



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

To,  
 Resident Engineer  
 NESPAK

China – Pakistan Economic Corridor (CPEC), Western Route Hakla (On M1) – Yarak (D.I. Khan) Motorway, Package-3 (Trap to Kot Belian)

Reference # CED/TFL 35228 (Dr. Qasim Khan)

Dated: 17-08-2020

Reference of the request letter # CPEC/NESPAK/RE/PKG3/20/1590

Dated: 16-08-2020

**Tension Test Report** (Page – 1/1)

Date of Test 25-08-2020

Gauge length 2 inches

Description Steel Structure 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
1	Steel Pipe Frame	50x50mmx16Swg	21.00x1.65	34.65	1200	1500	339.74	424.68	0.80	40.00	
2			21.00x1.65	34.65	1200	1450	339.74	410.52	0.80	40.00	
3	MS Sheet	20 SWG	21.90x0.95	20.81	840	1100	396.08	518.67	0.60	30.00	
4			21.60x0.95	20.52	800	1040	382.46	497.19	0.60	30.00	
5	Steel Pipe	100x8mm	26.10x8.00	208.80	8300	11500	389.96	540.30	0.45	22.50	
6			26.40x8.00	211.20	8400	11700	390.17	543.45	0.45	22.50	
7	Base Plate	250x10mm	22.00x18.80	413.60	15600	22500	370.01	533.67	0.90	45.00	
8			22.00x18.80	413.60	15500	22000	367.64	521.81	0.80	40.00	
<b>Only Eight Samples for Tensile and Four Samples for Bend Test</b>											
<b>Bend Test</b>											
Strip Taken from Steel Pipe Frame (50x50mmx16Swg) Bend Test Through 180° is Satisfactory											
Strip Taken from MS Sheet (20 SWG) Bend Test Through 180° is Satisfactory											
Strip Taken from Steel Pipe (100x8mm) Bend Test Through 180° is Satisfactory											
Strip Taken from Base Plate (250x10mm) Bend Test Through 180° is Satisfactory											

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



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To,  
M/S ASM Steel Building's  
Lahore

Reference # CED/TFL **35243** (Dr. Qasim Khan)  
Reference of the request letter # Nil

Dated: 19-08-2020

Dated: 19-08-2020

**Tension Test Report** (Page – 1/1)

Date of Test 25-08-2020  
Gauge length 2 inches  
Description GI Plate Steel Strip Tensile Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)									
1	GI Plate	2x10x610	26.70x2.00	53.40	2300	2700	422.53	496.01	0.50	25.00	
2			26.60x2.00	53.20	2200	2600	405.68	479.44	0.50	25.00	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
<b>Only Two Samples for Tensile Test</b>											
<b>Bend Test</b>											

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

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Ref: CED/TFL/08/35256

Dated: 21-08-2020

Dated of Test: 25-08-2020

To  
M/S Futuure Pipe Industry  
Gujranwala

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/08/35256)

Reference to your Letter No. Nil, dated: 21/08/2020 on the subject cited above. One Hydraulic Jack as received by us has been calibrated. The results are tabulated as under:

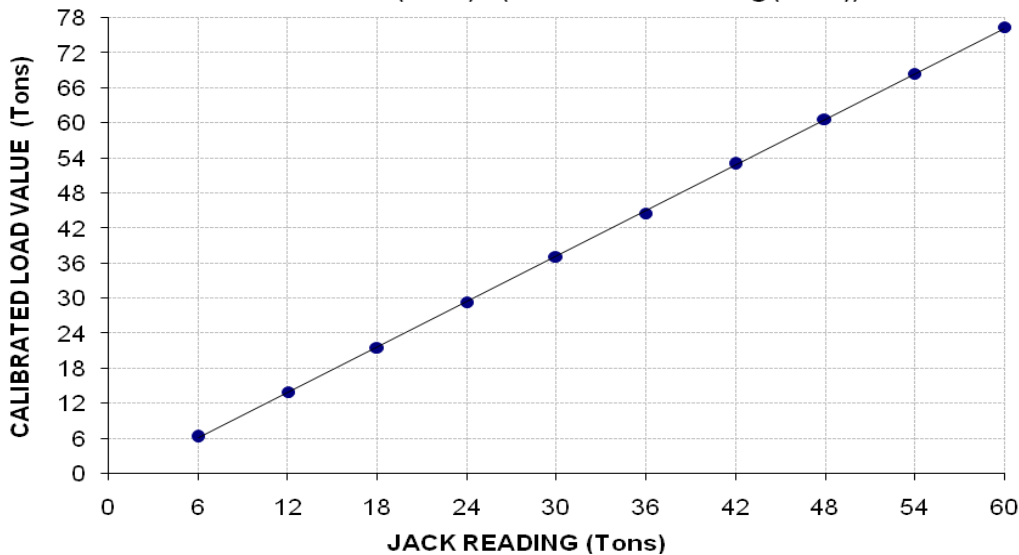
**Total Range : Zero - 100 (Ton)**  
**Calibrated Range : Zero - 60 (Ton)**

Hydraulic Jack Reading (Ton)	6	12	18	24	30	36	42	48	54	60	
Calibrated Load	(kg)	5700	12700	19600	26700	33700	40500	48100	55100	62200	69400
	(Ton)	6.28	13.98	21.58	29.40	37.11	44.59	52.96	60.67	68.49	76.42

1000 Kg = 1.1011 Ton

**Calibration Curve For Jack**

Calibrated Value (Tons) = (1.299 x Jack Reading (Tons)) - 1.732



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To,  
 Deputy Director (Works)  
 For Mines Labour Welfare Commissioner  
 Punjab, Lahore  
 (Establishment of Mines Labour Welfare Dispensary at Salaar Band/Sori Nala Tribal Area,  
 Tehsil Koh-e-Suleman District D.G. Khan)  
 Reference # CED/TFL **35260** (Dr. Waseem Abbass) Dated: 21-08-2020  
 Reference of the request letter # MLW/C.E/MT/50/17 6183 Dated: 20-08-2020

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

Date of Test 25-08-2020  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile 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	0.374	3/8	0.374	0.11	0.110	3100	4800	62200	62190	96200	96300	1.10	13.8	
2	0.377	3/8	0.376	0.11	0.111	3100	4800	62200	61620	96200	95500	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

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

Note:

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

To,  
 Deputy Director (Works)  
 For Mines Labour Welfare Commissioner  
 Punjab, Lahore

(Establishment of Mines Labour Welfare Dispensary at Sanghar/Gulki Tribal Area, Tehsil Koh-e-Suleman District D.G. Khan)

Reference # CED/TFL **35260** (Dr. Waseem Abbass)

Dated: 21-08-2020

Reference of the request letter # MLW/C.E/MT/50/17 618 5

Dated: 20-08-2020

**Tension Test Report** (Page -2/3)

Date of Test 25-08-2020

Gauge length 8 inches

Description Deformed Steel Bar Tensile 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	0.381	3/8	0.377	0.11	0.112	3300	4800	66200	64990	96200	94600	1.20	15.0	
2	0.367	3/8	0.371	0.11	0.108	3100	4700	62200	63270	94200	96000	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

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

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To,  
 Deputy Director (Works)  
 For Mines Labour Welfare Commissioner  
 Punjab, Lahore  
 (Provision of Wholesome Drinking Water Supply Scheme and Establishment of Mines Labour Welfare for Mine Workers at BAsti Dahar Tribal Tehsil Koh-e-Suleman District D.G. Khan)  
 Reference # CED/TFL **35260** (Dr. Waseem Abbass) Dated: 21-08-2020  
 Reference of the request letter # MLW/C.E/MT/50/17 6181 Dated: 20-08-2020

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

Date of Test 25-08-2020  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile 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	0.373	3/8	0.374	0.11	0.110	3200	4800	64200	64340	96200	96600	1.30	16.3	
2	0.367	3/8	0.371	0.11	0.108	3100	4600	62200	63380	92200	94100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

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

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To,  
 Manager, QA/QC Department  
 Bahria Town Private Limited, Lahore  
 Shahid Qureshi House, Bahria Town Multan Road, Lahore

Reference # CED/TFL **35261, 263** (Dr. Waseem Abbass)  
 Reference of the request letter # QA/QC-Steel-2096

Dated: 24-08-2020  
 Dated: 22-08-2020

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

Date of Test 25-08-2020  
 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	0.365	3	0.369	0.11	0.107	3100	4500	62200	63760	90200	92600	1.20	15.0	Ittefaq Steel
2	0.373	3	0.374	0.11	0.110	3100	4600	62200	62330	92200	92500	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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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To,  
 Project Manager  
 MEK Multistory Offices,  
 P-156 Gulberg II, Lahore

Reference # CED/TFL **35262** (Dr. Waseem Abbass)  
 Reference of the request letter # P-156-127

Dated: 24-08-2020  
 Dated: 24-08-2020

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

Date of Test 25-08-2020  
 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	0.376	3	0.375	0.11	0.110	4000	5000	80200	79850	100200	99900	0.80	10.0	Mughal Steel
2	0.384	3	0.379	0.11	0.113	3900	4900	78200	76120	98200	95700	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
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To,  
 Sr. Resident Engineer  
 Abdullah Khan Architect  
 CIMC (CMH Institute of Medical Sciences, DHA Bahawalpur)

Reference # CED/TFL **35266** (Dr. Waseem Abbass)

Dated: 25-08-2020

Reference of the request letter # SRE/KB/01/CIMS/Site/Lab/02

Dated: 21-08-2020

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

Date of Test 25-08-2020

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	0.378	3	0.376	0.11	0.111	3200	4700	64200	63530	94200	93400	1.50	18.8	Kamran Steel
2	0.369	3	0.371	0.11	0.108	3100	4700	62200	63050	94200	95600	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<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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