

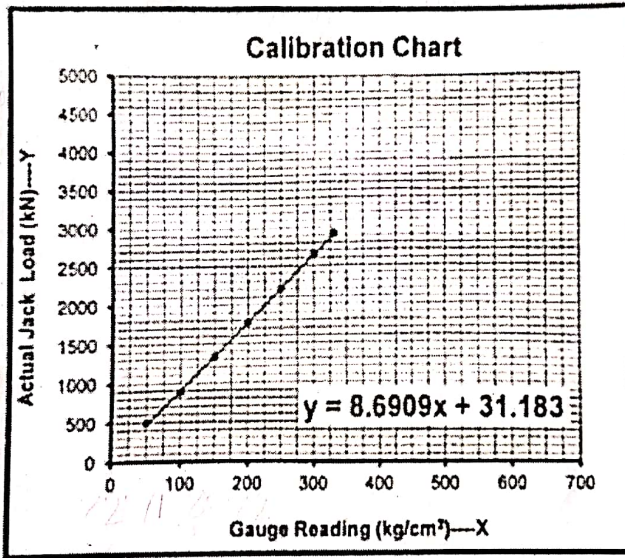


**STRENGTH OF MATERIALS LABORATORY**

**Calibration of Hydraulic Jack**

BRTC No.: 1103-55467/CE/24-25  
 Reference : Letter  
 Sent By: প্রোগ্রামেটর, নিত কনসাল্টেশন  
 Project: --  
 Machine: Hydraulic Jack ID: 804021 (Capacity: 500 Ton) Pump ID: 04  
 Jack Information: Piston Dia: 295 mm; Body Dia: 475 mm; Body Height: 385 mm  
 Pressure Gauge: Range: 0-700 kg/cm<sup>2</sup> Gauge ID: L-210661K SIKA  
 Calibration Device: Load Column: ELE 1052-10-6096 (3000 kN)  
 Date of Calibration: 29.06.2025

Date: 25/06/2025  
 Date: 25/06/2025



Pressure Gauge Reading (kg/cm <sup>2</sup> )	Actual Jack Load (kN)	Calibrated Jack Load (kN)
50.0	493.8	485.73
100.0	878.5	900.28
150.0	1328.9	1334.82
200.0	1759.3	1769.37
250.0	2190.4	2203.92
300.0	2642.9	2638.47
330.0	2912.0	2899.19



Hydraulic Jack is tested up to 2900 kN load

Hydraulic Jack is found OK against 3950 kN load & its calibration equation can be used up to 3950 kN load

Note: Note: 1 Ton (long) = 9.98402 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



Calibrated by:

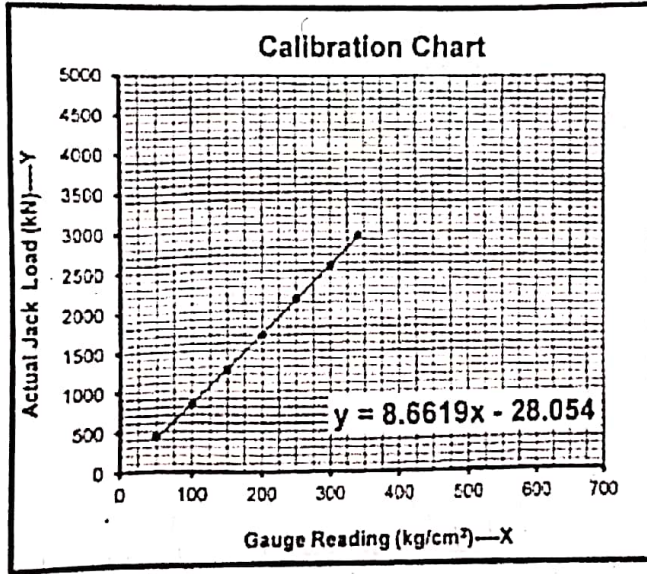
Dr. Sumaiya Afroz  
 Assistant Professor  
 Department of Civil Engineering  
 BUET, Dhaka-1000, Bangladesh



**STRENGTH OF MATERIALS LABORATORY**

**Calibration of Hydraulic Jack**

BRTC No.: 1103-55467/CE/24-25 Date: 25/06/2025  
 Reference : Letter Date: 25/06/2025  
 Sent By: প্রোগ্রামেটর, সিল্ড কনস্ট্রাকশন  
 Project: --  
 Machine: Hydraulic Jack ID: 804023 (Capacity: 500 Ton) Pump ID: 03  
 Jack Information: Piston Dia: 295 mm; Body Dia: 475 mm; Body Height: 385 mm  
 Pressure Gauge: Range: 0-700 kg/cm<sup>2</sup> Gauge ID: L-210630K SIKKA  
 Calibration Device: Load Column: ELE 1052-10-6098 (3000 kN)  
 Date of Calibration: 29.06.2025



Pressure Gauge Reading (kg/cm <sup>2</sup> )	Actual Jack Load (kN)	Calibrated Jack Load (kN)
50.0	430.7	405.64
100.0	824.8	838.13
150.0	1291.6	1271.23
200.0	1689.4	1704.32
250.0	2136.3	2137.42
300.0	2565.3	2570.51
340.0	2935.8	2918.99



Hydraulic Jack is tested upto 2900 kN load  
 Hydraulic Jack is found OK against 3950 kN load & its calibration equation can be used upto 3950 kN load  
 Note: Note: 1 Ton (long) = 9.98402 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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Prof. Dr. Moazzem Hossain  
 Test-in-Charge  
 Department of Civil Engineering  
 BUET, Dhaka-1000, Bangladesh



Calibrated by :

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 Assistant Professor  
 Department of Civil Engineering  
 BUET, Dhaka-1000, Bangladesh