



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

To,  
M.E  
AS Enterprises  
Style Textile Manga / Style Textile Rewind  
(AA Associates)(Afco Steel))

Reference # CED/TFL **35376** (Dr. M Rizwan Riaz)  
Reference of the request letter # USD/ASE/24

Dated: 17-09-2020  
Dated: 17-09-2020

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

Date of Test 18-09-2020  
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	0.493	10	10.91	0.12	0.145	4200	5400	77161	63890	99207	82200	1.20	15.0	
2	0.496	10	10.94	0.12	0.146	4200	5400	77161	63540	99207	81700	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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.**

Note:

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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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To,  
 Act. Director (Civil)  
 KCI

Reference # CED/TFL **35377** (Dr. Qasim Khan)  
 Reference of the request letter # B

Dated: 18-09-2020  
 Dated: 17-06-2020

**Tension Test Report** (Page -1/2)

Date of Test 18-09-2020  
 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	0.399	3	0.386	0.11	0.117	3400	5100	68200	63960	102200	96000	1.00	12.5	
2	0.382	3	0.378	0.11	0.112	3200	5000	64200	62800	100200	98200	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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**UET Lahore, Pakistan.**

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To,  
 Act. Director (Civil)  
 KCI

Reference # CED/TFL **35377** (Dr. Qasim Khan)  
 Reference of the request letter # A

Dated: 18-09-2020  
 Dated: 17-06-2020

**Tension Test Report** (Page -2/2)

Date of Test 18-09-2020  
 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	0.380	3	0.377	0.11	0.112	3500	5000	70200	69020	100200	98600	1.10	13.8	
2	0.377	3	0.375	0.11	0.111	3300	5000	66200	65710	100200	99600	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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To,  
Resident Engineer  
ACE, Kohat  
Dualization of Sherkot – Hangu Section of Provincial Highway S-7 (24 km)

Reference # CED/TFL **35379** (Dr. M Rizwan Riaz)  
Reference of the request letter # ACE/KHT/SHRP/687

Dated: 17-09-2020  
Dated: 17-09-2020

**Tension Test Report** (Page – 1/2)

Date of Test 18-09-2020  
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	18600	182.47	20000	196.20	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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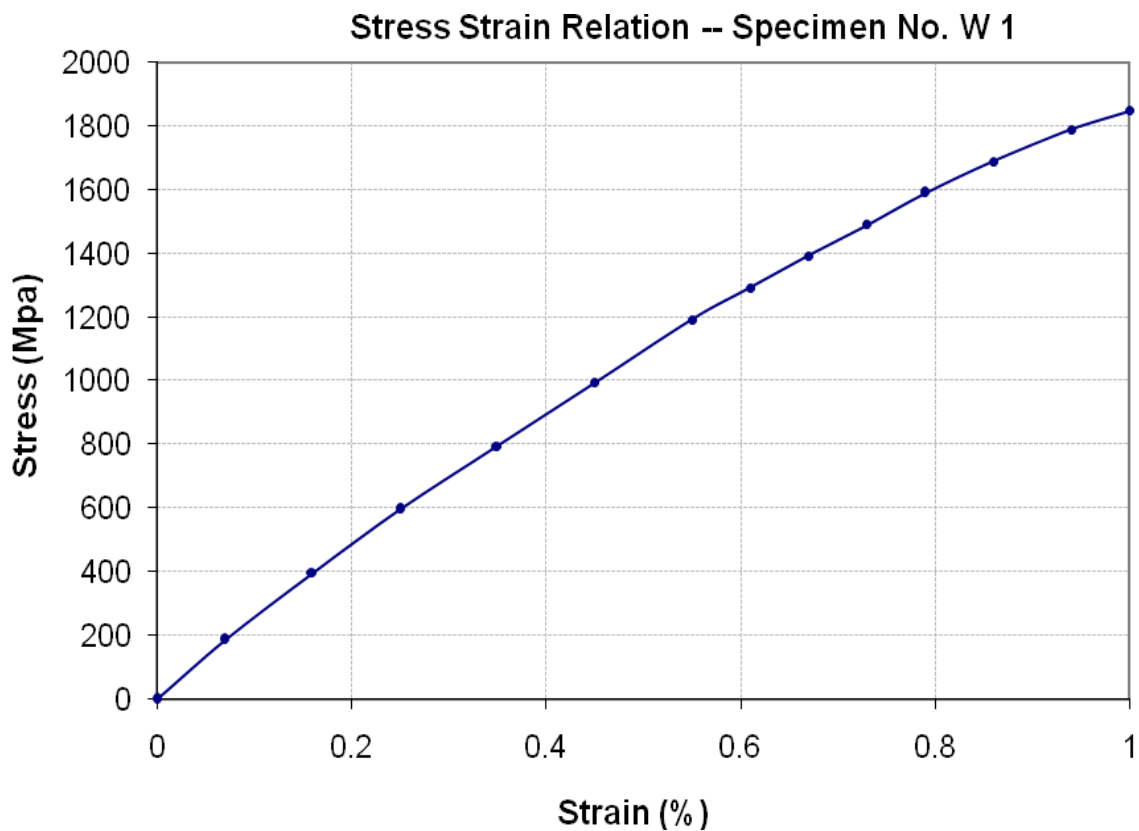
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**Graph** (Page – 2/2)



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