



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 Premium Engineering
Lahore

Reference # CED/TFL **4069** (Dr. M Rizwan Riaz)
Reference of the request letter # Nil

Dated: 16-10-2023
Dated: 14-10-2023

Tension Test Report (Page – 1/1)

Date of Test 19-10-2023
Gauge length 2 inches
Description HR 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)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	HR Steel Strip	27.40x3.80	104.12	4000	5300	377	499	0.70	35.00	
2	HR Steel Strip	27.30x4.80	131.04	5300	7600	397	569	0.60	30.00	
3	HR Steel Strip	27.30x6.90	188.37	5400	8000	281	417	0.90	45.00	
4	HR Steel Strip	27.20x6.70	182.24	5500	7900	296	425	0.90	45.00	
5	HR Steel Strip	27.20x9.80	266.56	10400	15200	383	559	0.80	40.00	
-	-	-	-	-	-	-	-	-	-	
Only Five Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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Ref: CED/TFL/10/4073
Dated of Test: 19-10-2023

Dated: 16-10-2023

To,
Resident Engineer
NESPAK
Construction of 8-Lane Overhead Bridge at Imamia Colony.

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/10/4073)

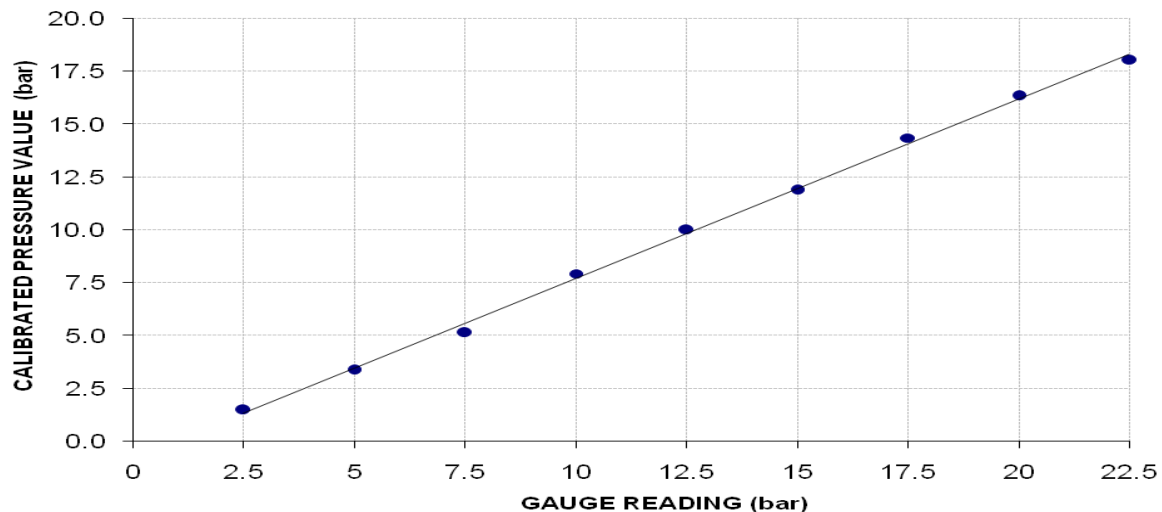
Reference to your Letter No. RE/SA-543/02/MH/118, Dated: 28/09/2023 on the subject cited above. One Pressure Gauge No. A-30 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 25 (bar)
Calibrated Range : Zero - 22.5 (bar)

Pressure Gauge Reading (bar)	2.5	5.0	7.5	10.0	12.5	15.0	17.5	20	22.5
Calibrated Load (kg)	300	680	1040	1600	2020	2400	2900	3300	3640
Calibrated Pressure (bar)	1.5	3.4	5.2	7.9	10.0	11.9	14.4	16.3	18.0

The Ram Are use for Calibration = 198 cm²

Calibration Curve for Pressure Gauge No. A-30



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To,

Procurment Executive
 Etimaad Engineering Pvt. Ltd
 “Shell Terminal, Machike, Sheikhpura”

Reference # CED/TFL **4075** (Dr. Safer Abbass)
 Reference of the request letter # EEL/HO/SMK/004

Dated: 17-10-2023
 Dated: 16-10-2023

Tension Test Report (Page -1/1)

Date of Test 19-10-2023
 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	0.384	3	0.379	0.11	0.113	4250	5320	85200	83090	106600	104100	0.90	11.3	Amreli Steel
2	0.383	3	0.379	0.11	0.113	4380	5370	87800	85740	107600	105200	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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
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Ref: CED/TFL/10/4076

Dated: 18-10-2023

Dated of Test: 19-10-2023

To

Sub Divisional Officer
Public Health Engg: Sub Division
Shahkot
(Construction of Urban Drainage PCC / RCC Streets, Tuff Tile and Sludge Carrier in Different Abadies of Mandi Faizabad, District Nankana Sahib.)

