



**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 Aldo International (Pvt.) Ltd.  
Lahore

Reference # CED/TFL **2711** (Dr. M Rizwan Riaz)  
Reference of the request letter # AI/UET/TEST/03

Dated: 31-01-2023

Dated: 30-01-2023

**Weight & Size Test Report** (Page – 1/1)

Date of Test

01-02-2023

Description

G.I Sheet Weight and Size Test

Sr. No.	Designation	Weight	Length	Width (b)	Weight per Unit Area	Thickness	Remark
		(g)	(cm)	(cm)	(kg/m <sup>2</sup> )	(mm)	
1	G.I Sheet	537	45.9	7.98	14.66	1.90	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
<b>Only One Sample for Test</b>							

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

Note:

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To,

Chief Technical Officer  
Sheikhoo Sugar Mills (Steel Division)  
Anwar Abad Kot Addu, Muzaffargarh

Reference # CED/TFL **2716** (Dr. M Yousaf)  
Reference of the request letter #Nil

Dated: 31-01-2023  
Dated: 31-01-2023

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

Date of Test 01-02-2023  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	4.224	32	31.94	1.25	1.242	41800	55200	73722	74210	97355	98000	1.30	16.3	1
2	4.214	32	31.90	1.25	1.239	40600	54000	71605	72250	95239	96100	1.30	16.3	2
3	5.286	36	35.72	1.58	1.554	52400	66800	73115	74340	93207	94800	1.50	18.8	A
4	5.317	36	35.83	1.58	1.563	54000	70000	75347	76160	97672	98800	1.00	12.5	B
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only four samples for tensile test</b>														
Bend Test														

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

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Chief Technical Officer  
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Reference # CED/TFL **2716** (Dr. M Yousaf)  
Reference of the request letter #Nil

Dated: 31-01-2023  
Dated: 31-01-2023

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

Date of Test 01-02-2023  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	4.224	32	31.94	1.25	1.242	41800	55200	73722	74210	97355	98000	1.30	16.3	1
2	4.214	32	31.90	1.25	1.239	40600	54000	71605	72250	95239	96100	1.30	16.3	2
3	5.286	36	35.72	1.58	1.554	52400	66800	73115	74340	93207	94800	1.50	18.8	A
4	5.317	36	35.83	1.58	1.563	54000	70000	75347	76160	97672	98800	1.00	12.5	B
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only four samples for tensile test</b>														
Bend Test														

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Ref: CED/TFL/01/2717

Dated: 31-01-2023

Dated: 01-02-2023

To

**M/S China Gezhouba Group Company Limited**  
**Pakistan**

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/01/2717) (Page -1/4)

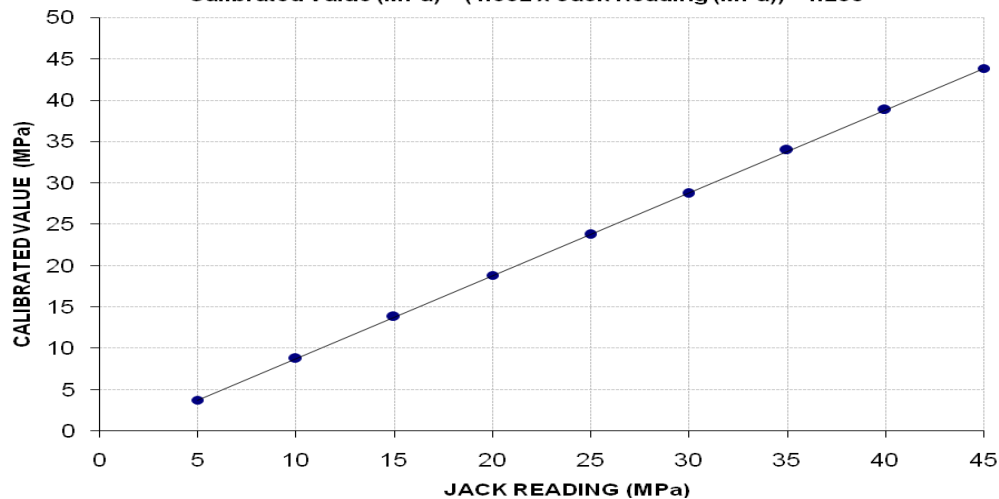
Reference to your Letter No. MDSYS-213, dated: 31/01/2023 on the subject cited above.  
One Hydraulic Jack (Jack No. HJ-1410, Gauge No. 2856) as received by us has been  
calibrated. The results are tabulated as under:

**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)	11400	26600	42000	57200	72200	87200	103200	118000	133200
Calibrated Pressure (Mpa)	3.75	8.75	13.82	18.82	23.76	28.70	33.96	38.83	43.84

The Ram Area of Jack = 298 cm<sup>2</sup>

**Calibration Curve For Jack No. 1410 (Gauge # 2856)**  
**Calibrated Value (MPa) = (1.002 x Jack Reading (MPa)) - 1.256**



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

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Dated: 31-01-2023

Dated: 01-02-2023

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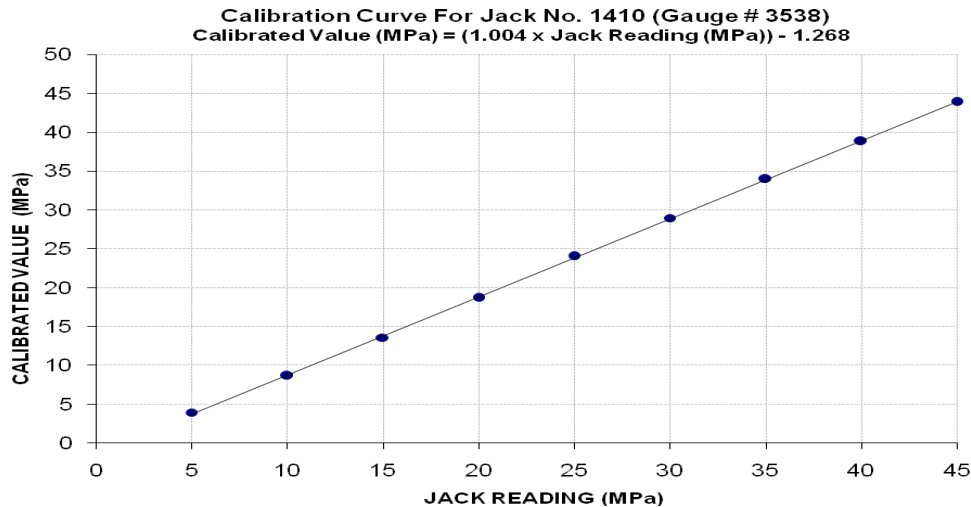
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/01/2717) (Page -2/4)

Reference to your Letter No. MDSYS-213, dated: 31/01/2023 on the subject cited above.  
One Hydraulic Jack (Jack No. HJ-1410, Gauge No. 3835) 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)	12000	26400	41200	56800	73000	88000	103200	118000	133400
Calibrated Pressure (Mpa)	3.95	8.69	13.56	18.69	24.02	28.96	33.96	38.83	43.90

The Ram Area of Jack = 298 cm<sup>2</sup>



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

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Ref: CED/TFL/01/2717

Dated: 31-01-2023

Dated: 01-02-2023

To

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**Pakistan**

Construction of Mohmand Dam Hydropower Project - Contract No. ICB MDHP-01,  
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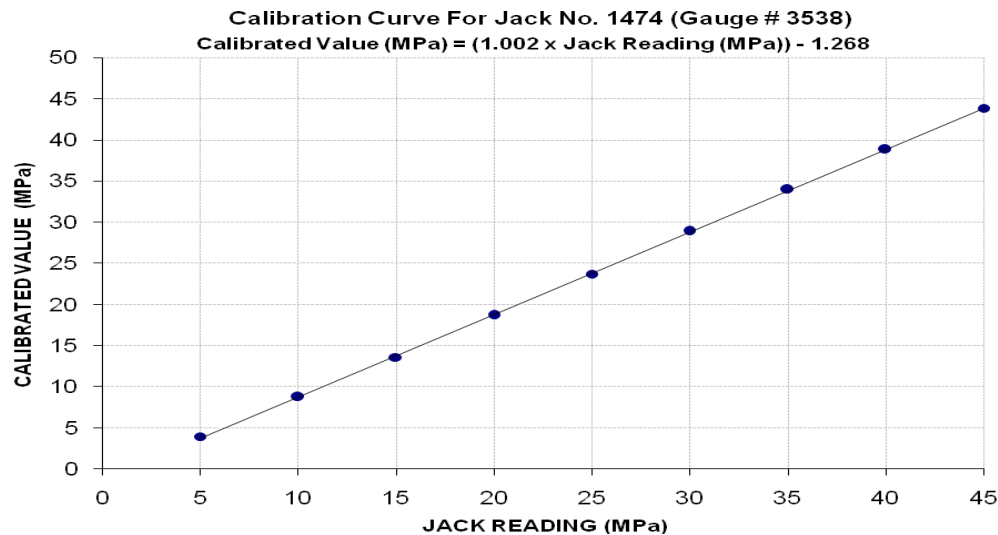
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/01/2717) (Page -3/4)

Reference to your Letter No. MDSYS-213, dated: 31/01/2023 on the subject cited above.  
One Hydraulic Jack (Jack No. HJ-1474, Gauge No. 3835) 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)	12000	26600	41200	56800	72000	87800	103200	118000	133200
Calibrated Pressure (Mpa)	3.95	8.75	13.56	18.69	23.69	28.89	33.96	38.83	43.84

The Ram Area of Jack = 298 cm<sup>2</sup>



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Ref: CED/TFL/01/2717

Dated: 31-01-2023

Dated: 01-02-2023

To

**M/S China Gezhouba Group Company Limited**  
**Pakistan**

Construction of Mohmand Dam Hydropower Project - Contract No. ICB MDHP-01,  
Construction of Civil Works Including Design, Supply and Installation of Electrical and  
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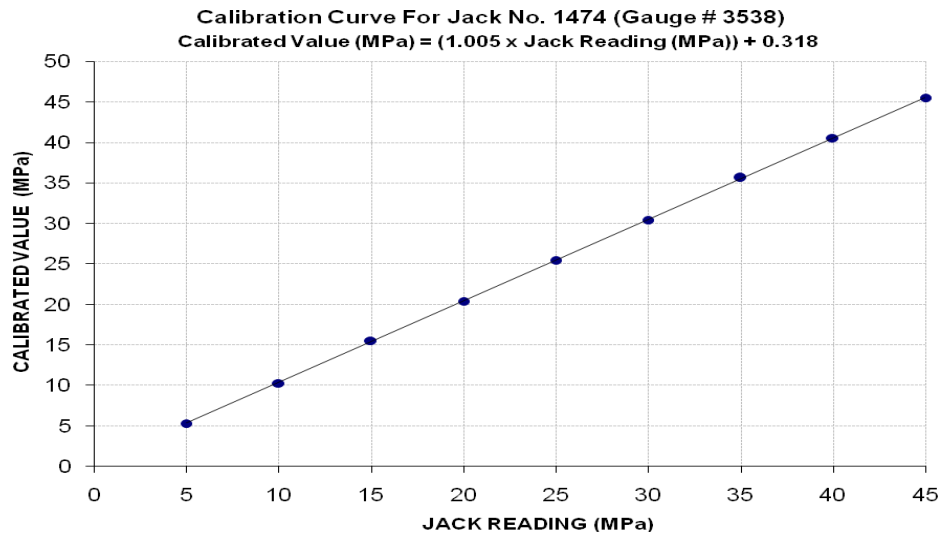
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/01/2717) (Page -4/4)

Reference to your Letter No. MDSYS-213, dated: 31/01/2023 on the subject cited above.  
One Hydraulic Jack (Jack No. HJ-1474, Gauge No. 3904) 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)	16200	31200	47200	62000	77400	92400	108200	123200	138200
Calibrated Pressure (Mpa)	5.33	10.27	15.53	20.40	25.47	30.41	35.61	40.54	45.48

The Ram Area of Jack = 298 cm<sup>2</sup>



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To,

Resident Engineer  
 G3 Engineering Consultants (Pvt.) Ltd.  
 Construction of DHA Newlife Residency Apartments at 273/1 Q Block Phase-II DHA,  
 Lahore

Reference # CED/TFL **2722** (Dr. Asad Ali)  
 Reference of the request letter # G3/DHA-NLD/RE/132

Dated: 01-02-2023  
 Dated: 31-01-2023

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

Date of Test 01-02-2023  
 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 <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	0.381	3	0.378	0.11	0.112	3720	5450	74600	73180	109200	107300	0.80	10.0	AF Steel
2	0.373	3	0.374	0.11	0.110	3930	5170	78800	78940	103600	103900	1.00	12.5	
3	0.373	3	0.374	0.11	0.110	3790	5220	76000	76150	104600	104900	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only three samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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