

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

To, Assistant Director-II Building Research Station Lahore (Ittefaq Steel)

Reference # CED/TFL **34233** (Dr. Qasim Khan) Reference of the request letter # 154-R/3364 Dated: 29-11-2019 Dated: 29-11-2019

<b>Tension Test Re</b>	<b>port</b> (Page -1/1)
Date of Test	06-12-2019
Gauge length	8 inches
Description	Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	M M M M Diamete Size		Δrea				Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Grade
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Ŭ
1	0.376	3	0.375	0.11	0.110	3100	4400	62200	61860	88200	87800	1.40	17.5	40
2	0.377	3	0.375	0.11	0.111	3400	5250	68200	67710	105200	104600	1.30	16.3	60
3	4.290	10	1.267	1.27	1.261	45000	58000	78100	78660	100700	101400	1.50	18.8	60
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Note	e: only	three sa	amples fo	or tensile	and thre	e sample	s for ben	d test			
							Bend T	est						
#3	Bar Ben	d Test 7	Through	180° is	s Satisfa	actory								
#3	Bar Ben	d Test ]	Through	180° is	s Satisfa	actory								
#1(	) Bar Be	nd Test	Throug	h 180°	is Satis	factory								

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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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 New Vision Engineering Consultant Construction of Product Development Center (PDC) for Composites Based Sports Goods, Sialkot

Reference # CED/TFL 34247 (Dr. Qasim Khan)	Dated: 02-12-2019
Reference of the request letter # NVEC/2019/R.E./PDC/Sialkot/020	Dated: 21-11-2019

# **Tension Test Report** (Page – 1/2)

Date of Test06-12-2019Gauge length2 inchesDescriptionMS Plate Steel Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	Elongation	Remarks	
	(mm)	(mm)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)	%		
1	5	22.00x4.95	108.90	5300	6750	477.44	608.06	0.50	25.00		
2	5	22.00x4.95	108.90	5400	6750	486.45	608.06	0.60	30.00		
3	16	22.00x16.00	352.00	13600	19400	379.02	540.66	0.80	40.00		
4	10	22.00x16.00	352.00	13900	19600	387.38	546.24	0.80	40.00		
-	-	-	-	-	-	-	-	-	-	L	
-	-	-	-	-	-	-	-	-	-		
	C	Only Four Sam	ples for <b>T</b>	ensile a	nd Two Sa	mples fo	r Bend 7	ſest			
	Bend Test										
Strip	Strip Taken from MS Plate 5mm Bend Test Through 180° is Satisfactory										
Strip	Taken from MS	S Plate 16mm H	Bend Test	Through	180° is Sat	isfactory					

I/C Testing Laboratoires UET Lahore, Pakistan.

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To, Resident Engineer New Vision Engineering Consultant Construction of Product Development Center (PDC) for Composites Based Sports Goods, Sialkot

Reference # CED/TFL 34247 (Dr. Qasim Khan)	Dated: 02-12-2019
Reference of the request letter # NVEC/2019/R.E./PDC/Sialkot/020	Dated: 21-11-2019

# Weight & Size Test Report (Page – 2/2)

Date of Test06-12-2019Gauge length------DescriptionMS Plate Weight and Size Test

Sr. No.	Designation	Weight	Length	Width (b)	Weight per Unit Area	Thickness	Remark
	(mm)	(g)	(cm)	(cm)	$(kg/m^2)$	(mm)	
1	5	7564	61.80	30.80	39.74	4.95	
2	16	23000	61.80	30.80	120.83	16.00	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
		Only '	Гwo Samp	les for Te	st		

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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 Widening of Aik Moria Pull, Lahore

Reference # CED/TFL **34262** (Dr. Waseem Abbass) Reference of the request letter # 3772/AMP/103/MWA/04/54 Dated: 04-12-2018 Dated: 18-11-2018

# **Tension Test Report** (Page – 1/1)

Date of Test	06-12-2018
Gauge length	2 inches
Description	Rivet Bar Tensile Test

Sr. No.	Diameter / size	Diameter / size Area		Yield load Breaking Load		Ultimate Stress	Elongation	Elongation	Marks		
	( <b>mm</b> )	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	( <b>mm</b> )	%			
1	19.10	286.521	7400	12600	253.36	431.40	0.80	40.00			
2	19.40	295.592	7700	13200	255.54	438.08	0.80	40.00			
	Only Two Samples for Tensile Test										

Witness by Javaid Masood (M.E. NESPAK)

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 RTCC Factory Lahore

Reference # CED/TFL **34263** (Dr. Qasim Khan) Reference of the request letter # Nil Dated: 04-12-2019 Dated: 04-12-2019

Tension Test Rep	<b>bort</b> (Page – 1/1)
Date of Test	06-12-2019
Gauge length	2 inches
Description	Steel Angle Steel Strip Tensile and Bend Test as per ASTM A36

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	Elongation	Remarks	
	(inch)	(mm)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)	%		
1	13/2/16	21.90x4.50	98.55	4900	7000	487.76	696.80	0.20	10.00		
2	1 <sup>3</sup> / <sub>4</sub> x3/16	21.90x4.50	98.55	4700	6800	467.85	676.89	0.20	10.00		
-		-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-		
-		-	-	-	-	-	-	-	-		
		Only Two Sa	mples for	Tensile a	and One s	ample fo	r Bend T	`est			
	Bend Test										
Strip	Strip Taken from Angle Iron (1 <sup>3</sup> / <sub>4</sub> "x3/16") Bend Test Through 180° is Satisfactory										

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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To, Operation Manager Amer Adnan Associates Hotel Building at 24-A Block E /2 at Gulberg III Lahore

Reference # CED/TFL **34265** (Dr. Qasim Khan) Reference of the request letter # AAA/24 A/0001 Dated: 04-12-2019 Dated: 04-12-2019

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

Date of Test Gauge length Description 06-12-2019 8 inches Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size				Meight Meight M			rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R				
1	0.377	3	0.376	0.11	0.111	4200	5200	84200	83590	104200	103500	1.00	12.5					
-	-	-	-	-	-	-	-	-	-	-	-	-	-					
-	-	-	-	-	-	-	-	-	-	-	•	-	•					
-	-	-	-	-	-	-	-	-	-	-	•	-	-					
-	-	-	-	-	-	-	-	-	-	-	-	-	-					
-	-	-	-	-	-	-	-	-	-	-	-	-	-					
					No	te: only o	one samp	le for ten	sile test	1		n						
							Bend T	est										

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 A RCO Engineering Islamabad

Reference # CED/TFL **34267** (Dr. Qasim Khan) Reference of the request letter # Nil Dated: 04-12-2019 Dated: 04-12-2019

# Tension Test Report(Page - 1/1)Date of Test06-12-2019

Description

06-12-2019 Steel Wire Rope Tensile Test

Sr. No.	Diameter	Measured weight	Breaking	Remarks / Coil No.	
	(mm)	m) (kg/km)		(kN)	Rema
1	12	491	6300	61.80	
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-	
		Only one s	sample 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, Project Manager Maypole Lime Light (Front Building

Reference # CED/TFL **34270** (Dr. Qasim Khan) Reference of the request letter # MML-15 Dated: 05-12-2019 Dated: 04-12-2019

# Tension Test Report(Page -1/1)Date of Test06-12-2019Gauge length8 inchesDescriptionDeformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		neter/ ze		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	1) Elongation % Elongation	
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Remarks
1	0.375	3	0.374	0.11	0.110	3300	5000	66200	66050	100200	100100	1.30	16.3	
2	0.368	3	0.371	0.11	0.108	3200	4950	64200	65220	99200	100900	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	est						
#3	Bar Ben	d Test	Fhrough	n 180° is	s Satisfa	ctory								

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Ref: <u>CED/TFL/12/34271</u>

