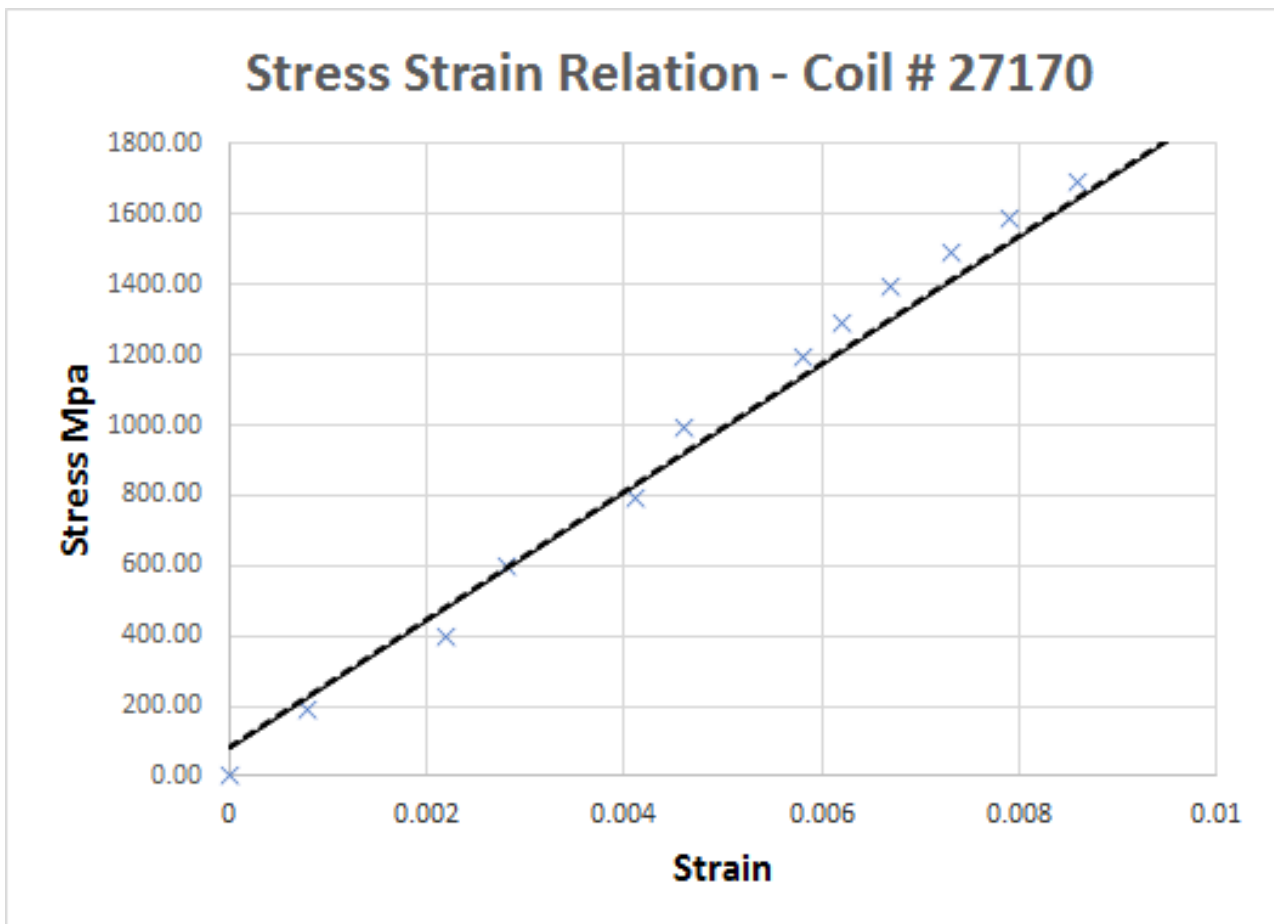
To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-01 & 02)

Reference # CED/TFL **7298** (Dr. M. Kashif)
Reference of the request letter # 4713/RRR/IUK/25/239

