

To,
 Project Manager
 Sunshine Health Care (Pvt.) Ltd.
 Sunshine Medical Tower Shashtra

Reference # CED/TFL 7286 (Dr. M Kashif)
 Reference of the request letter # Nil

Dated: 29-07-2025
 Dated: 29-07-2025

Tension Test Report (Page-1/1)

Date of Test 01-08-2025
 Gauge Length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.364	3	0.369	0.110	0.107	31.50	43.70	64351	66173	89275	91803	1.5	18.8	-
2	0.368	3	0.371	0.110	0.108	31.50	44.20	64351	65500	90296	91909	1.3	16.3	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,

Mr. Ahsan (Project Engineer)
Baig Developers and Builders (pvt.) Ltd.
Construction of City Star Shopping Mall, Link Road Model Town, Lahore

Reference # CED/TFL 7304 (Dr. M Kashif)
Reference of the request letter # ST/UET/31072025/3000

Dated: 01-08-2025
Dated: 31-07-2025

Tension Test Report (Page-1/1)

Date of Test 01-08-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.371	3	0.372	0.110	0.109	42.00	50.70	85802	86666	103575	104618	0.8	10.0	-
2	0.376	3	0.375	0.110	0.11	39.50	49.20	80695	80416	100511	100164	0.9	11.3	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,

Mr. Kashif Shahzad (Manager-Technical)
Gharibwal Cement Ltd.

Reference # CED/TFL 7302 (Dr. M Kashif)
Reference of the request letter # GCL/Purchase/UET/008

Dated: 31-07-2025
Dated: 31-07-2025

Tension Test Report (Page-1/3)

Date of Test 01-08-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (mm)	Actual Diameter (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			
1	4.249	32	1.261	1.250	1.248	46000	59000	81107	81210	104029	104161	0.9	11.3	H # 761
2	4.239	32	1.259	1.250	1.246	44400	60600	78286	78555	106850	107217	1	12.5	H # 761
3	4.226	32	1.257	1.250	1.242	36800	52200	64886	65311	92039	92642	1.4	17.5	H # 762
4	4.187	32	1.252	1.250	1.23	36000	51600	63475	64496	90981	92444	1.3	16.3	H # 762
5	4.166	32	1.248	1.250	1.224	41400	56600	72996	74540	99797	101907	1.3	16.25	H # 262
6	4.023	32	1.227	1.250	1.182	33800	49600	59596	63023	87455	92483	1.5	18.75	H # 262

Note: Only 6 Samples for Tensile and 3 Samples for Bend test

Bend Test

32mm Bar Bend Test Through 180 Degree is Satisfactory

32mm Bar Bend Test Through 180 Degree is Satisfactory

32mm Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Kashif Shahzad (Manager-Technical)
Gharibwal Cement Ltd.

Reference # CED/TFL 7302 (Dr. M Kashif)
Reference of the request letter # GCL/Purchase/UET/008

Dated: 31-07-2025
Dated: 31-07-2025

Tension Test Report (Page-2/3)

Date of Test 01-08-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (mm)	Actual Diameter (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			
7	4.189	32	1.252	1.250	1.231	39800	56400	70175	71272	99444	100998	1.4	17.5	H # 263
8	4.198	32	1.253	1.250	1.234	41400	57800	72996	73972	101913	103275	1.1	13.8	H # 263
9	4.160	32	1.248	1.250	1.223	41800	58000	73702	75359	102266	104565	1.4	17.5	H # 203
10	4.165	32	1.248	1.250	1.224	41400	57800	72996	74547	101913	104078	1.4	17.5	H # 203
11	4.130	32	1.243	1.250	1.214	45200	58800	79697	82086	103676	106785	1.3	16.25	H # 700
12	4.138	32	1.244	1.250	1.216	46200	59400	81460	83746	104734	107673	1.5	18.75	H # 700

Note: Only 6 Samples for Tensile and 3 Samples for Bend test

Bend Test

32mm Bar Bend Test Through 180 Degree is Satisfactory

32mm Bar Bend Test Through 180 Degree is Satisfactory

32mm Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,
 Mr. Kashif Shahzad (Manager-Technical)
 Gharibwal Cement Ltd.