Dated: 05-12-19

Date of Test: 06-12-19

To, Resident Engineer REC-LOYA-TECHNIA-Jv

Construction of 4-Lane Bridge Across River Indus Linking Layyah with Taunsa including 2 Lane Approach Roads and Training Works, Package I: Major Bridge on River Indus

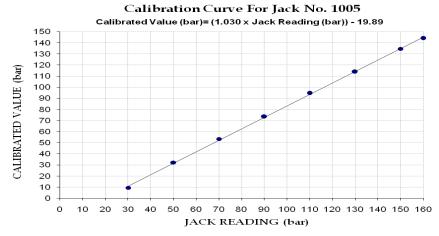
# Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/12/34271)(Page # 1/2)

Reference to your Letter No. REC-LOYA-TECHNIA/Coord/181, Dated: 29/11/2019 on the subject cited above. One Hydraulic Jack No. 1005 with Pressure Gauge No. 1005 as received by us has been calibrated. The results are tabulated as under:

Total Range	:	Zero -	700 (bar)
Calibrated Range	:	Zero -	160 (bar)

Hydraulic Jack Reading (bar)	30	50	70	90	110	130	150	160
Calibrated Load (k g)	12100	41800	69600	95600	123300	148400	175400	187800
Calibrated Pressure (bar)	9.28	32.06	53.38	73.33	94.57	113.82	134.53	144.04

The Ram Area of Jack =  $1278.6 \text{ cm}^2$ 



I/C Testing Laboratoires UET Lahore, Pakistan.

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Ref: <u>CED/TFL/12/34271</u>

Dated: 05-12-19

Date of Test: 06-12-19

To, Resident Engineer REC-LOYA-TECHNIA-Jv Construction of 4-Lane B

Construction of 4-Lane Bridge Across River Indus Linking Layyah with Taunsa including 2 Lane Approach Roads and Training Works, Package I: Major Bridge on River Indus

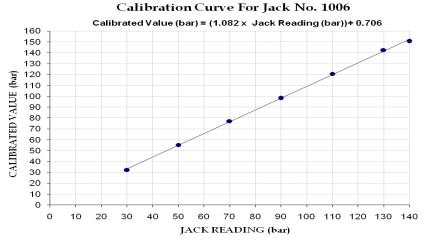
# Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/12/34271)(Page # 2/2)

Reference to your Letter No. REC-LOYA-TECHNIA/Coord/181, Dated: 29/11/2019 on the subject cited above. One Hydraulic Jack No. 1006 with Pressure Gauge No. 1006 as received by us has been calibrated. The results are tabulated as under:

Total Range	:	Zero -	700 (bar)
<b>Calibrated Range</b>	:	Zero -	140 (bar)

Hydraulic Jack Reading (bar)	30	50	70	90	110	130	140
Calibrated Load (k g)	42000	71800	100600	128000	157200	185600	196200
Calibrated Pressure (bar)	32.21	55.07	77.16	98.18	120.57	142.36	150.49

The Ram Area of Jack =  $1278.6 \text{ cm}^2$ 



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To, CEO N.A. Associates Pepsi Co International

Reference # CED/TFL **34279** (Dr. Qasim Khan) Reference of the request letter # NA-240-Con test-01 Dated: 06-12-2019 Dated: 05-12-2019

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

Date of Test Gauge length Description 06-12-2019 8 inches

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

Sr. No.	Weight		neter/ ze ch)		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks						
	(1bs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R						
1	0.357	10	9.29	0.12	0.105	3700	4800	67975	77690	88184	100800	1.60	20.0							
-	-	-	-	-	-	-	•	-	-	-	-	-	-							
-	-	-	-	-	-	-	•	-	-	-	-	-	-							
-	-	-	-	-	-	-	-	-	-	-	-	-	-							
-	-	-	-	-	-	-	-	-	-	-	-	-	-							
-	-	-	-	-	-	-	-	-	-	-	-	-	-							
			N	ote: on	ly one s	sample fo	r tensile	and one	sample fo	or bend t	est									
							Bend T	est												
10r	10mm Dia Bar Bend Test Through 180° is Satisfactory																			

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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