



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/07/3551

Dated: 03-07-2023

Dated of Test: 28-08-2023

To

Assistant Director (QCD)
WASA, LDA, Lahore
(M/s Ali Rehman Punjab RCC Pipe Factory)

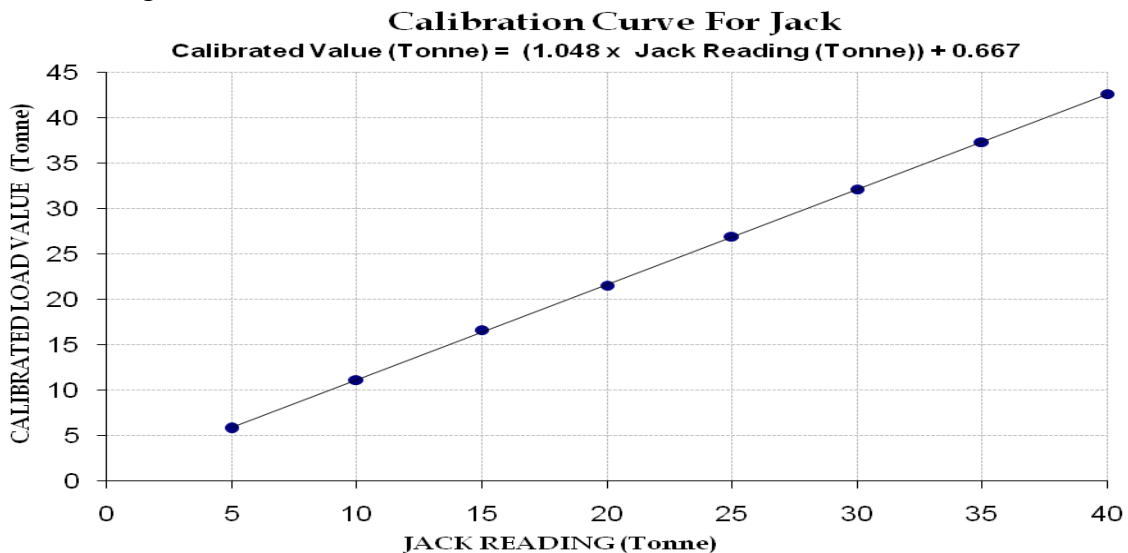
Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE
(MARK: TFL/07/3551)

Reference to your Letter No. QCD/1135-36, Dated: 15/06/2023 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 50 (Tonne)
Calibrated Range : Zero - 40 (Tonne)

Hydraulic Jack Reading (Tonne)		5	10	15	20	25	30	35	40
Calibrated Load	(kg)	5800	11150	16600	21550	26900	32100	37300	42600
	(Tonne)	5.80	11.15	16.60	21.55	26.90	32.10	37.30	42.60

1000 kg = 1 Tonne



I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
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Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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Ref: CED/TFL/08/3776, 3796

Dated: 22-08-2023

Dated of Test: 28-08-2023

To

Resident Engineer
NESPAK
Construction of Flyover / Underpass at Akbar Chowk Lahore.
(Revised: Signal Free Corridor)

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/08/3776) (Page -1/2)

Reference to your Letter No. 3772/103/ACF/SA/188, dated: 19/08/2023 on the subject cited above. One Hydraulic Jack (Jack No. 604, Gauge No. SF-604) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 140 (bar)

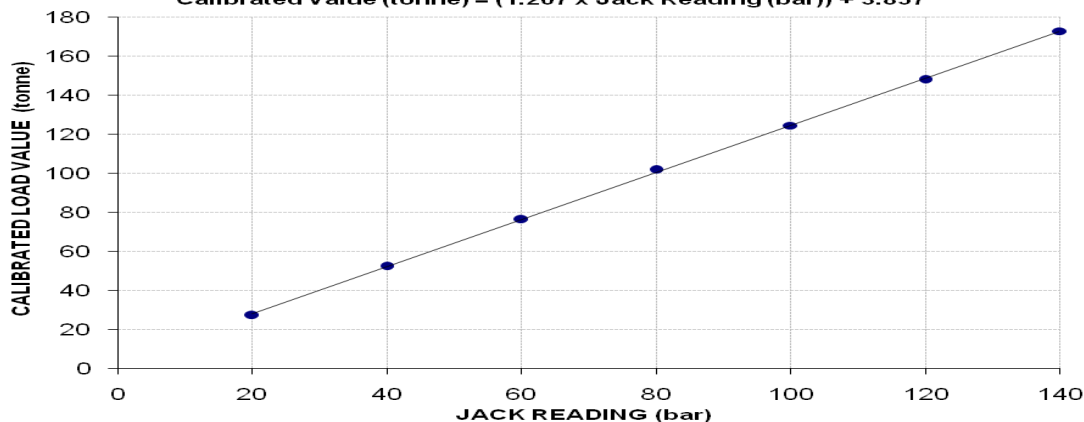
Hydraulic Jack Reading (bar)		20	40	60	80	100	120	140
Calibrated Load	(kg)	27200	52400	76400	101800	124400	148000	172800
	(tonne)	27.20	52.40	76.40	101.80	124.40	148.00	172.80
Calibrated Pressure (bar)		22.36	43.07	62.79	83.67	102.25	121.64	142.03

The Ram Area of Jack = 1193.2 cm²

Awais Ahmed (A.R.E. NESPAK), M. Saleem (MS NESPAK) and Engr. Ishtiaq Ahmed (ME HCS)

