



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

Ref: CED/TFL/06/1554

Dated: 16-06-2022

Dated of Test: 11-06-2022

To

**Resident Engineer**  
**NESPAK**  
**Rehabilitation and Widening of IJP Road Faizabad to N-5 Islamabad**

Subject: - **CALIBRATION OF HYDRAULIC JACK (MARK: TFL/06/1554)** (Page -1/2)

Reference to your Letter No. 400455/103/MKI/233, dated: 11/06/2022 on the subject cited above. One Hydraulic Jack (Jack No. 409, Gauge No. SF-409) as received by us has been calibrated. The results are tabulated as under:

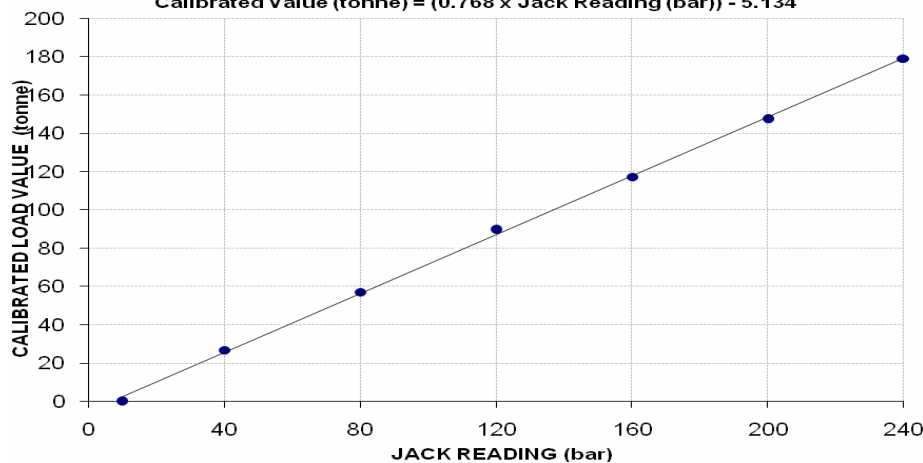
**Total Range : Zero - 1000 (bar)**  
**Calibrated Range : Zero - 260 (bar)**

Hydraulic Jack Reading (bar)	10	40	80	120	160	200	240	260	
Calibrated Load	(kg)	0	26800	57200	89600	117400	147400	179200	194600
	(Tonne)	0	26.80	57.20	89.60	117.40	147.40	179.20	194.60
Calibrated Pressure (bar)	0	35.81	76.43	119.72	156.86	196.95	239.44	260.01	

(1 Tonne = 1000 kg) The Ram Area of Jack = 733.975 cm<sup>2</sup>

**Calibration Curve For Jack No. 409**

Calibrated Value (tonne) = (0.768 x Jack Reading (bar)) - 5.134



**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



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

Ref: CED/TFL/06/1554

Dated: 16-06-2022

Dated of Test: 11-06-2022

To

**Resident Engineer**  
**NESPAK**  
**Rehabilitation and Widening of IJP Road Faizabad to N-5 Islamabad**

**Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/06/1554) (Page -2/2)**

Reference to your Letter No. 400455/103/MKI/233, dated: 11/06/2022 on the subject cited above. One Hydraulic Jack (Jack No. 410, Gauge No. SF-410) as received by us has been calibrated. The results are tabulated as under:

