

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

To,

M/S Vision Engineering (Pvt) Ltd. Lahore

Reference # CED/TFL **<u>2362</u>** (Dr. M Rizwan Riaz) Reference of the request letter # VECO/2022/1128/7542 Dated: 28-11-2022 Dated: 28-11-2022

## **Tension Test Report**(Page -1/2)Date of Test01-12-2022

Date of Test01-12Gauge length8 incDescriptionPlain

8 inches Plain Steel Bar Tensile Test

Sr. No.	Weight	Diameter/ size		Area (mm²)		Yield load	Breaking Load	Yield Stress (MPa)	Ultimate Stress (MPa)	Elongation	Elongation	Remarks	
	(kg/m)	Nominal (mm)	Actual (mm)	Nominal	Actual	(kg)	(kg)	Actual	Actual	(inch)	0%	1	
1	0.154	5	5.00		19.60		1600		800	0.4	5.0		
-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-		
	Note: only one sample for tensile test												
						Bend 7	Гest						

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\_reports
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### **Tension Test Report** (Page -2/2)

Date of Test01-12-2022Gauge length640 mmDescriptionSteel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause	trength e (6.3)	Breal strength (6.2	king clause 2)	Elongation	arks/ Coil No.			
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	%	Rem			
1	9.53 (3/8")	432.0	433.0	9100	89.27	10900	106.93	>3.50	XX			
-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
	Only two samples for Test											

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

To,

Sub Divisional Officer (Buildings) Sub Division Ferozewala (Construction of Judicial Academy at Lahore Kala Shah Kaku, Lahore)

Reference # CED/TFL 2378 (Dr. M Rizwan Riaz) Reference of the request letter # 5005/F Dated: 30-11-2022 Dated: 17-11-2022

# Tension Test Report(Page -1/1)Date of Test01-12-2022Gauge length8 inchesDescriptionDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Dian Si (in	Diameter/ Size (inch)		Diameter/ Size (in (inch)		Area (in <sup>2</sup> )		Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	longation	emarks
	(lls/fl)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R		
1	0.384	3/8	0.379	0.11	0.113	3380	5170	67800	66000	103600	101000	1.20	15.0	I		
2	0.390	3/8	0.382	0.11	0.115	3490	5320	70000	67120	106600	102400	1.10	13.8	Stee		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	ſS		
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		1	N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test					
							Bend T	est								
3/8	" Dia Ba	ar Bend	Test Tl	nrough	180° is S	Satisfacto	ory									

#### 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,

Resident Engineer NESPAK Dualization of Road from Gujranwala to M-2 Interchange at Kot Sawar via Hafizabad km 6.20 to km 80.35 Length 74.15 km in District Gujranwala & Hafizabad

Reference # CED/TFL 2379 (Dr. M Rizwan Riaz)	Dated: 30-11-2022
Reference of the request letter # SA-466F/103/GH/ML/Lab/57	Dated: 29-11-2022

#### **Tension Test Report** (Page -1/4)

Date of Test01-12-2022Gauge length640 mmDescriptionSteel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield st clause	trength e (6.3)	Brea strei clause	king ngth e (6.2)	Young's Modulus of Elasticity "E"	Elongation	rtks / Coil No.		
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa	%	Rema		
1	12.70 (1/2")	775.0	787	17200	168.73	19100	187.37	198	>3.50	143		
2	12.70 (1/2")	775.0	785	17300	169.71	19200	188.35	199	>3.50	143		
3	12.70 (1/2")	775.0	793	17700	173.64	19300	189.33	199	>3.50	145		
-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-	-			
	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 Laboratoires UET Lahore, Pakistan.

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To,

#### STRUCTURAL ENGINEERING DIVISION

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

Resident Engineer NESPAK Dualization of Road from Gujranwala to M-2 Interchange at Kot Sawar via Hafizabad km 6.20 to km 80.35 Length 74.15 km in District Gujranwala & Hafizabad

Reference # CED/TFL 2379 (Dr. M Rizwan Riaz)Dated: 30-11-2022Reference of the request letter # SA-466F/103/GH/ML/Lab/57Dated: 29-11-2022

Graph (Page - 2/4)



I/C Testing Laboratoires UET Lahore, Pakistan.

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To,

### STRUCTURAL ENGINEERING DIVISION

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

Resident Engineer NESPAK Dualization of Road from Gujranwala to M-2 Interchange at Kot Sawar via Hafizabad km 6.20 to km 80.35 Length 74.15 km in District Gujranwala & Hafizabad

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Graph (Page - 3/4)



I/C Testing Laboratoires UET Lahore, Pakistan.

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To,

Resident Engineer NESPAK Dualization of Road from Gujranwala to M-2 Interchange at Kot Sawar via Hafizabad km 6.20 to km 80.35 Length 74.15 km in District Gujranwala & Hafizabad

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Graph (Page - 4/4)



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,

Sub Divisional Officer Public Health Engg: Sub Division Sargodha (Water Supply Scheme Cheema Colony District Sargodha)

Reference # CED/TFL **<u>2381 (Dr. Waseem Abbass)</u>** Reference of the request letter # 559 Dated: 30-11-2022 Dated: 16-11-2022

## Tension Test Report(Page -1/1)Date of Test01-12-2022Gauge length8 inchesDescriptionDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Dian Si (in	neter/ ze ch)	Aı (iı	rea 1 <sup>2</sup> )	Yield load	Breaking Load	Yield (p	Stress si)	Ultimat (p	Iltimate Stress (psi)		longation	emarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.365	3/8	0.370	0.11	0.107	3360	4950	67400	69040	99200	101800	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
							Bend T	est						
3/8	" Bar B	end Tes	st Throu	igh 180	o is Sati	sfactory								

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,

M/S Prime Steel Re-Rolling Mills Sheikhupura

Reference # CED/TFL **2384** (Dr. M Rizwan Riaz) Reference of the request letter # Nil

Dated: 01-12-2022 Dated: 01-12-2022

#### **Tension Test Report** (Page -1/1) Date of Test 01-12-2022 Gauge length 8 inches Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Elongation **Yield load** Breaking Weight Load Yield Stress **Ultimate Stress** Diameter/ Area % Elongation Size (in<sup>2</sup>) (psi) (psi) Remarks Sr. No. Nominal Nominal Nominal Nominal (lbs/ft) Actual Actual (inch) (inch) Actual Actual (# (kg) (kg) 0.408 3 0.391 0.11 0.120 3920 78600 72080 111500 102300 20.0 1 5560 1.60 **Prime Steel** 0.399 3 0.386 0.117 3960 5200 79400 74450 104200 97800 1.20 15.0 2 0.11 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ -\_ -----\_ ----\_ -\_ \_ -\_ \_ \_ \_ -\_ -Note: only two samples for tensile and two samples for bend test Bend Test #3 Bar Bend Test Through 180° is Satisfactory #3 Bar Bend Test Through 180° is Satisfactory

> I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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2. The above results pertain to sample /samples supplied to this laboratory.

Sealed sample / Unsealed sample / Marked sample/Signed Samples 3-