Calibration Curve For Jack No. 604

Calibrated Value (tonne) = (1.207 × Jack Reading (bar)) + 3.857



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Ref: CED/TFL/08/3776, 3796

Dated: 22-08-2023

Dated of Test: 28-08-2023

To

Resident Engineer
NESPAK
Construction of Flyover / Underpass at Akbar Chowk Lahore.
(Revised: Signal Free Corridor)

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/08/3776) (Page -2/2)

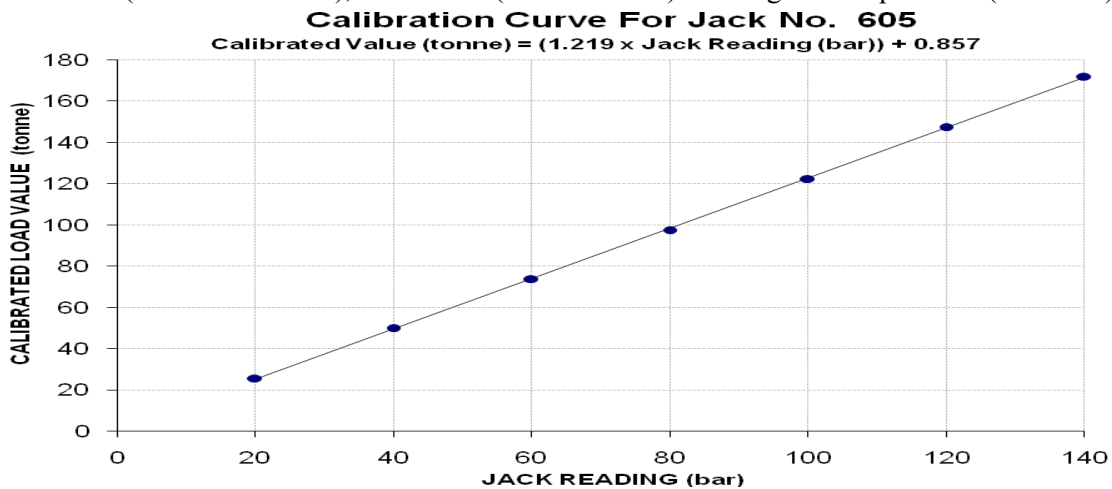
Reference to your Letter No. 3772/103/ACF/SA/188, dated: 19/08/2023 on the subject cited above. One Hydraulic Jack (Jack No. 605, Gauge No. SF-605) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 140 (bar)

Hydraulic Jack Reading (bar)		20	40	60	80	100	120	140
Calibrated Load	(kg)	25600	50000	73800	97600	122400	147600	172000
	(tonne)	25.60	50.00	73.80	97.60	122.40	147.60	172.00
Calibrated Pressure (bar)		21.04	41.10	60.66	80.22	100.60	121.31	141.37

The Ram Area of Jack = 1193.2 cm²

Awais Ahmed (A.R.E. NESPAK), M. Saleem (MS NESPAK) and Engr. Ishtiaq Ahmed (ME HCS)



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To,
 Resident Engineer
 NESPAK
 Construction Underpass along Bedian Road at Roundabout near Lahore Ring Road
 (LRR), Lahore.

Reference # CED/TFL **3783** (Dr. Rizwan Azam)
 Reference of the request letter # 3772/103/BU/MHK/04/24

Dated: 24-08-2023
 Dated: 22-08-2023

Tension Test Report (Page -1/1)

Date of Test 28-08-2023
 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 ²)		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	0.407	3	0.390	0.11	0.120	4100	5400	82200	75570	108200	99600	1.20	15.0	Sheikhoo Steel
2	0.405	3	0.389	0.11	0.119	4000	5400	80200	74000	108200	99900	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
 Senior Manager Projects - Civil
 Vision Packaging
 Volka Food International Limited

Reference # CED/TFL **3784** (Dr. Rizwan Azam)
 Reference of the request letter # VFI/Civil/22

Dated: 24-08-2023
 Dated: 23-08-2023

Tension Test Report (Page -1/1)

Date of Test 28-08-2023
 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 ²)		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	0.399	3/8	0.387	0.11	0.117	4400	5500	88200	82640	110200	103300	0.80	10.0	
2	0.413	3/8	0.393	0.11	0.121	4300	5400	86200	78050	108200	98100	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
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To,

Project Manager / DTL
Osmani & Company (Pvt) Ltd.
EDCS Project, Pakpattan
Engineering Design & Construction Supervision for Punjab Rural Sustainable Water
Supply and Sanitation Project (PRSWSSP) Cluster Central II

Reference # CED/TFL **3785** (Dr. Rizwan Azam)

Dated: 24-08-2023

Reference of the request letter # PM/OCL/PRSWSSP/EDCS/2023/22

Dated: 23-08-2023

Tension Test Report (Page -1/1)

Date of Test 28-08-2023

Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size		Area (in ²)		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	0.365	3	0.369	0.11	0.107	3600	4700	72200	74020	94200	96700	1.20	15.0	
2	0.365	3	0.369	0.11	0.107	3400	4600	68200	69890	92200	94600	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,

Principal Architect
Z.H. Kazmi & Associates
Construction of MC Bank Ltd. Gohadpur Branch Gujranwala Region (0222)

Reference # CED/TFL **3802** (Dr. Rizwan Azam)
Reference of the request letter # Nil

Dated: 28-08-2023
Dated: 28-07-2023

Tension Test Report (Page -1/1)

Date of Test 28-08-2023
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 ²)		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	0.396	3	0.385	0.11	0.117	3200	5300	64200	60530	106200	100300	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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