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. SDO(PHED)/202, dated 10.06.2023 on the subject cited above. Seven R.C.C. Pipes as received by us have been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.73	7.30	15.94	11.56	2.19	12500	17000	3919	5330
2	15	7.76	7.33	19.53	14.68	2.42	9500	15000	2335	3687
3	18	7.73	7.34	23.11	18.16	2.48	4500	8500	893	1687
4	24	7.80	7.19	29.84	24.06	2.89	12670	15860	1936	2424
5	27	8.04	7.74	33.86	27.22	3.32	7340	11600	922	1457
6	30	7.97	7.64	37.95	30.89	3.53	7340	12670	823	1421
7	36	8.00	7.66	43.90	35.94	3.98	13700	17990	1316	1728

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,

Sub Divisional Officer
Public Health Engg: Sub Division
Shahkot
(Construction of Urban Drainage PCC / RCC Streets, Tuff Tile and Sludge Carrier in
Different Abadies of Mandi Faizabad, District Nankana Sahib.)

Reference # CED/TFL **4077** (Dr. Rizwan Azam)
Reference of the request letter # SDO(PHED)/185

Dated: 18-10-2023

Dated: 26-05-2023

Tension Test Report (Page -1/1)

Date of Test 19-10-2023
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test

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	0.132	3/16	0.222	-----	0.039	1400	1480	-----	79700	-----	84300	0.90	11.3	
2	0.102	3/16	0.196	-----	0.030	1040	1070	-----	76150	-----	78400	1.20	15.0	
3	0.188	1/4	0.265	-----	0.055	1170	1540	-----	46670	-----	61500	1.60	20.0	
4	0.190	1/4	0.267	-----	0.056	1190	1540	-----	46920	-----	60800	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/10/4078
2023

Dated: 18-10-

Dated: 19-10-2023

To

M/S China Gezhouba Group Company Limited, Pakistan
DESCON

Construction of Mohmand Dam Hydropower Project - Contract No. ICB MDHP-01,
Construction of Civil Works Including Design, Supply and Installation of Electrical and
Mechanical Works and Hydraulic Steel Structures.

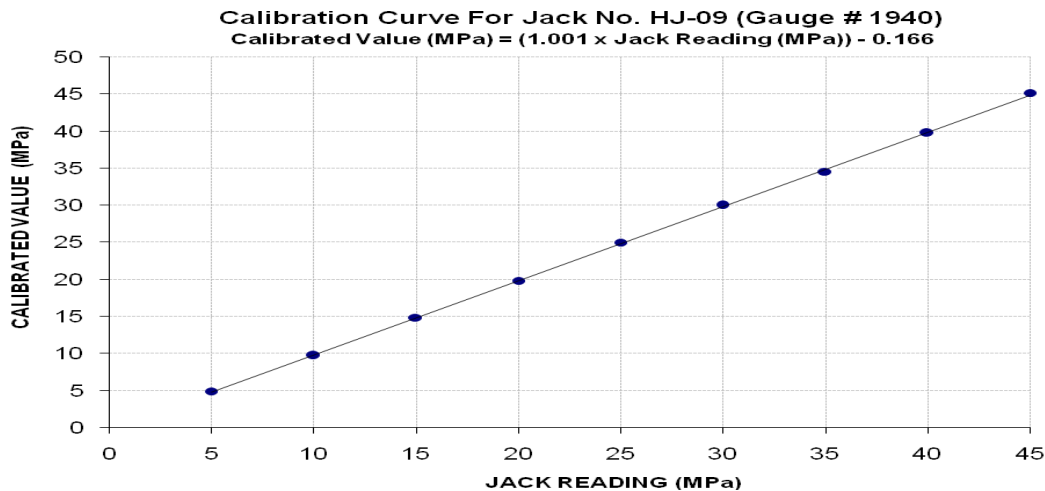
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/4078) (Page -1/4)

Reference to your Letter No. MDSYS-241, dated: 17/10/2023 on the subject cited above.
One Hydraulic Jack (Jack No. HJ-09, Gauge No. 1940) as received by us has been
calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	15000	29600	45200	60200	76000	91200	105000	120800	137200
Calibrated Pressure (Mpa)	5	10	15	20	25	30	35	40	45

The Ram Area of Jack = 298 cm²



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UET Lahore, Pakistan.

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Ref: CED/TFL/10/4078

Dated: 18-10-2023

Dated: 19-10-2023

To

M/S China Gezhouba Group Company Limited, Pakistan
DESCON

Construction of Mohmand Dam Hydropower Project - Contract No. ICB MDHP-01,
Construction of Civil Works Including Design, Supply and Installation of Electrical and
Mechanical Works and Hydraulic Steel Structures.

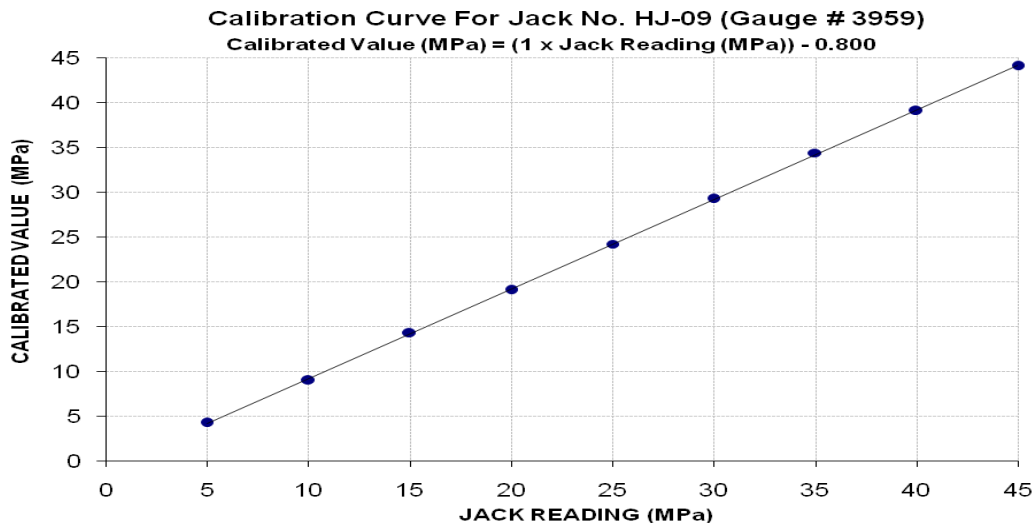
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/4078) (Page -1/4)

Reference to your Letter No. MDSYS-241, dated: 17/10/2023 on the subject cited above.
One Hydraulic Jack (Jack No. HJ-09, Gauge No. 3959) as received by us has been
calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	13000	27400	43400	58000	73600	89000	104600	118800	134000
Calibrated Pressure (Mpa)	4	9	14	19	24	29	34	39	44

The Ram Area of Jack = 298 cm²



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Dated: 18-10-2023

Dated: 19-10-2023

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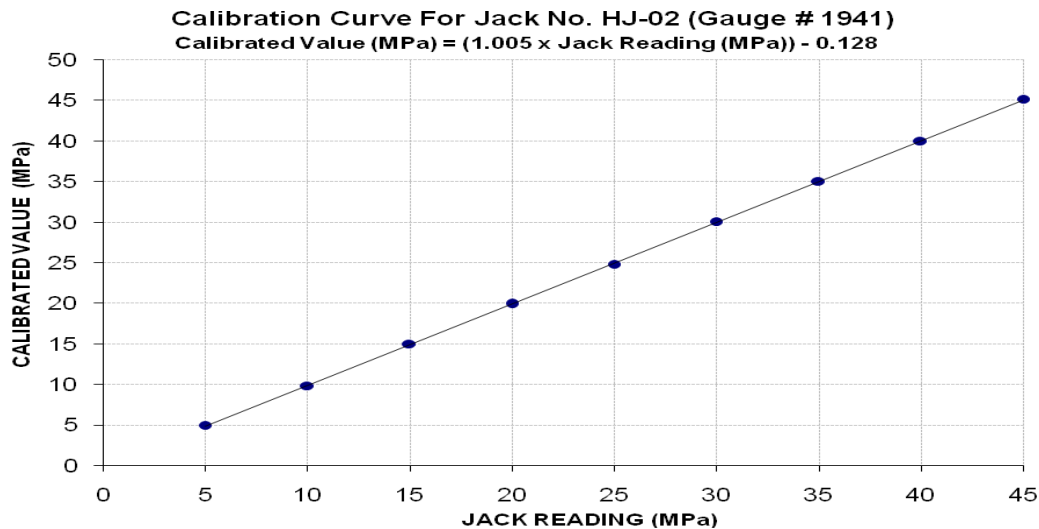
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/4078) (Page -1/4)

Reference to your Letter No. MDSYS-241, dated: 17/10/2023 on the subject cited above.
One Hydraulic Jack (Jack No. HJ-02, Gauge No. 1941) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	15200	30000	45600	60600	75400	91400	106600	121600	137400
Calibrated Pressure (Mpa)	5	10	15	20	25	30	35	40	45

The Ram Area of Jack = 298 cm²



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Ref: CED/TFL/10/4078

Dated: 18-10-2023

Dated: 19-10-2023

To

M/S China Gezhouba Group Company Limited, Pakistan
DESCON

Construction of Mohmand Dam Hydropower Project - Contract No. ICB MDHP-01,
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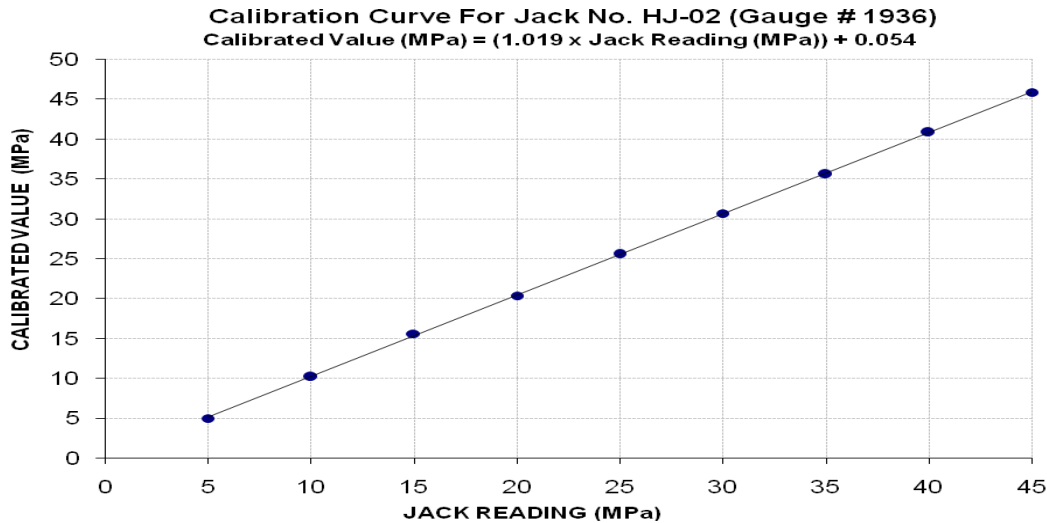
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/4078) (Page -1/4)

Reference to your Letter No. MDSYS-241, dated: 17/10/2023 on the subject cited above. One Hydraulic Jack (Jack No. HJ-02, Gauge No. 1936) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	15200	31000	47400	62000	77800	93200	108200	124200	139400
Calibrated Pressure (Mpa)	5	10	16	20	26	31	36	41	46

The Ram Area of Jack = 298 cm²



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To,
 Quality Manager
 Premium Batala Steel
 Lahore

Reference # CED/TFL **4080** (Dr. M Rizwan Riaz)
 Reference of the request letter # Nil

Dated: 19-10-2023
 Dated: 19-10-2023

Tension Test Report (Page -1/1)

Date of Test 19-10-2023
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile 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	0.375	3	0.374	0.11	0.110	3800	5300	76200	76040	106200	106100	0.90	11.3	Premium Batala Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

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