



**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 Ibrahim Nizami Wire Ind. (Pvt) Ltd  
Lahore

Reference # CED/TFL **2158** (Dr. Rizwan Azam)  
Reference of the request letter # Nil

Dated: 21-10-2022

Dated: 20-10-2022

**Tension Test Report** (Page – 1/1)

Date of Test 27-10-2022

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)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	432.0	439	8500	83.39	11000	107.91	>3.50	xx
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
<b>Only one sample for Test</b>									

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

- 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](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Deputy Manager Civil  
Nishat Denim  
“Construction Bridge for Nishat Mills Ltd Denim Division Unit 67” Bhikhi Sheikhpura

Reference # CED/TFL **2179** (Dr. Rizwan Azam)  
Reference of the request letter # NML/DENIM/ST/004

Dated: 25-10-2022  
Dated: 21-10-2022

**Tension Test Report** (Page -1/3)

Date of Test 27-10-2022  
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	783.0	17100	167.75	19700	193.26	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only one sample for Test</b>										

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

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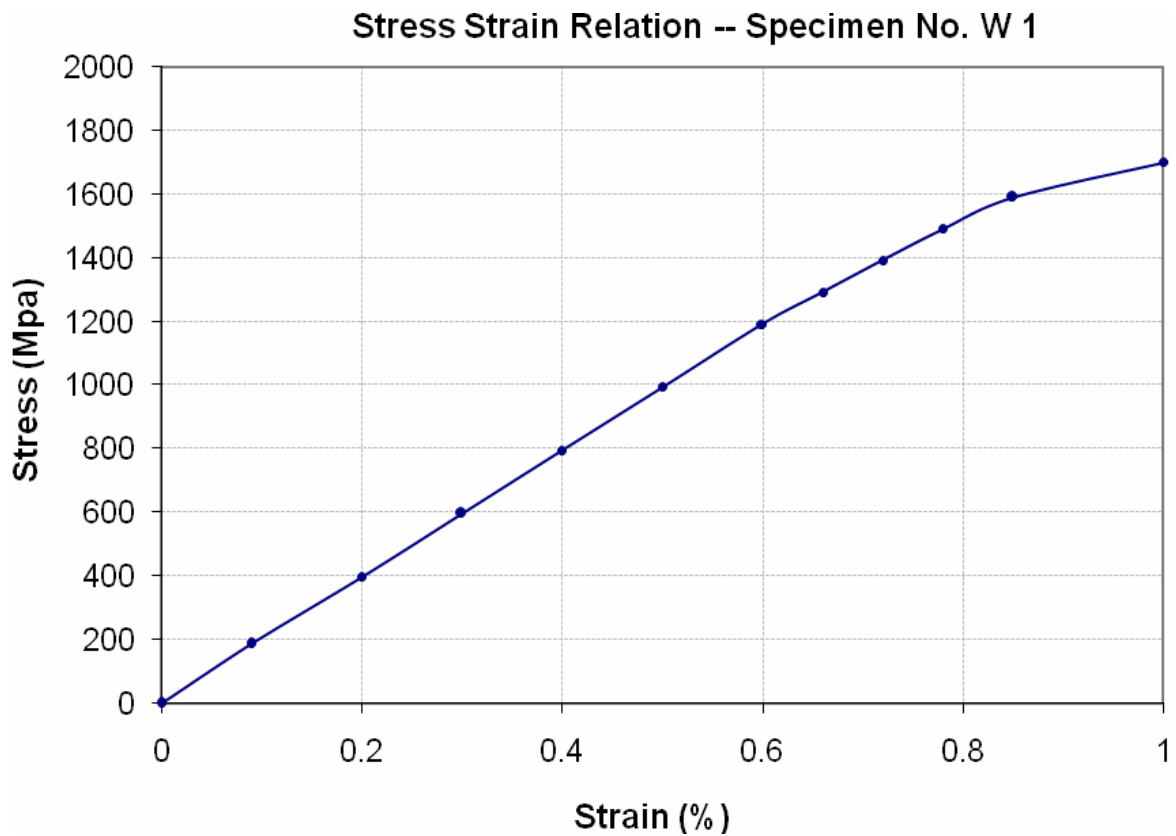
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To,  
Deputy Manager Civil  
Nishat Denim  
“Construction Bridge for Nishat Mills Ltd Denim Division Unit 67” Bhikhi Sheikhpura

Reference # CED/TFL 2179 (Dr. Rizwan Azam)  
Reference of the request letter # NML/DENIM/ST/004

Dated: 25-10-2022  
Dated: 21-10-2022

**Graph** (Page – 2/2)



**I/C Testing Laboratories**  
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To,  
 Senior Manager Project – Civil  
 Vision Packaging  
 Volka Food International Limited  
 Multan

Reference # CED/TFL **2181** (Dr. Rizwan Azam)  
 Reference of the request letter # VFI/Civil/16

Dated: 25-10-2022  
 Dated: 25-10-2022

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

Date of Test 27-10-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.036	1.25	1.229	1.27	1.186	31600	50200	54900	58710	87200	93300	1.70	21.3	
2	4.187	1.25	1.252	1.27	1.231	42400	53800	73600	75940	93400	96400	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
1.25" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
M/S Beacon Impex  
34 – km Sheikhpura Road, Faisalabad  
(Construction of Multi Storey Polyester Building at Beacon Impex II.)  
(M/s M. Saleem Construction Company)

Reference # CED/TFL **2186** (Dr. Rizwan Azam)  
Reference of the request letter # Nil

Dated: 26-10-2022  
Dated: 24-10-2022

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

Date of Test 27-10-2022  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		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	0.360	3	0.367	0.11	0.106	3100	4700	62200	64600	94200	98000	1.30	16.3	Mehran Metro
2	0.369	3	0.372	0.11	0.109	3200	4900	64200	64980	98200	99500	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**University of Engineering and Technology Lahore, 54890**  
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To,  
 Muddasir Ali  
 Lahore

Reference # CED/TFL **2187** (Dr. Rizwan Azam)  
 Reference of the request letter # Nil

Dated: 26-10-2022  
 Dated: 26-10-2022

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

Date of Test 27-10-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		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	0.373	3	0.374	0.11	0.110	4200	5400	84200	84340	108200	108500	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
M/S Rahat Hafeez Builders

Reference # CED/TFL **2189** (Dr. Rizwan Azam)  
Reference of the request letter # Nil

Dated: 26-10-2022  
Dated: 26-10-2022

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

Date of Test 27-10-2022  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		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	0.373	3	0.373	0.11	0.110	3700	4800	74200	74480	96200	96700	0.75	9.4	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
 Project Manager  
 Izhar Construction (Pvt) Ltd  
 OMBRe' Holdings Pvt Ltd Raiwind, Lahore

Reference # CED/TFL **2190** (Dr. Rizwan Azam)  
 Reference of the request letter # OMBRe'/Mughal/Steel/010

Dated: 26-10-2022  
 Dated: 24-10-2022

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

Date of Test 27-10-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.393	10	9.74	0.12	0.116	4200	5500	77161	80110	101044	104900	1.10	13.8	Ittefaq Steel
2	0.378	10	9.56	0.12	0.111	3600	5300	66138	71380	97370	105100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**Pakistan. Ph: 92-42-99029202**

To,  
 Resident Engineer  
 Metroplan – Asian Consulting Engineers  
 Hazrat Hameed-ud-Din Hakim Surgical Complex, Sheikh Zayed Medical College / Hospital  
 Rahim Yar Khan.

Reference # CED/TFL **2194** (Dr. Rizwan Azam)

Dated: 26-10-2022

Reference of the request letter # RE/HHHSC/AsCE/UET/07

Dated: 24-10-2022

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

Date of Test 27-10-2022

Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		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	0.410	3	0.392	0.11	0.120	3900	5700	78200	71390	114300	104400	1.00	12.5	Agha Steel
2	0.378	3	0.376	0.11	0.111	3500	4800	70200	69510	96200	95400	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two sample for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**University of Engineering and Technology Lahore, 54890**  
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To,  
 Project Director  
 Overseas Construction Co. (Pvt) Ltd  
 Gulberg City Centre, Lahore

Reference # CED/TFL **2197** (Dr. Asif Hameed)  
 Reference of the request letter # OCC/Steel/07

Dated: 27-10-2022  
 Dated: 27-10-2022

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

Date of Test 27-10-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	4.247	10	1.261	1.27	1.248	36400	51000	63200	64260	88600	90100	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**Pakistan. Ph: 92-42-99029202**

To,  
 Head/ Manager Projects  
 Shaukat Khanum Memorial Trust  
 Construction of Multi-Storied Parking Garage SKMCH & RC, Lahore

Reference # CED/TFL **2198** (Dr. Nauman Khurram)  
 Reference of the request letter # SKM/PG/UET/10/18

Dated: 27-10-2022  
 Dated: 27-10-2022

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

Date of Test 27-10-2022  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		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	0.373	3	0.374	0.11	0.110	3870	5070	77600	77740	101600	101900	1.30	16.3	FF Steel
2	0.368	3	0.371	0.11	0.108	3690	4740	74000	75130	95000	96500	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

Witness by M. Bilal Khalid (Civil Engr. SKMCH)

**I/C Testing Laboratoires**  
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