Reference # CED/TFL 7302 (Dr. M Kashif)
 Reference of the request letter # GCL/Purchase/UET/008

Dated: 31-07-2025
 Dated: 31-07-2025

Tension Test Report (Page-3/3)

Date of Test 01-08-2025
 Gauge Length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (mm)	Actual Diameter (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			
13	4.226	32	1.257	1.250	1.242	45400	60400	80049	80588	106497	107214	1.4	17.5	H # 202
14	4.241	32	1.260	1.250	1.246	45000	60600	79344	79591	106850	107182	1.5	18.8	H # 202
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test
32mm Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

Ref: CED/TFL/07/7303

Dated: 31-07-2025

Dated of Test: 01-08-2025 (Dr. M. Kashif)

To

Laboratory Manager
China Gezhouba Group Company Limited
300 MW Balakot Hydro Power Project.

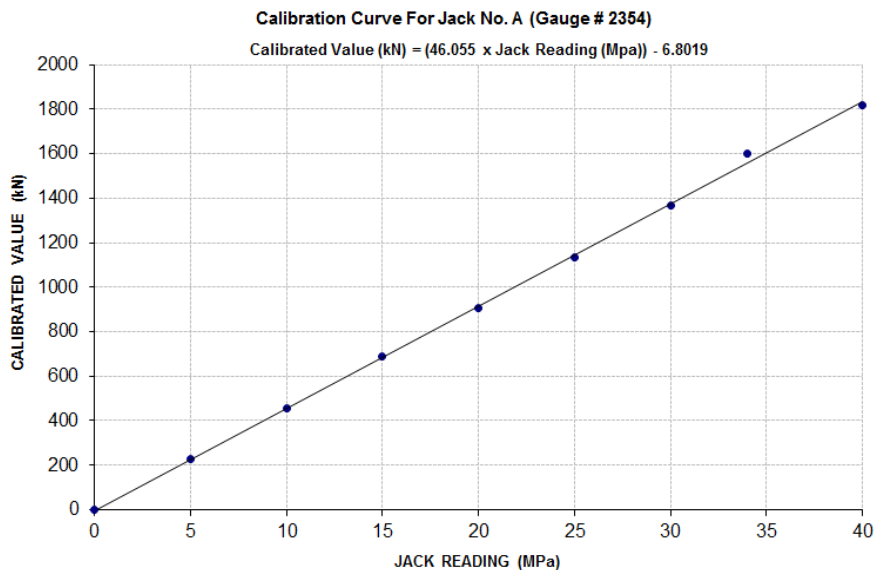
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/08/7303) (Page -1/7)

Reference to your Letter No. Nil, dated: 31/07/2025 on the subject cited above. One Hydraulic Jack (Jack No. A, Gauge No. 2354) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 40 (MPa)

Hydraulic Jack Reading (MPa)	0	5	10	15	20	25	30	35	40	
Calibrated Load	(kg)	0	23200	46200	70000	92200	115600	139200	163200	185200
	(kN)	0	228	453	687	904	1134	1366	1601	1817
Calibrated Pressure (Mpa)	0	5.0	9.9	15.0	19.7	24.7	29.7	34.9	39.6	

The Ram Area of Jack = 459 cm²



Test Performed and Verified by:

Ref: CED/TFL/07/7303

Dated: 31-07-2025

Dated of Test: 04-08-2025 (Dr. Rizwan Riaz)

To

Laboratory Manager
China Gezhouba Group Company Limited
300 MW Balakot Hydro Power Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/08/7303) (Page -2/7)

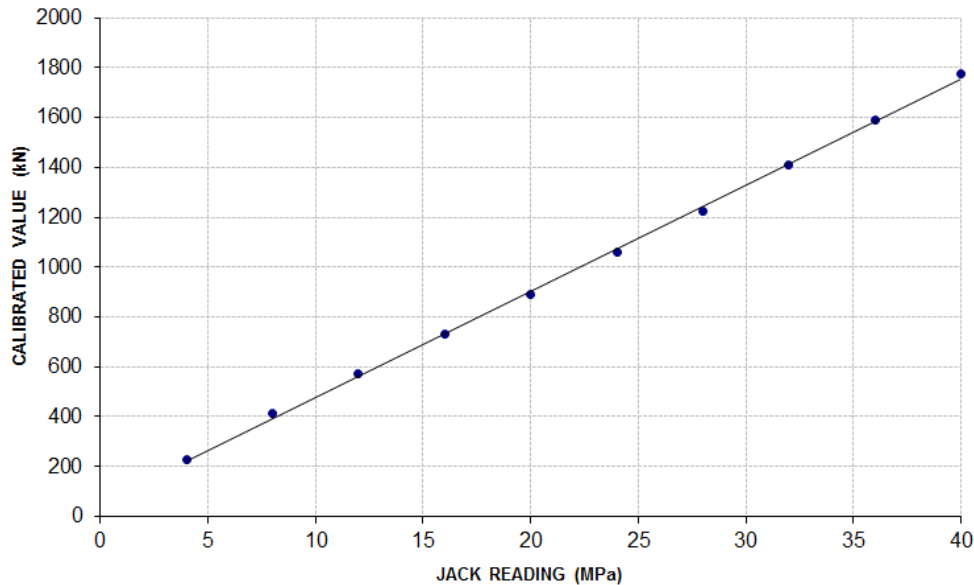
Reference to your Letter No. Nil, dated: 31/07/2025 on the subject cited above. One Hydraulic Jack (Jack No. YDC 2500C, Gauge No. 250) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 100 (MPa)
Calibrated Range : Zero - 40 (MPa)

Hydraulic Jack Reading (MPa)	4	8	12	16	20	24	28	32	36	40	
Calibrated Load	(kg)	23000	42000	58200	74400	90800	108000	125000	143800	162200	181000
	(kN)	226	412	571	730	891	1059	1226	1411	1591	1776
Calibrated Pressure (Mpa)	4.66	8.52	11.80	15.09	18.41	21.90	25.35	29.16	32.90	36.71	

The Ram Area of Jack = 483.56 cm²

Calibration Curve For Jack No. YDC 2500C (Gauge # 250)
Calibrated Value (kN) = (42.516 x Jack Reading (Mpa)) + 53.89



Test Performed and Verified by:

Ref: CED/TFL/07/7303

Dated: 31-07-2025

Dated of Test: 04-08-2025 (Dr. Rizwan Riaz)

To

**Laboratory Manager
China Gezhouba Group Company Limited
300 MW Balakot Hydro Power Project.**

Subject: - CALIBRATION OF Hydraulic Jack (MARK: TFL/07/303) (Page -3/7)

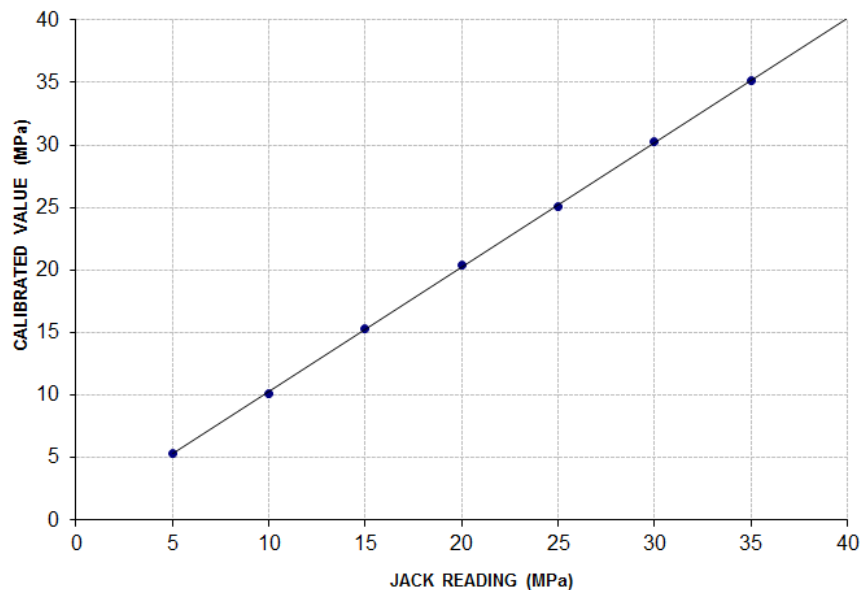
Reference to your Letter No. Nil, dated: 31/07/2025 on the subject cited above. One Hydraulic Jack (Jack No. 13299, Gauge No. 2653) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 40 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40
Calibrated Load (kg)	2600	4900	7450	9900	12200	14750	17100	19500
Calibrated Pressure (MPa)	5.34	10.07	15.31	20.35	25.08	30.32	35.15	40.08

