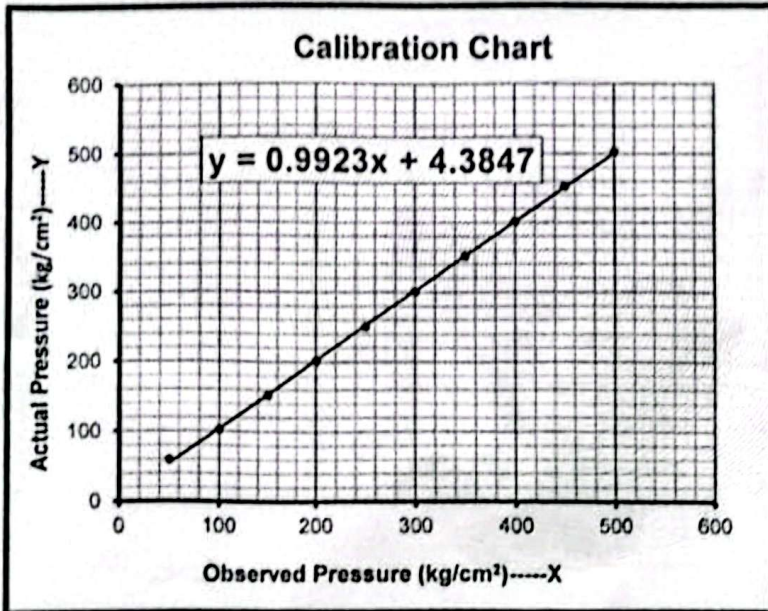




Calibration of Pressure Gauge (ASTM E4 - 16)

BRTC No.: 1103-62948/CE/25-26
Reference : Letter
Sent by: M/S Masum Traders, Rohonpur, Chapal Nawabganj
Project: The PSC girder bridge tensioning on going project
Equipment: Pressure Gauge: MICRO, ID: MPC-237219E (On Side)
Capacity: 0-600 kg/cm²
Date of Calibration: 07/10/2025

Date: 07/10/2025
 Date: 05/10/2025



Observed Pressure (kg/cm ²)	Actual Pressure (kg/cm ²)	±% Error
50	59.1	-15.46%
100	102.0	-1.93%
150	151.9	-1.27%
200	201.4	-0.69%
250	250.3	-0.13%
300	300.8	-0.27%
350	351.3	-0.37%
400	401.3	-0.31%
450	452.2	-0.49%
500	502.2	-0.44%

Note: Pressure Gauge was received in unsealed condition.
 1 MPa = 10.1972 kg/cm²

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Countersigned by :

Prof. Dr. Moazzem Hossain
 Test-In-Charge
 Department of Civil Engineering
 BUET, Dhaka-1000, Bangladesh



Calibrated by :

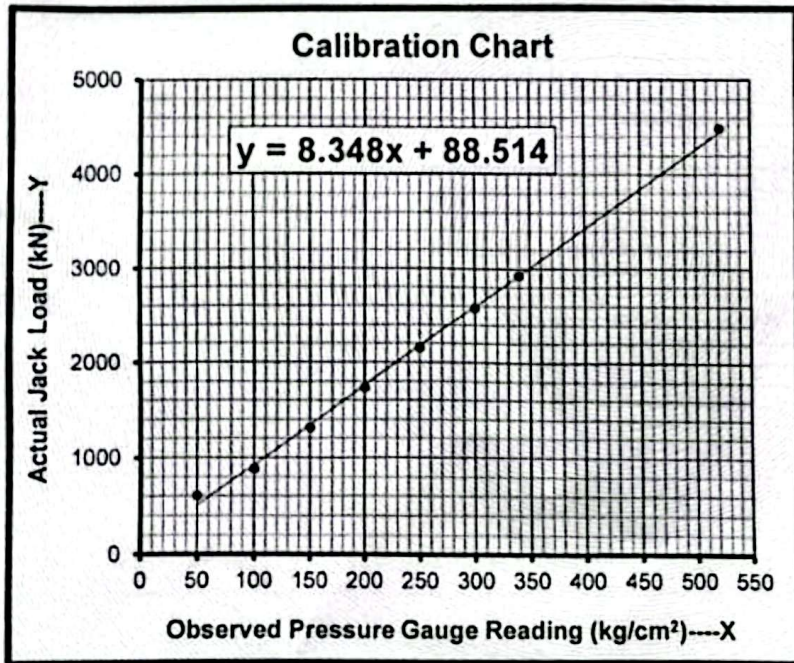
Sk. Rakibul Islam
 Assistant Professor
 Department of Civil Engineering
 BUET, Dhaka-1000, Bangladesh





Calibration of Hydraulic Jack

BRTC No.: 1103-62948/CE/25-26 **Date:** 07/10/2025
Reference : Letter **Date:** 05/10/2025
Client: M/S Masum Traders, Rohonpur, Chapai Nawabganj
Project: The PSC girder bridge tensoning on going project
Machine: Hydraulic Jack, ID: L709046 (Capacity: 5000 kN)
Jack Information: Piston Diameter: 300 mm; Body Diameter: 460 mm; Body Height: 450 mm
Pressure Gauge: Range: 0-600 kg/cm² **Gauge ID:** MICRO; ID: MPC-237219E (On Side)
Calibration Device: Load Column: ELE 1052-10-6096 (3000 kN)
Date of Calibration: 07/05/2025 **Pump:** Motorized **Pump ID:** 710570



Pressure Gauge Reading (kg/cm ²)	Actual Jack Load (kN)	Calibrated Jack Load (kN)
50	604.44	505.91
100	883.19	923.31
150	1310.91	1340.71
200	1732.99	1758.11
250	2150.55	2175.51
300	2576.02	2592.91
340	2926.99	2926.83
522	4483.81	4446.17

Hydraulic Jack is tested upto 2927 kN load
 Hydraulic Jack is found OK against 4483 kN load & its calibration equation can be used upto 4483 kN load
 Note: Note: 1 Ton (long) = 9.96402 kN, 1 ton (short) = 8.89644 kN & 1 tonne (metric ton) = 9.80665 kN;

Warning: Calibration is valid only when the above mentioned Jack and Pressure Gauge pair are used together as they are calibrated. Re-calibration shall be needed if any of the above Jack or Pressure Gauge is changed/replaced or repaired.

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Countersigned by :

Prof. Dr. Moazzem Hossain
 Test-In-Charge
 Department of Civil Engineering
 BUET, Dhaka-1000, Bangladesh



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Calibrated by :

Sk. Rakibul Islam
 Assistant Professor
 Department of Civil Engineering
 BUET, Dhaka-1000, Bangladesh



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DEPARTMENT OF CIVIL ENGINEERING

Mobile: 01819557964; PABX: (8802)-55167100, 55167228-57 Ext. 7226.
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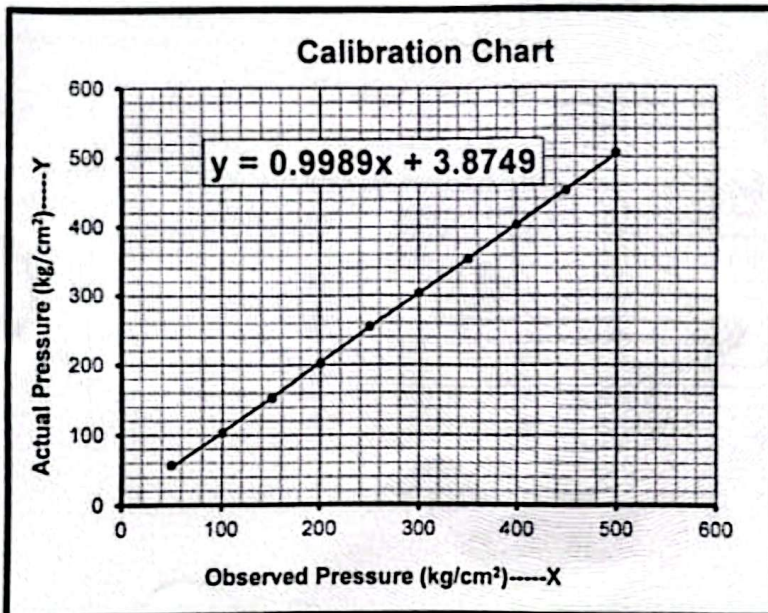
STRENGTH OF MATERIALS LABORATORY

Calibration of Pressure Gauge (ASTM E4 - 16)

BRTC No.: 1103-62948/CE/25-26
Reference : Letter
Sent by: M/S Masum Traders, Rohonpur, Chapai Nawabganj
Project: The PSC girder bridge tensioning on going project
Equipment: Pressure Gauge: MICRO; ID: MPC-256050C (On Side)
Capacity: 0-600 kg/cm²
Date of Calibration: 07/10/2025

Date: 07/10/2025

Date: 05/10/2025



Observed Pressure (kg/cm ²)	Actual Pressure (kg/cm ²)	±% Error
50	56.6	-11.65%
100	102.5	-2.42%
150	152.4	-1.6%
200	202.4	-1.19%
250	254.4	-1.74%
300	303.9	-1.27%
350	352.8	-0.8%
400	403.3	-0.82%
450	452.2	-0.49%
500	505.3	-1.04%

Note: Pressure Gauge was received in unsealed condition.

1 MPa = 10.1972 kg/cm²

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Prof. Dr. Moazzem Hossain
 Test-In-Charge
 Department of Civil Engineering
 BUET, Dhaka-1000, Bangladesh



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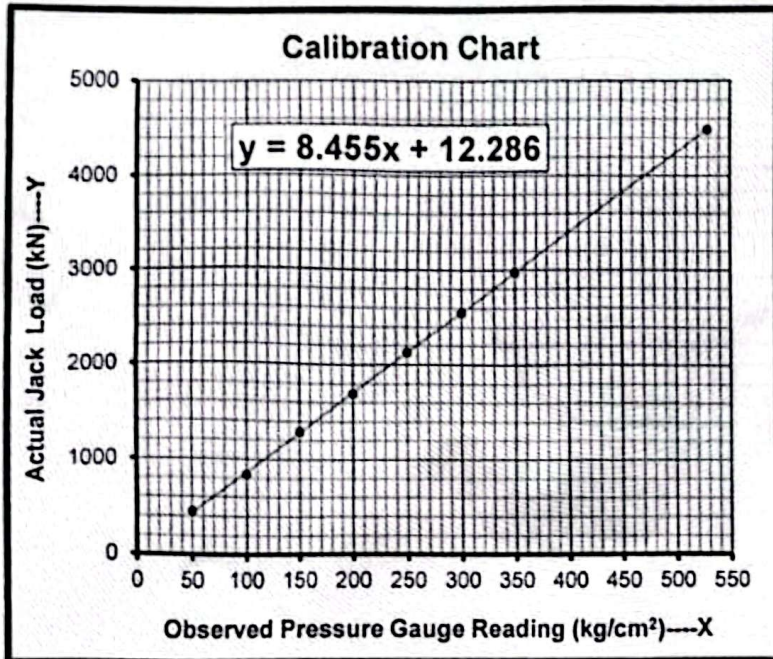
Sk. Rakibul Islam
 Assistant Professor
 Department of Civil Engineering
 BUET, Dhaka-1000, Bangladesh





Calibration of Hydraulic Jack

BRTC No.: 1103-62948/CE/25-26 **Date:** 07/10/2025
Reference : Letter **Date:** 05/10/2025
Client: M/S Masum Traders, Rohonpur, Chapai Nawabganj
Project: The PSC girder bridge tensioning on going project
Machine: Hydraulic Jack, ID: L709047 (Capacity: 5000 kN)
Jack Information: Piston Diameter: 300 mm; Body Diameter: 460 mm; Body Height: 450 mm
Pressure Gauge: Range: 0-600 kg/cm² **Gauge ID:** MICRO; ID: MPC-256050C (On Side)
Calibration Device: Load Column: ELE 1052-10-6096 (3000 kN)
Date of Calibration: 07/05/2025 **Pump:** Motorized **Pump ID:** 710567



Pressure Gauge Reading (kg/cm ²)	Actual Jack Load (kN)	Calibrated Jack Load (kN)
50	449.83	435.04
100	838.05	857.79
150	1289.47	1280.54
200	1691.23	1703.29
250	2127.98	2126.04
300	2551.19	2548.79
350	2976.65	2971.54
529	4483.81	4484.98

Hydraulic Jack is tested upto 2976 kN load
 Hydraulic Jack is found OK against 4483 kN load & its calibration equation can be used upto 4483 kN load
 Note: Note: 1 Ton (long) = 9.96402 kN, 1 ton (short) = 8.89644 kN & 1 tonne (metric ton) = 9.80665 kN;

Warning: Calibration is valid only when the above mentioned Jack and Pressure Gauge pair are used together as they are calibrated. Re-calibration shall be needed if any of the above Jack or Pressure Gauge is changed/replaced or repaired.

Countersigned by :

Prof. Dr. Moazzem Hossain
 Test-In-Charge
 Department of Civil Engineering
 BUET, Dhaka-1000, Bangladesh

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 with the QR Code or ID



Calibrated by :

Sk. Rakibul Islam
 Assistant Professor
 Department of Civil Engineering
 BUET, Dhaka-1000, Bangladesh
 BUETCE 0583304