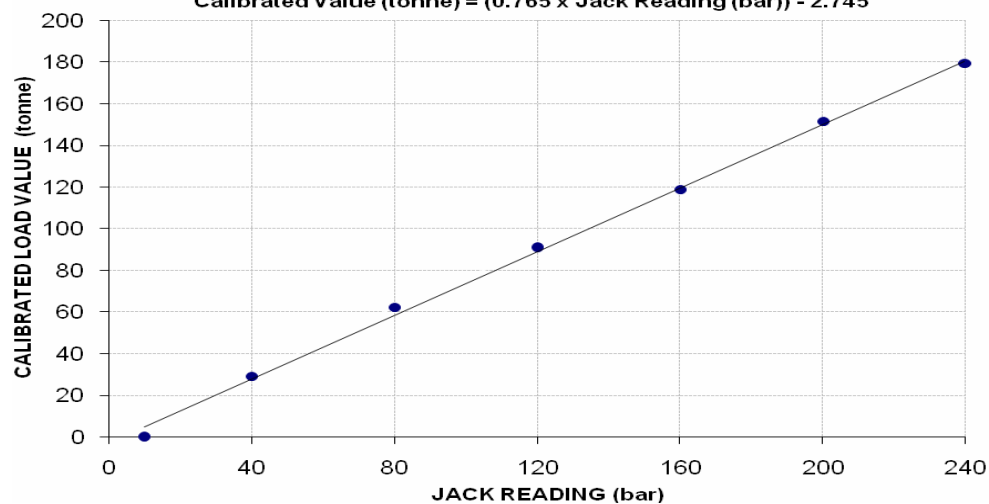
**Total Range : Zero - 1000 (bar)**  
**Calibrated Range : Zero - 260 (bar)**

Hydraulic Jack Reading (bar)	10	40	80	120	160	200	240	260	
Calibrated Load	(kg)	0	29200	62400	90800	119000	151600	179600	194800
	(Tonne)	0	29.20	62.40	90.80	119.00	151.60	179.60	194.80
Calibrated Pressure (bar)	0	39.02	83.38	121.32	159.00	202.56	239.97	260.28	

(1 Tonne = 1000 kg) The Ram Area of Jack = 733.975 cm<sup>2</sup>

**Calibration Curve For Jack No. 410**

Calibrated Value (tonne) = (0.765 × Jack Reading (bar)) - 2.745



**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



**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 Tariq Khetran Constrtion Campany  
(Construction of Fabrication, Erection and Installation of 200ft Self Supported TV Tower at  
RBS-Barkhan Baluchistan

Reference # CED/TFL **1563** (Dr. Irfan ul Hussan)  
Reference of the request letter # Nil

Dated: 17-06-2022  
Dated: 17-06-2022

**Tension Test Report** (Page – 1/1)

Date of Test 20-06-2022  
Gauge length 2 inches  
Description Angle Iron 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 <sup>2</sup> )	(kN)	(kN)	(MPa)	(MPa)	(in)		
1	Angle Iron	24.30x4.90	119.07	48.70	55.70	409	468	0.70	35.00	
2	Angle Iron	24.40x12.60	307.44	98.50	159.00	320	517	0.70	35.00	
3	Angle Iron	24.80x16.60	411.68	156.00	232.00	379	564	0.80	40.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only Three Samples for Tensile Test</b>										
<b>Bend Test</b>										

**I/C Testing Laboratoires**  
**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



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

To,  
 Admin Manager  
 Sunrays Textile Mills Ltd  
 Muzaffargarh

Reference # CED/TFL **1569** (Dr. Irfan ul Hussan)  
 Reference of the request letter # Nil

Dated: 20-06-2022  
 Dated: 18-06-2022

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

Date of Test 20-06-2022  
 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	0.417	10	10.04	0.12	0.123	4080	5200	74956	73310	95533	93500	1.10	13.8	Mughal Steel
2	0.415	10	10.01	0.12	0.122	4450	5500	81754	80370	101044	99400	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
10mm Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**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



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

To,  
 Admin Manager  
 Sunrays Textile Mills Ltd  
 Muzaffargarh

Reference # CED/TFL **1570** (Dr. Irfan ul Hussan)  
 Reference of the request letter # Nil

Dated: 20-06-2022  
 Dated: 18-06-2022

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

Date of Test 20-06-2022  
 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	0.421	10	10.08	0.12	0.124	4640	5560	85245	82740	102146	99200	0.80	10.0	Naveena Steel
2	0.419	10	10.06	0.12	0.123	4590	5400	84326	82170	99207	96700	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
10mm Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**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