The Ram Area of Jack = 47.71 cm²

Calibration Curve For Jack No. 13299 (Gauge # 2653)
Calibrated Value (MPa) = (0.996 x Calibrated Value (MPa)) + 0.3047



Test Performed and Verified by:

Ref: CED/TFL/07/7303

Dated: 31-07-2025

Dated of Test: 04-08-2025 (Dr. Rizwan Riaz)

To

Laboratory Manager
China Gezhouba Group Company Limited
300 MW Balakot Hydro Power Project.

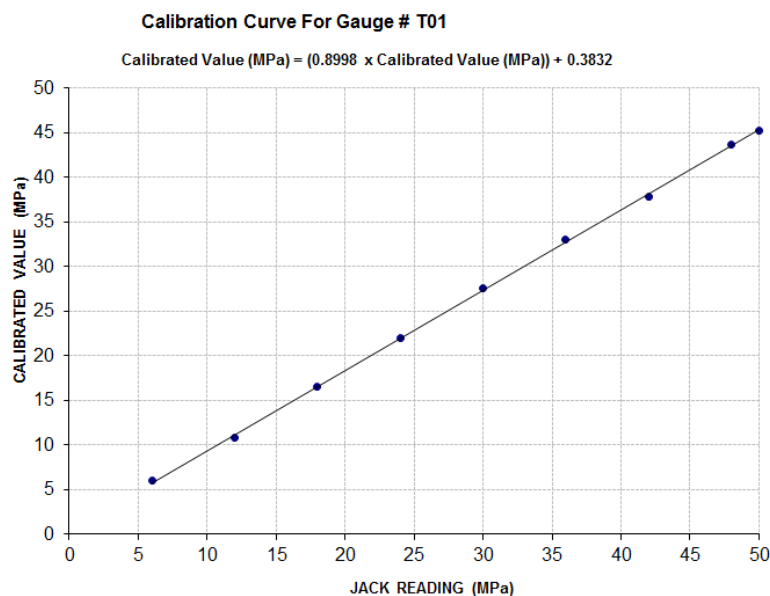
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/07/7303) (Page -4/7)

Reference to your Letter No. Nil, dated: 31/07/2025 on the subject cited above. One Pressure Gauge (Gauge No. T01) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 80 (MPa)
Calibrated Range : Zero - 50 (MPa)

Hydraulic Jack Reading (MPa)	6	12	18	24	30	36	42	48	50
Calibrated Load (kg)	12200	21800	33400	44300	55600	66800	76400	88300	91400
Calibrated Pressure (MPa)	6.04	10.80	16.54	21.94	27.54	33.09	37.84	43.74	45.27

The Ram Area of Jack = 198 cm²



Test Performed and Verified by:

Ref: CED/TFL/07/7303

Dated: 31-07-2025

Dated of Test: 04-08-2025 (Dr. Rizwan Riaz)

To

Laboratory Manager
China Gezhouba Group Company Limited
300 MW Balakot Hydro Power Project.

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/07/7303) (Page -5/7)

Reference to your Letter No. Nil, dated: 31/07/2025 on the subject cited above. One Pressure Gauge (Gauge No. T02) as received by us has been calibrated. The results are tabulated as under:

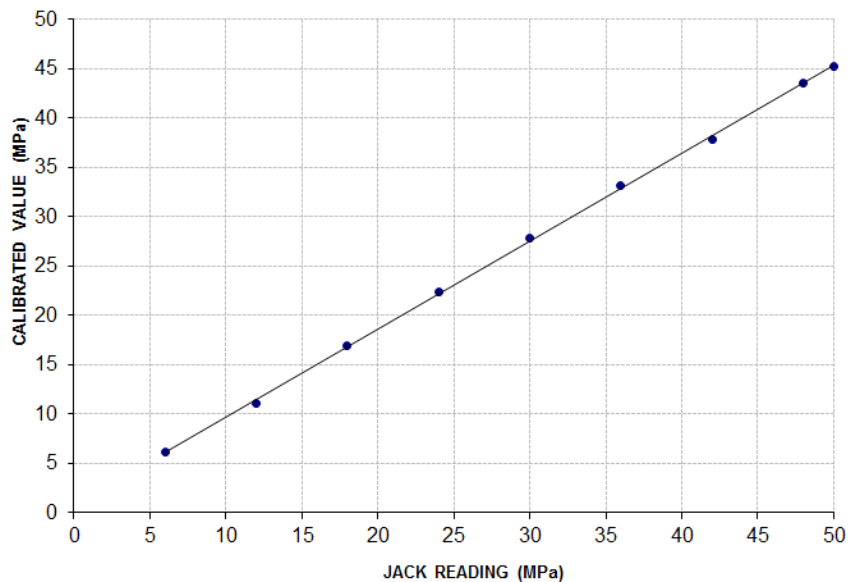
Total Range : Zero - 80 (MPa)
Calibrated Range : Zero - 50 (MPa)

Hydraulic Jack Reading (MPa)	6	12	18	24	30	36	42	48	50
Calibrated Load (kg)	12300	22300	34100	45100	56200	67000	76400	88000	91300
Calibrated Pressure (MPa)	6.09	11.05	16.89	22.34	27.84	33.19	37.84	43.59	45.22

The Ram Area of Jack = 198 cm²

Calibration Curve For Gauge # T02

$$\text{Calibrated Value (MPa)} = (0.8924 \times \text{Calibrated Value (MPa)}) + 0.74$$



Test Performed and Verified by:

Ref: CED/TFL/07/7303

Dated: 31-07-2025

Dated of Test: 04-08-2025 (Dr. Rizwan Riaz)

To

Laboratory Manager
China Gezhouba Group Company Limited
300 MW Balakot Hydro Power Project.

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/07/7303) (Page -6/7)

Reference to your Letter No. Nil, dated: 31/07/2025 on the subject cited above. One Pressure Gauge (Gauge No. T03) as received by us has been calibrated. The results are tabulated as under:

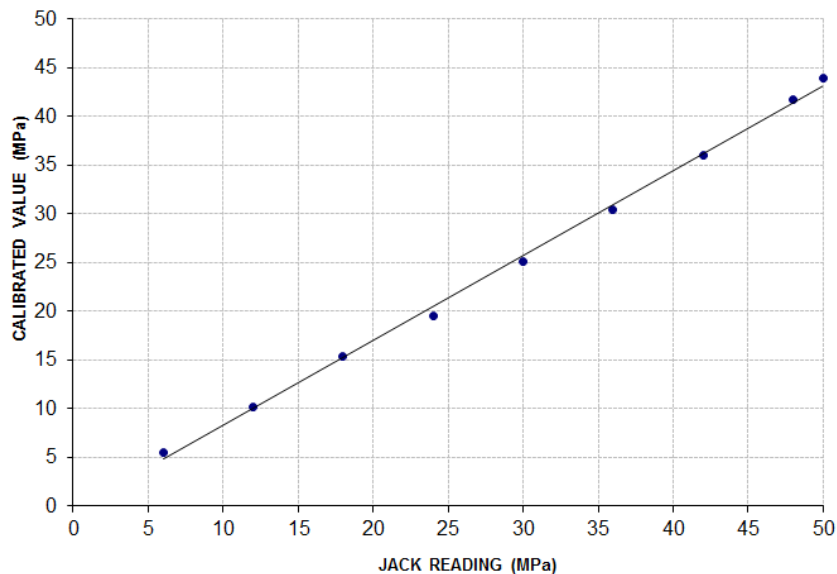
Total Range : Zero - 100 (MPa)
Calibrated Range : Zero - 50 (MPa)

Hydraulic Jack Reading (MPa)	6	12	18	24	30	36	42	48	50
Calibrated Load (kg)	11100	20500	31100	39500	50700	61400	72600	84200	88600
Calibrated Pressure (MPa)	5.50	10.15	15.40	19.56	25.11	30.41	35.96	41.70	43.88

The Ram Area of Jack = 198 cm²

Calibration Curve For Gauge # T03

$$\text{Calibrated Value (MPa)} = (0.871 \times \text{Calibrated Value (MPa)}) - 0.4449$$



Test Performed and Verified by:

Ref: CED/TFL/07/7303

Dated: 31-07-2025

Dated of Test: 04-08-2025 (Dr. Rizwan Riaz)

To

**Laboratory Manager
China Gezhouba Group Company Limited
300 MW Balakot Hydro Power Project.**

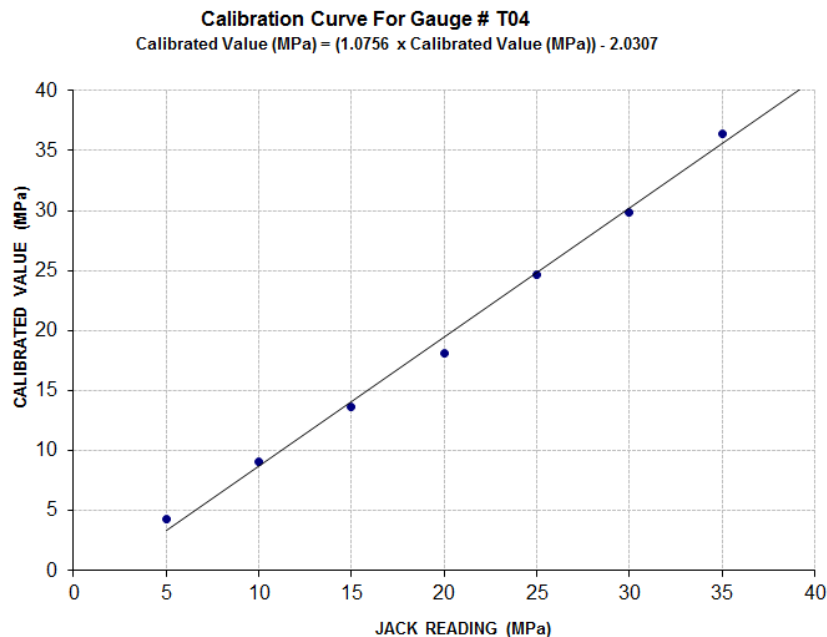
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/07/7303) (Page -7/7)

Reference to your Letter No. Nil, dated: 31/07/2025 on the subject cited above. One Pressure Gauge (Gauge No. T04) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 40 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40
Calibrated Load (kg)	8700	18200	27500	36600	49800	60200	73500	78600
Calibrated Pressure (MPa)	4.31	9.01	13.62	18.13	24.67	29.82	36.40	38.93

The Ram Area of Jack = 198 cm²



Test Performed and Verified by:

To,

Mr. Ahsan (Project Engineer)
Baig Developers and Builders (pvt.) Ltd.
Construction of City Star Shopping Mall, Link Road Model Town, Lahore

Reference # CED/TFL 7304 (Dr. M Kashif)
Reference of the request letter # ST/UET/31072025/3000

Dated: 01-08-2025
Dated: 31-07-2025

Tension Test Report (Page-1/1)

Date of Test 01-08-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kN)	Breaking Load (kN)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.371	3	0.372	0.110	0.109	42.00	50.70	85802	86666	103575	104618	0.8	10.0	-
2	0.376	3	0.375	0.110	0.11	39.50	49.20	80695	80416	100511	100164	0.9	11.3	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,
 Manager Technical
 Alfazal Electrical Engineering Industry (Pvt.) Ltd.

Reference # CED/TFL **7305** (Dr. M. Kashif)
 Reference of the request letter # AEEI-25-0091

Dated: 01-08-2025
 Dated: 31-07-2025

Tension Test Report (Page -1/1)

Date of Test 01-08-2025
 Gauge length 8 inches
 Description MS Rod Tensile and Bend Test

Sr. No.	Weight	Diameter/ Size (mm)		Area	Yield load	Breaking Load	Yield Stress (psi)	Ultimate Stress	Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (mm)	Actual	(in ²)	(kg)	(kg)	(psi)	(psi)	(inch)		
1	4.587	36	1.310	1.348	28000	44600	45789	72936	1.00	12.5	-
2	7.054	45	1.625	2.073	37600	63200	39978	67197	1.90	23.8	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
Note: only two samples for tensile and one for bend test											
Bend Test											
36mm MS Rod Bend Test Through 180° is Satisfactory											

Test Performed and Verified by: