

To,

Engr. Ikram Ullah Khan (Resident Engineer)
NESPAK Pvt. Ltd.
Construction of Rawalpindi Ring Road (P-01)

Reference # CED/TFL **6809** (Dr. M. Kashif)
Reference of the request letter # 4713/RRR/IUK/25/206

Dated: 15-04-2025

Dated: 15-04-2025

Tension Test Report (Page -1/3)

Date of Test 18-04-2025

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	787	17500	171.68	19300	189.33	198	>3.50	26558
2	12.70 (1/2")	780.0	787	17000	166.77	19000	186.39	199	>3.50	26562
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
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

Test Performed and Verified by:

To,

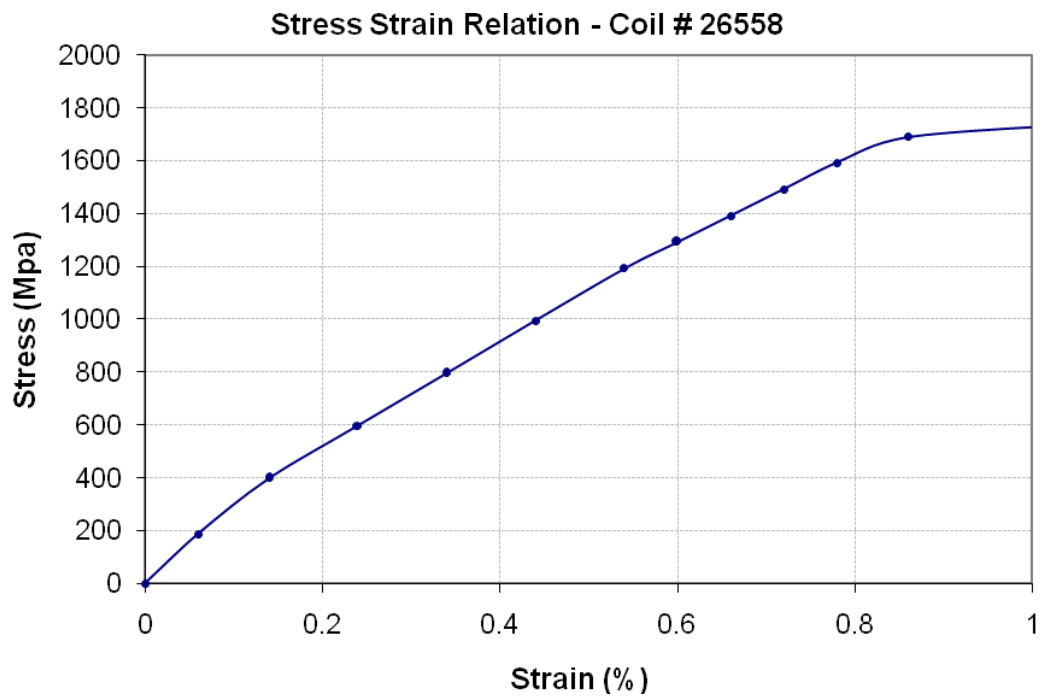
Engr. Ikram Ullah Khan (Resident Engineer)
NESPAK Pvt. Ltd.
Construction of Rawalpindi Ring Road (P-01)

Reference # CED/TFL **6809** (Dr. M. Kashif)
Reference of the request letter # 4713/RRR/IUK/25/206

Dated: 15-04-2025

Dated: 15-04-2025

Graph (Page – 2/3)



Test Performed and Verified by:

To,

Engr. Ikram Ullah Khan (Resident Engineer)
NESPAK Pvt. Ltd.
Construction of Rawalpindi Ring Road (P-01)

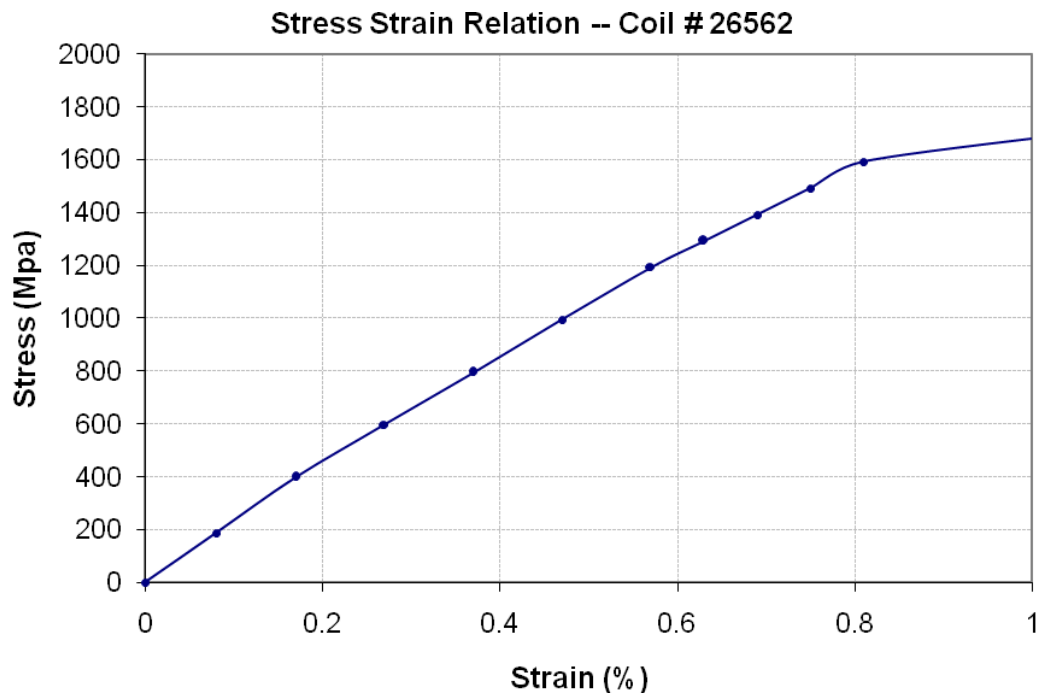
Reference # CED/TFL **6809** (Dr. M. Kashif)

Dated: 15-04-2025

Reference of the request letter # 4713/RRR/IUK/25/206

Dated: 15-04-2025

Graph (Page – 3/3)



Test Performed and Verified by:

To,
XEN Civil,
Civil Works Division No.1,
FESCO, Faisalabad.

Reference # CED/TFL 6817 (Dr. M. Kashif)
Reference of the request letter # Nil

Dated: 15-04-2025
Dated: 15-04-2025

Tension Test Report (Page – 1/2)

Date of Test 18-04-2025

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	% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kg)	E, GPa		
1	11.11 (7/16")	582.0	584.0	9900	12600	199	>3.50	xx
2	11.11 (7/16")	582.0	587.0	12200	13500	198	<3.50	xx
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
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

Test Performed and Verified by:

To,
XEN Civil,
Civil Works Division No.1,
FESCO, Faisalabad.

Reference # CED/TFL 6817 (Dr. M. Kashif)
Reference of the request letter # Nil

Dated: 15-04-2025
Dated: 15-04-2025

Tension Test Report (Page – 2/2)

Date of Test 18-04-2025
Gauge length 8 inches
Description Steel Wire Tensile Test

Sr. No.	Weight	Diameter/ Size		Area (in ²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (mm)	Actual (inch)	Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.104	5	0.198	-	0.031	-	15.70	-	-	-	114900	0.40	5.0	
2	0.103	5	0.197	-	0.030	-	15.70	-	-	-	116000	0.50	6.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: Only Two Samples for Tensile Test														
Bend Test														

Test Performed and Verified by:

To,

Ravi Construction Company
Repetify 2 QABP, Sheikhpura

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Reference # CED/TFL **6821** (Dr. M Kashif)
Reference of the request letter # Nil

Dated: 16-04-2025
Dated: 14-04-2025

Tension Test Report (Page-1/1)

Date of Test 18-04-2025

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 (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.371	3	0.373	0.110	0.109	32.00	46.00	65373	65877	93973	94698	1.5	18.8	3"/8
2	0.369	3	0.372	0.110	0.109	31.50	45.70	64351	65213	93361	94610	1.6	20.0	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,

Mr. Azam Nafees (Construction Project Manager)
Etihad Town Premeir Enclave Raiwind Road, Lahore.
(Al-Aziz Steel)

Reference # CED/TFL **6835** (Dr. M Kashif)
Reference of the request letter # ETPE/2025/025

Dated: 18-04-2025
Dated: 17-04-2025

Tension Test Report (Page-1/1)

Date of Test 18-04-2025

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 (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.378	3	0.376	0.110	0.111	34.70	53.00	70889	70282	108274	107347	1.1	13.8	0
2	0.367	3	0.371	0.110	0.108	34.50	52.50	70480	71871	107252	109369	1.0	12.5	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. Manohar Lal (Resident Engineer)

NESPAK (Pvt.) Ltd.

Construction of Flyover at GT Road-Chan da Qila Chowk in District Gujranwala

Reference # CED/TFL

6825 (Dr. M Kashif)

Dated: 16-04-2025

Reference of the request letter #

4834/103/CQF/ML/Lab/05

Dated: 14-04-2025

Tension Test Report

(Page-1/1)

Date of Test 18-04-2025

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	3680	4820	73734	74676	96575	97810	1	12.5	-
2	0.375	3	0.374	0.110	0.11	3980	5100	79745	79704	102185	102133	0.9	11.3	-
3	4.234	10	1.259	1.270	1.244	34600	51600	60046	61297	89548	91413	1.6	20.0	-
4	4.210	10	1.255	1.270	1.237	39400	56000	68376	70188	97184	99760	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 4 Samples for Tensile and 2 Samples for Bend test

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

Test Performed and Verified by:

Ref: CED/TFL/04/6826

Dated: 16-04-2025

Dated of Test: 18-04-2025

To

**Mr. Abdul Ghafoor
Kescon Builders.**

**Subject: - CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE
(MARK: TFL/04/6826) (Page # 1/1)**

Reference to your Letter No. Nil, dated: 16-04/2025 on the subject cited above. One Hydraulic with Pressure Gauge as received by us has been calibrated. The results are tabulated as under:

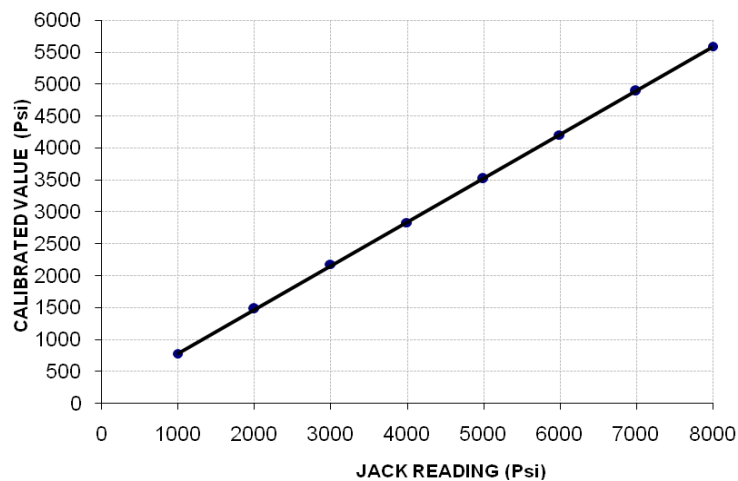
Total Range : Zero - 8000 (Psi)
Calibrated Range : Zero - 75000 (Psi)

Hydraulic Jack Reading (Psi)	1000	2000	3000	4000	5000	6000	7000	8000
Calibrated Load (kg)	10400	19800	29200	38000	47200	56400	65600	75000
Calibrated Pressure (Psi)	775	1476	2177	2833	3518	4204	4890	5591

The Ram Area of Jack = 190.8 cm²

Calibration Curve For Jack

$$\text{Calibrated Value (Psi)} = 0.6851 \times \text{Jack Reading (Psi)} + 100.1$$



Test Performed and Verified by:

To,
 Engr. Muhammad Rizwan Nazir
 MSc. (Structural) Engg.
 Rizwan Nazir Consulting Engineers
 Nazir Feed Mill, Daska, Sialkot

Reference # CED/TFL **6827** (Dr. M. Yousaf)
 Reference of the request letter # Nil

Dated: 16-04-2025
 Dated: 15-04-2025

Tension Test Report (Page – 1/1)

Date of Test 18-04-2025
 Gauge length 2 inches
 Description Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	-----	(mm)	(mm ²)	(kN)	(kN)	(MPa)	(MPa)	(in)		
1	Steel Plate	25.90x16.00	414.40	131.70	198.00	318	478	0.80	40.00	
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only One Sample for Tensile Test										
Bend Test										

Test Performed and Verified by:

To,
Progressive Dynamics (Pvt.) Ltd.

Reference # CED/TFL **6832** (Dr. M. Kashif)
Reference of the request letter # Nil

Dated: 17-04-2025
Dated: 17-04-2025

Tension Test Report (Page – 1/1)

Date of Test 18-04-2025
Gauge length 2 inches
Description Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	-----	(mm)	(mm ²)	(kN)	(kN)	(MPa)	(MPa)	(in)		
1	-	30.90x3.20	98.88	25.00	33.50	253	339	0.60	30.00	
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only One Sample for Tensile Test										
Bend Test										

Test Performed and Verified by:

To,
Rana Ghulam Murtaza (Construction Manager)
De-Orion Mall
Construction o De-Orion Mall, Multan

Reference # CED/TFL **6833** (Dr. M Kashif)
Reference of the request letter # DOM-2025-005

Dated: 18-04-2025
Dated: 17-04-2025

Tension Test Report (Page-1/1)

Date of Test 18-04-2025
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 (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.369	3	0.371	0.110	0.108	34.20	44.00	69867	70918	89888	91240	1.5	18.8	3"/8
2	0.368	3	0.371	0.110	0.108	34.20	44.00	69867	71034	89888	91389	1.3	16.3	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,

Arshad Hussain (Resident Engineer)

Asian Consulting Engineers

Infrastructure Sub-Projects, Sectoral Planning & Resident Supervision in 16 Cities of Punjab-Package No.4

Rain Water Drainage Facilities in Vehari City

Reference # CED/TFL

6834 (Dr. M Kashif)

Dated: 18-04-2025

Reference of the request letter #

AsCE-RHCJV/PMDFC/PKG-04/RE/152

Dated: 14-03-2025

Tension Test Report

(Page-1/1)

Date of Test 18-04-2025

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 (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.368	3	0.371	0.110	0.108	32.70	46.70	66803	67992	95403	97101	1.3	16.3	-
2	0.367	3	0.370	0.110	0.108	33.20	48.50	67824	69234	99081	101139	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:

To,

Mr. Azam Nafees (Construction Project Manager)
Etihad Town Premeir Enclave Raiwind Road, Lahore.
(Al-Aziz Steel)

Reference # CED/TFL **6835** (Dr. M Kashif)
Reference of the request letter # ETPE/2025/025

Dated: 18-04-2025
Dated: 17-04-2025

Tension Test Report (Page-1/1)

Date of Test 18-04-2025

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 (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.378	3	0.376	0.110	0.111	34.70	53.00	70889	70282	108274	107347	1.1	13.8	0
2	0.367	3	0.371	0.110	0.108	34.50	52.50	70480	71871	107252	109369	1.0	12.5	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: