



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 Ann Global Private Limited
Lahore
(PCC poles at Sahiwal Pole Plant)

Reference # CED/TFL **1367** (Dr. Ali Ahmed)
Reference of the request letter # NAMCO/UET/2022-2022

Dated: 12-05-2022
Dated: 11-05-2022

Tension Test Report (Page – 1/1)

Date of Test 18-05-2021
Gauge length 640 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	9.53 (3/8")	432.0	436.0	9900	97.12	11000	107.91	>3.50	xx
2	9.53 (3/8")	432.0	435.0	9800	96.14	11100	108.89	>3.50	xx
3	11.11 (7/16")	582.0	594.0	11000	107.91	14300	140.28	>3.50	xx
4	11.11 (7/16")	582.0	594.0	12000	117.72	14300	140.28	>3.50	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

Only four samples for Test

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
NESPAK
Construction of Circular Bypass Road Bannu

Reference # CED/TFL **1369** (Dr. Ali Ahmed)
Reference of the request letter # 4040/021/SK/02/0375

Dated: 12-05-2022
Dated: 12-05-2022

Tension Test Report (Page -1/4)

Date of Test 18-05-2022
Gauge length 640 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)			
1	12.70 (1/2")	775.0	779.0	17100	167.75	19200	188.35	199	>3.50	xx
2	12.70 (1/2")	775.0	777.0	17100	167.75	19200	188.35	198	>3.50	xx
3	12.70 (1/2")	775.0	778.0	17200	168.73	19200	188.35	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

Only three 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 Laboratories
UET Lahore, Pakistan.

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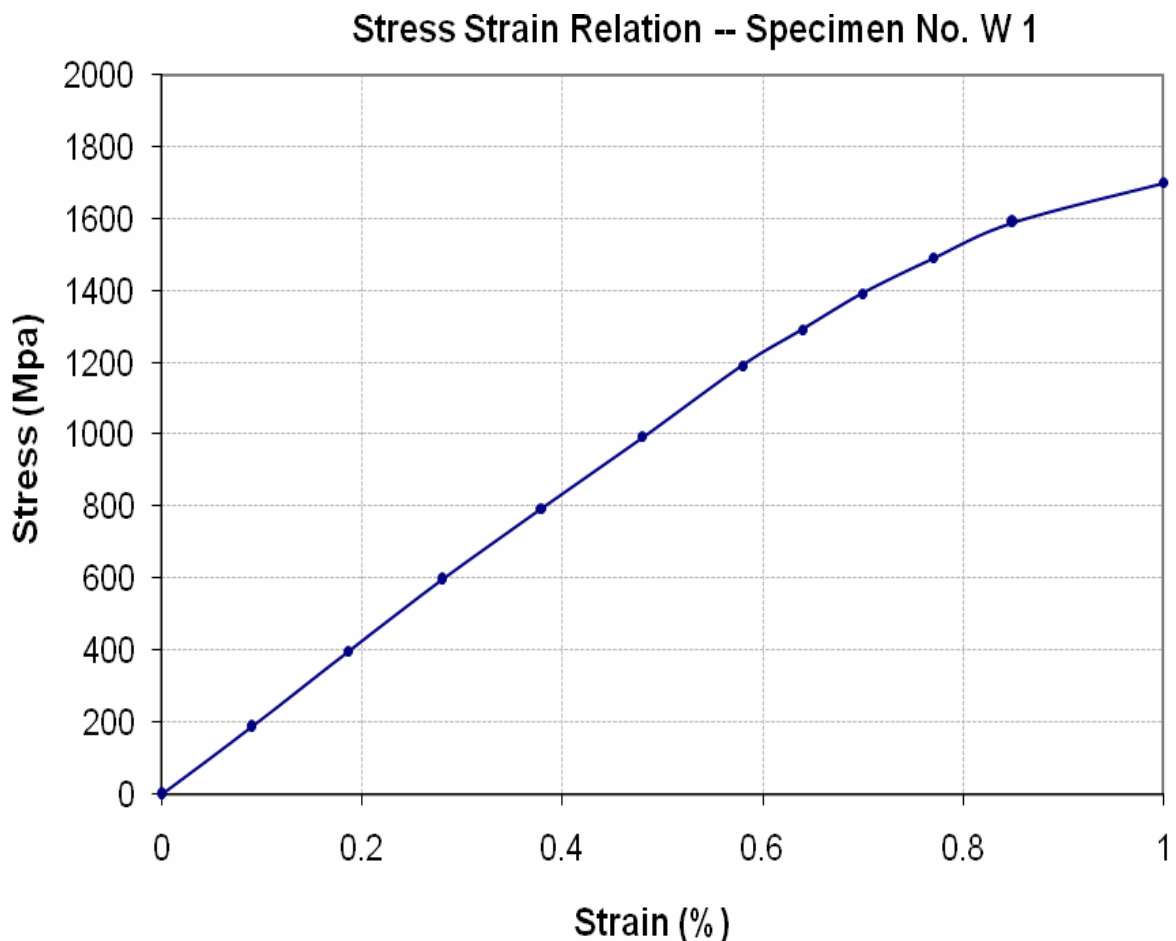
STRUCTURAL ENGINEERING DIVISION
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To,
Resident Engineer
NESPAK
Construction of Circular Bypass Road Bannu

Reference # CED/TFL 1369 (Dr. Ali Ahmed)
Reference of the request letter # 4040/021/SK/02/0375

Dated: 12-05-2022
Dated: 12-05-2022

Graph (Page – 2/4)



I/C Testing Laboratories
UET Lahore, Pakistan.

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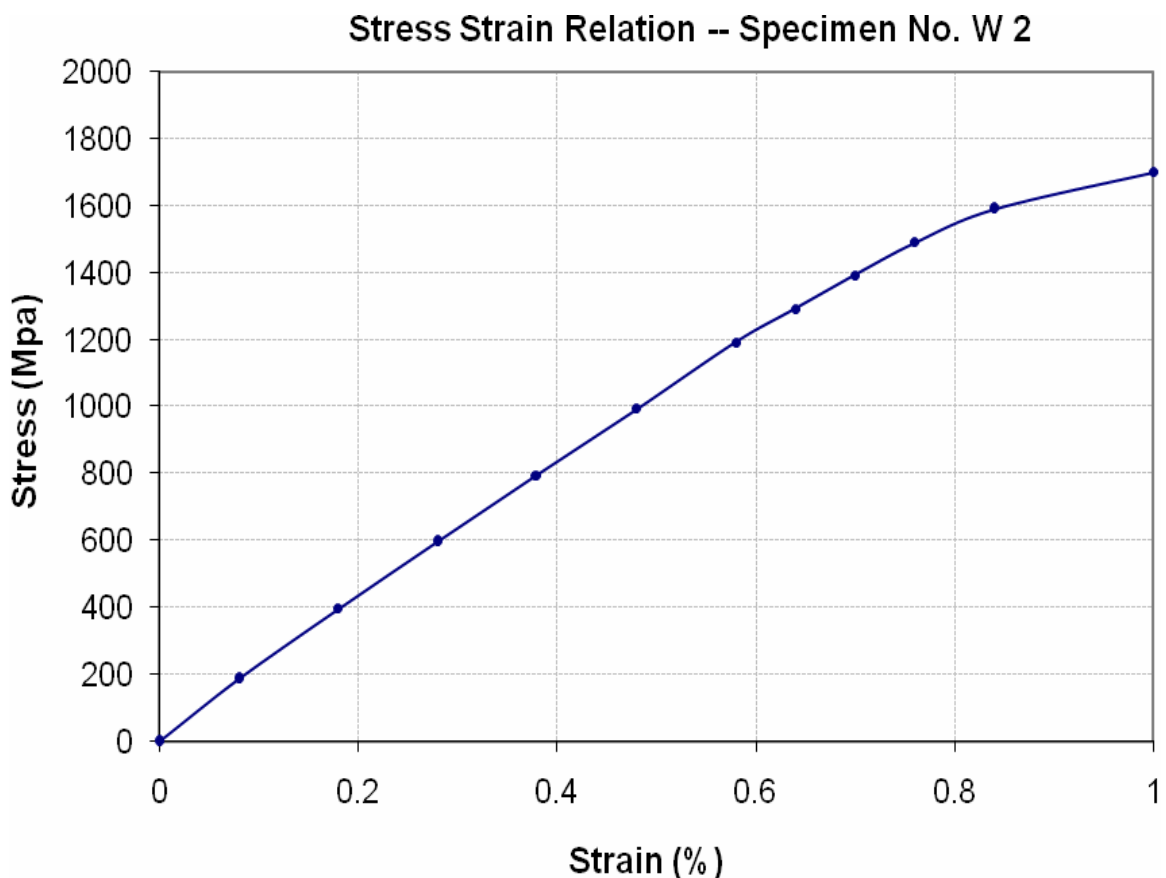
STRUCTURAL ENGINEERING DIVISION
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To,
Resident Engineer
NESPAK
Construction of Circular Bypass Road Bannu

Reference # CED/TFL **1369** (Dr. Ali Ahmed)
Reference of the request letter # 4040/021/SK/02/0375

Dated: 12-05-2022
Dated: 12-05-2022

Graph (Page – 3/4)



I/C Testing Laboratories
UET Lahore, Pakistan.

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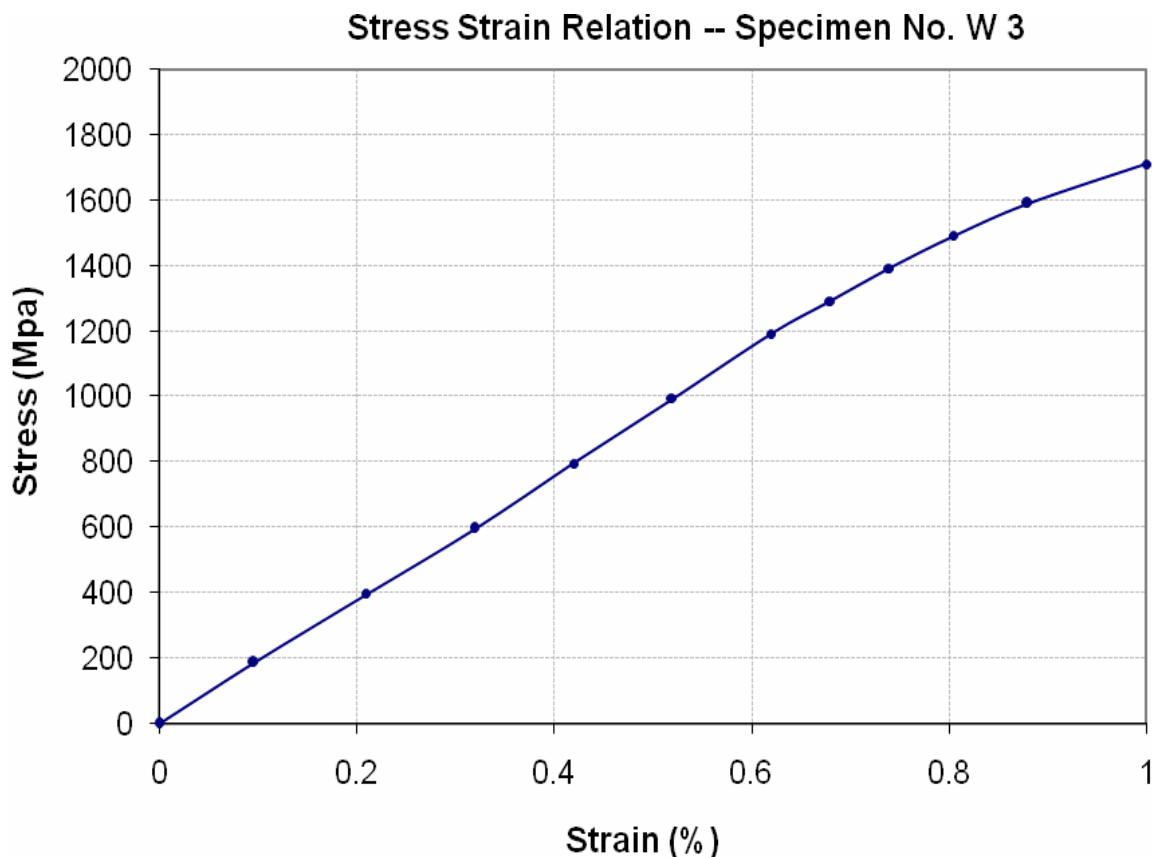
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To,
Resident Engineer
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Construction of Circular Bypass Road Bannu

Reference # CED/TFL **1369** (Dr. Ali Ahmed)
Reference of the request letter # 4040/021/SK/02/0375

Dated: 12-05-2022
Dated: 12-05-2022

Graph (Page – 4/4)



I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
Sr. Manager Projects
Izhar Group of Companies
Commercial Building for Mix-Use Development DB-32, Plot # 29/B, Sec.C. Phase-III, DHA
Lahore
Reference # CED/TFL **1378** (Dr. Ali Ahmed) Dated: 13-05-2022
Reference of the request letter # ICPL/DB-32-PILES/2022/0513 Dated: 13-05-2022

Tension Test Report (Page – 1/1)

Date of Test 18-05-2021
Gauge length 640 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	12.70 (1/2")	432.0	782.0	17400	170.69	19500	191.30	>3.50	xx
2	12.70 (1/2")	582.0	784.0	17400	170.69	19500	191.30	>3.50	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

Only two samples for Test

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
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To,
M/S Vision Engineering (Pvt) Ltd
Lahore

Reference # CED/TFL **1382** (Dr. Ali Ahmed)
Reference of the request letter # VECO/2022/0513/6870

Dated: 13-05-2022

Dated: 13-05-2022

Tension Test Report (Page – 1/1)

Date of Test 18-05-2021
Gauge length 640 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	9.53 (3/8")	432.0	431.0	9700	95.16	10700	104.97	>3.50	xx
2	11.11 (7/16")	582.0	587.0	10900	106.93	13000	127.53	>3.50	xx
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only two samples for Test									

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
Sr. Project Manager
Country Developer (Pvt) Ltd
Lahore Medical and Dental College Teaching Hospital

Reference # CED/TFL **1391** (Dr. Ali Ahmed)
Reference of the request letter # CD-02-Testing/con/LMDC

Dated: 16-05-2022
Dated: 16-05-2022

Tension Test Report (Page -1/2)

Date of Test 18-05-2022
Gauge length 640 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")	775.0	774.0	17300	169.71	19600	192.28	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
Only one sample 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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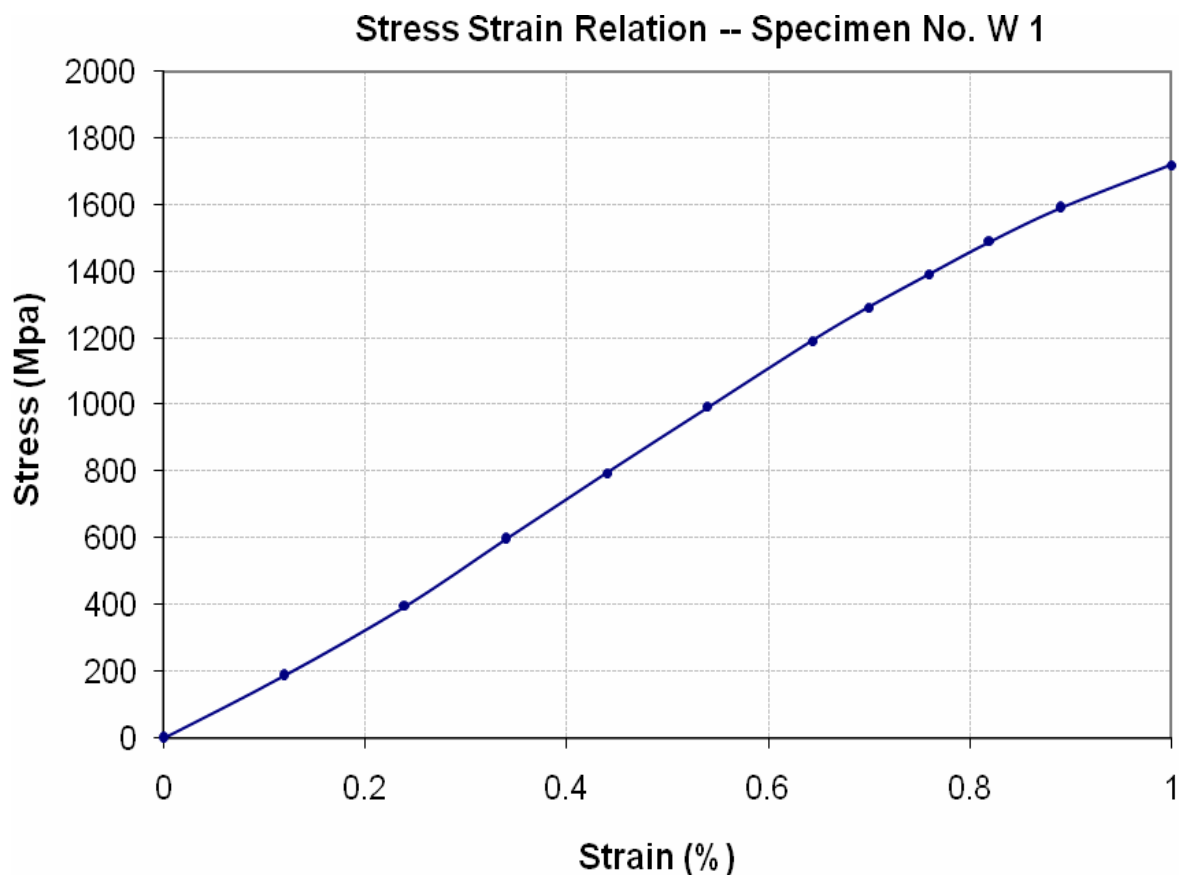
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To,
Sr. Project Manager
Country Developer (Pvt) Ltd
Lahore Medical and Dental College Teaching Hospital

Reference # CED/TFL 1391 (Dr. Ali Ahmed)
Reference of the request letter # CD-02-Testing/con/LMDC

Dated: 16-05-2022
Dated: 16-05-2022

Graph (Page – 2/2)



I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/05/1393

Dated: 16-05-2022

Dated of Test: 18-05-2022

To

M/S Wahga Pipes
Lahore

Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE
(MARK: TFL/05/1121)

Reference to your Letter No. Nil, Dated: 16/05/2022 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

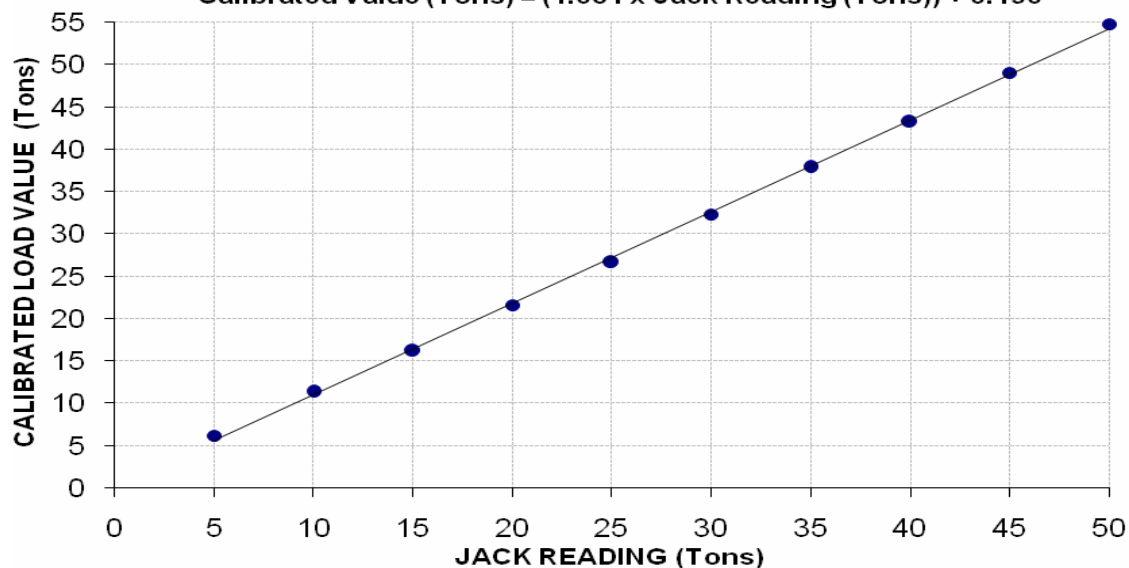
Total Range : Zero - 70 (Ton)
Calibrated Range : Zero - 50 (Ton)

Hydraulic Jack Reading (Ton)	5	10	15	20	25	30	35	40	45	50	
Calibrated Load	(kg)	5600	10300	14700	19600	24200	29400	34400	39300	44600	49800
	(Ton)	6.17	11.34	16.19	21.58	26.65	32.37	37.88	43.27	49.11	54.83

1000 Kg = 1.1011 Ton

Calibration Curve For Jack

Calibrated Value (Tons) = (1.081 x Jack Reading (Tons)) + 0.190



I/C Testing Laboratoires
UET Lahore, Pakistan.

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

To,
 Ikram Amjad
 Lahore

Reference # CED/TFL **1404** (Dr. Ali Ahmed)
 Reference of the request letter # Nil

Dated: 18-05-2022
 Dated: 18-05-2022

Tension Test Report (Page -1/1)

Date of Test 18-05-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.370	3	0.372	0.11	0.109	3260	4690	65400	66070	94000	95100	1.20	15.0	
-	0.370	3	0.372	0.11	0.109	3310	4690	66400	67000	94000	95000	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

Witness by Engr. Allah Nawaz (Senior Officer UMT) and Muhammad Zahid Ali (Ittefaq Steel)

I/C Testing Laboratoires
UET Lahore, Pakistan.

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