Dated: 31-07-2025
Dated: 29-07-2025

Graph (Page – 8/10)



Test Performed and Verified by:

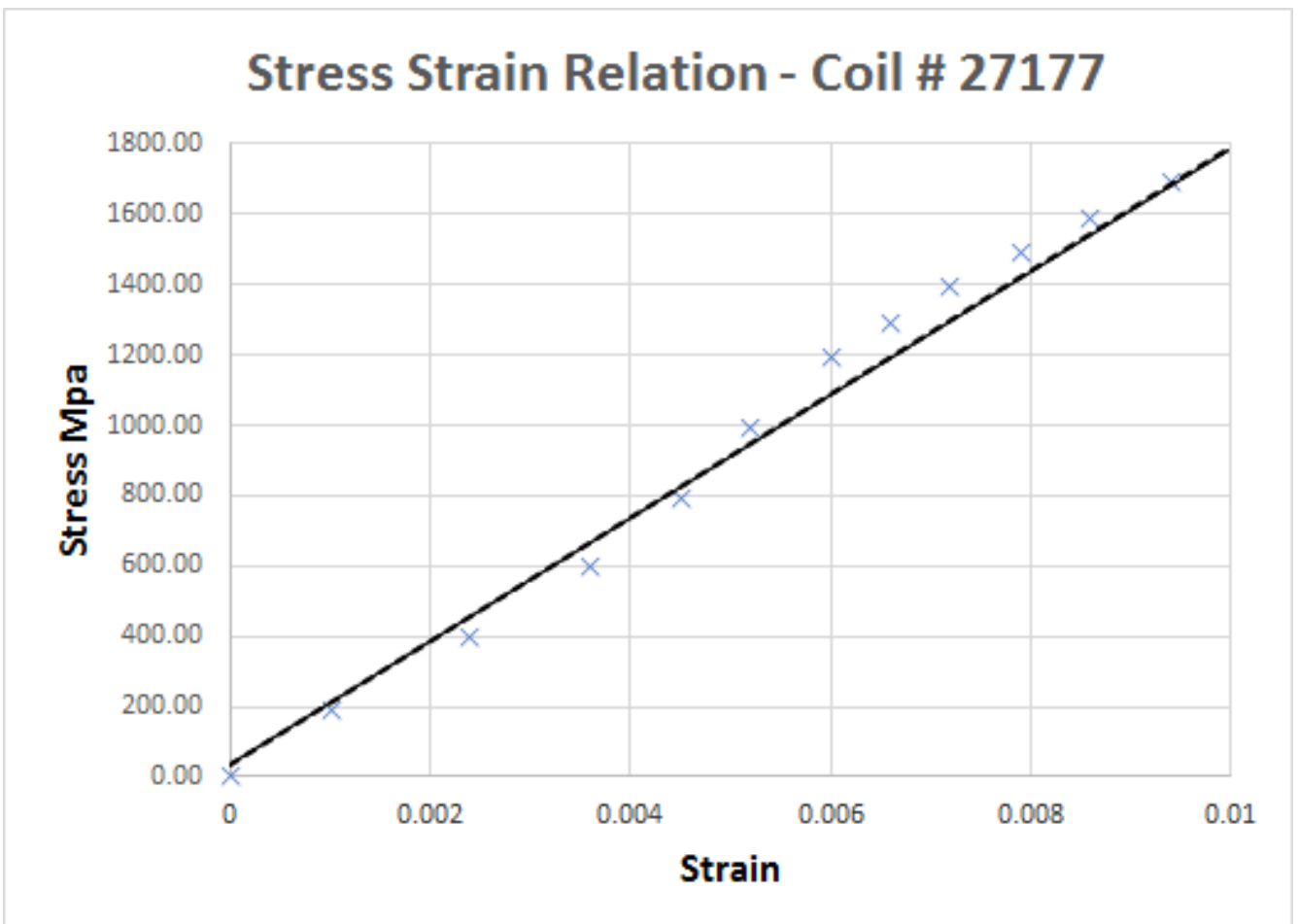
To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-01 & 02)

Reference # CED/TFL **7298** (Dr. M. Kashif)
Reference of the request letter # 4713/RRR/IUK/25/239

Dated: 31-07-2025
Dated: 29-07-2025

Graph (Page – 9/10)



Test Performed and Verified by:

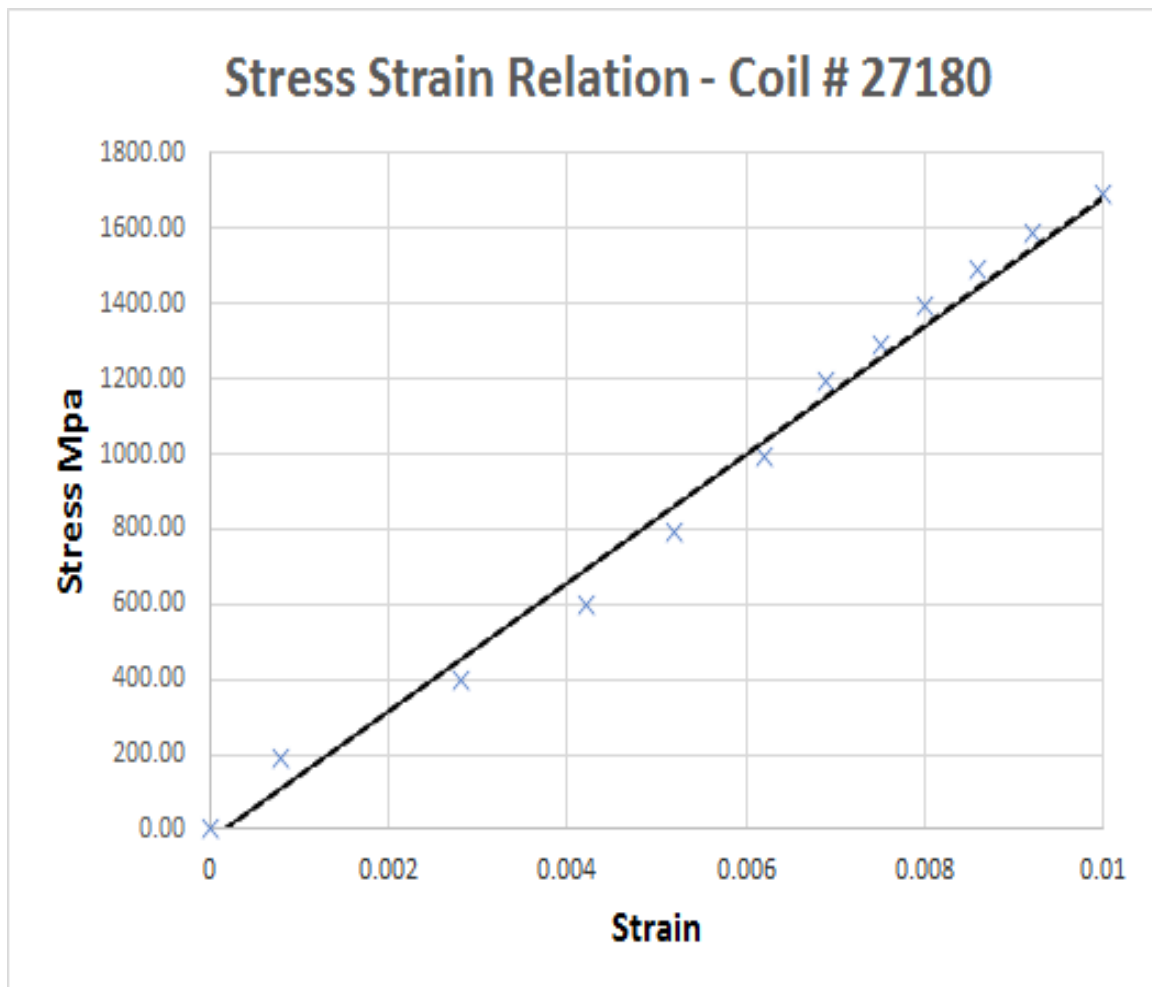
To,

Mr. Ikram Ullah Khan (Resident Engineer)
Nespak (Pvt.) Ltd. (Wire Manufacturing Industry (Pvt.) Ltd.)
Rawalpindi Ring Road Project (P-01 & 02)

Reference # CED/TFL **7298** (Dr. M. Kashif)
Reference of the request letter # 4713/RRR/IUK/25/239

Dated: 31-07-2025
Dated: 29-07-2025

Graph (Page – 10/10)



Test Performed and Verified by:

To,
 Mr. Salman Akbar (Director Projects)
 Ans Associates
 US Embassy Islamabad " Construction of Staircase"

Reference # CED/TFL 7326-31 (Dr. Rizwan Riaz)
 Reference of the request letter # Nil

Dated: 05-08-2025
 Dated: 05-08-2025

Tension Test Report (Page-1/1)

Date of Test 07-08-2025
 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	0.108	3400	4800	68124	69094	96175	97545	1.2	15.0	3/8"
2	0.374	3	0.374	0.110	0.11	3400	4800	68124	68267	96175	96376	1.2	15.0	3/8"
3	0.372	3	0.373	0.110	0.109	3500	4800	70127	70510	96175	96699	0.9	11.3	3/8"
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 3 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. Akhtar Jan
M.D. Construction Co.
Pak Arab Refinery Ltd. Faisalabad Station TS-3, M.P.T Staff Residence

Reference # CED/TFL 7332 (Dr. Rizwan Riaz)

Dated: 06-08-2025

Reference of the request letter # 1

Dated: 06-08-2025

Tension Test Report (Page-1/1)

Date of Test 07-08-2025

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	3500	4600	70127	70314	92167	92413	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. Khalid Bashir
Ittefaq Building Solution (Pvt.) Ltd.
ABL Babar Chowk Branch, Faisalabad

Reference # CED/TFL 7333 (Dr. Rizwan Riaz)
Reference of the request letter # IBS/CGB/ST001

Dated: 06-08-2025
Dated: 06-08-2025

Tension Test Report (Page-1/1)

Date of Test 07-08-2025
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	3600	4700	72131	72331	94171	94432	1.4	17.5	-
2	0.373	3	0.374	0.110	0.11	3600	4700	72131	72379	94171	94494	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,

Director Projects
Sheikhoo Sugar Mills, Steel Division, Anwar Abad Kot Addu, Muzaffargarh
(Sheikhoo Steel)

Reference # CED/TFL 7334 (Dr. Rizwan Riaz)

Dated: 06-08-2025

Reference of the request letter # Nil

Dated: 03-08-2025

Tension Test Report (Page-1/1)

Date of Test 07-08-2025

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	3200	4700	64116	63934	94171	93903	1.6	20.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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,

Engr. Muaz Ali (Project Manager)
MA Engineering Services
Engro Enfrashare B2S Sites

Reference # CED/TFL 7335 (Dr. Rizwan Riaz)
Reference of the request letter # MA/UET/LHR/024

Dated: 06-08-2025
Dated: 08-05-2025

Tension Test Report (Page-1/1)

Date of Test 07-08-2025
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 (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.350	10	0.362	0.120	0.103	3800	4500	69793	81535	82650	96555	0.8	10.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Test Performed and Verified by:

Ref: CED/TFL/08/7337

Dated: 06-08-2025

Dated of Test: 07-08-2025 (Dr. Rizwan Riaz)

To

Mr. Riaz Ahmed (General Manager)
M/s National Technocommercial Services (Private) Limited
Lahore

Subject: - BREAKING LOAD TEST OF LUG No. MK-1 No.59 (NTS with Harding)
(Page # 1/2)

Reference to your Letter No. NTS/DC-Lug59/DC/25-6, dated: 06/08/2025, on the subject cited above. Two Lugs with assembly as received by us have been tested. The results are tabulated as shown below:

Sr. No.	Diameter	Length	Breaking Load	Remarks
	(mm)	(mm)	(kg)	
1	44	66.50	17100	Lug Hook Failure
-	-	-	-	-
-	-	-	-	-
Only one sample for test				

Test Performed and Verified by:

Ref: CED/TFL/08/7337

Dated: 06-08-2025

Dated of Test: 07-08-2025 (Dr. Rizwan Riaz)

To

Mr. Riaz Ahmed (General Manager)
M/s National Technocommercial Services (Private) Limited
Lahore

**Subject: - BREAKING LOAD TEST OF LUG) No. MK-2 No. 43A (ATR) (NTS with
Harding)**
(Page # 2/2)

Reference to your Letter No. NTS/DC-Lug 43A/DC/25-5, dated: 06/08/2025, on the subject cited above. Two Lug with assembly as received by us has been tested. The results are tabulated as shown below:

Sr. No.	Nominal Diameter	Length	Breaking Load	Remarks
	(mm)	(mm)	(kg)	
1	44	59.00	18800	Lug Hook Failure
-	-	-	-	-
-	-	-	-	-
Only one sample for test				

Test Performed and Verified by:

To,

Executive Engineer

Buildings Division, Kasur

Establishment / Revamping of Civil Veterinary Dispensary in Punjab One at CVD Cheena Uttar

UC-120 Tehsil Kot Radha Kishan District Kasur

Reference # CED/TFL 7338 (Dr. Rizwan Riaz)

Dated: 06-08-2025

Reference of the request letter # 6105/D

Dated: 31-07-2025

Tension Test Report (Page-1/1)

Date of Test 07-08-2025

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	0.371	0.110	0.108	3500	5400	70127	71533	108196	110366	1.1	13.8	3/8"
2	0.365	3	0.370	0.110	0.107	3400	5300	68124	69787	106193	108785	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:

To,

Mr. Faheem Ahmed (ARE, Package-I PCP Daska)
MM Pakistan (Pvt.) Ltd.
Construction of Storm Water Drainage in Daska City
(Islamabad Supreme)

Reference # CED/TFL 7339 (Dr. Rizwan Riaz)
Reference of the request letter # DSK/CON/1094/SWD/273/2025

Dated: 06-08-2025
Dated: 20-05-2025

Tension Test Report (Page-1/2)

Date of Test 07-08-2025
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	4900	64116	64159	98178	98243	1.4	17.5	-
2	0.367	3	0.370	0.110	0.108	3200	4800	64116	65464	96175	98196	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,

Mr. Faheem Ahmed (ARE, Package-I PCP Daska)
MM Pakistan (Pvt.) Ltd.
Construction of Storm Water Drainage in Daska City
(Islamabad Supreme)

Reference # CED/TFL 7339 (Dr. Rizwan Riaz)
Reference of the request letter # DSK/CON/1094/SWD/247/2025

Dated: 06-08-2025
Dated: 28-02-2025

Tension Test Report (Page-2/2)

Date of Test 07-08-2025
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	3300	5000	66120	66379	100182	100575	1.4	17.5	-
2	0.366	3	0.370	0.110	0.107	3200	4800	64116	65636	96175	98454	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,

Mr. Muhammad Shafiq (Assistant Resident Engineer)

MM Pakistan (Pvt.) Ltd.

Improvement of Sewerage System and Construction of Waste Water Treatment Plant (WWTP)

Kamalia City (Package-04 Construction of Waste Water Treatment Plant) (FF Steel)

Reference # CED/TFL 7340 (Dr. Rizwan Riaz)

Dated: 07-08-2025

Reference of the request letter # MMP/1095/KCM/WWTP/137/2025

Dated: 06-07-2025

Tension Test Report (Page-1/1)

Date of Test 07-08-2025

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	3100	4300	62113	62944	86156	87310	1.3	16.3	3/8"
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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: