



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/11/37314, 392

Dated: 05-11-2021

Dated of Test: 25-11-2021

To
M/S Bestow Interior
Lahore
(Zee Avenue Ramada Hotel 17-A Cooper Road, Lahore.)

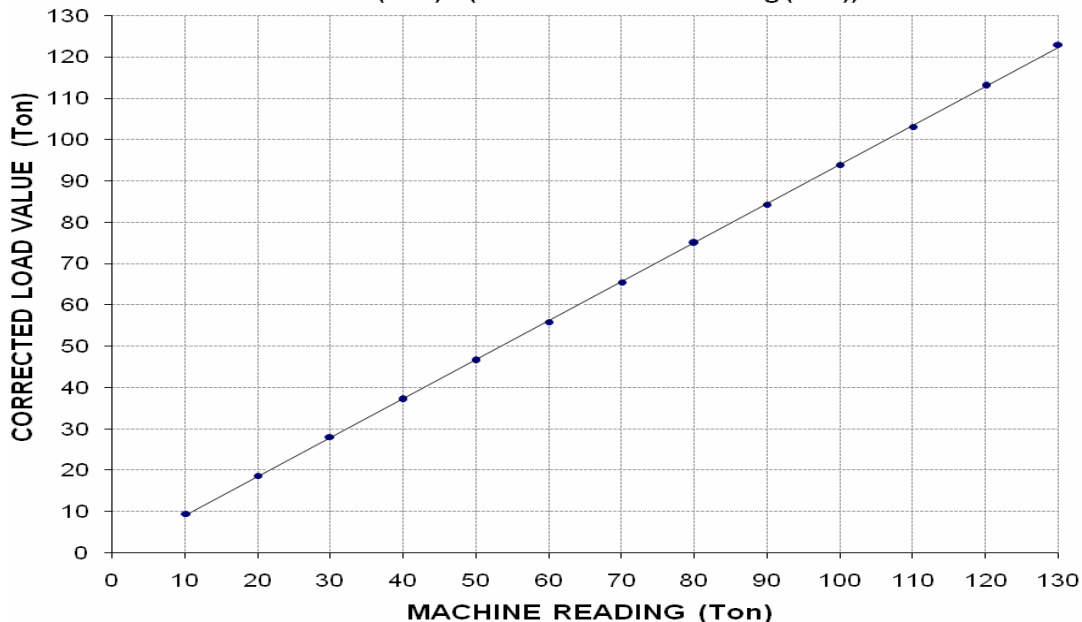
Subject:- CALIBRATION OF CONCRETE COMPRESSIVE TESTING MACHINE
(MARK: CED/TFL/11/37314)

Reference to your letter No. Nil, dated: 04/11/2021 on the subject cited above. One Concrete Compressive Testing Machine has been calibrated by using standard calibration device. The results are tabulated as under:

Calibrated Rang : Zero - 130 (Ton)

| Machine Reading (Ton) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 |
|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Corrected Load Value (Ton) | 9.44 | 18.69 | 27.98 | 37.11 | 46.50 | 55.85 | 65.35 | 74.96 | 84.27 | 93.79 | 102.96 | 112.96 | 122.91 |

CONCRETE COMPRESINE TESTING MACHINE
Callibrated Value (Ton) = (0.944 × Machine Reading (Ton)) - 0.512



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Resident Engineer
ETI GB
Khaplu Brog ILD Scheme

Reference # CED/TFL **37399** (Dr. Usman Akmal)
Reference of the request letter # RCU-BLN/11/03

Dated: 22-11-2021
Dated: 22-11-2021

Tension Test Report (Page – 1/1)

Date of Test 25-11-2021
Gauge length 2 inches
Description MS Pipe Steel Strip Tensile Test

| Sr. No. | Designation | Size of Strip | X Section Area | Yield load | Breaking Load | Yield Stress | Ultimate Stress | Elongation | % Elongation | Remarks |
|--|-------------|---------------|--------------------|------------|---------------|--------------|-----------------|------------|--------------|---------|
| | (inch) | (mm) | (mm ²) | (kg) | (kg) | (MPa) | (MPa) | (in) | | |
| 1 | 12 | 28.80x5.60 | 161.28 | 4500 | 6000 | 274 | 365 | 0.30 | 15.00 | 1 |
| 2 | | 28.70x5.50 | 157.85 | 4400 | 6100 | 273 | 379 | 0.30 | 15.00 | |
| 3 | 12 | 28.80x5.70 | 164.16 | 5600 | 7300 | 335 | 436 | 0.60 | 30.00 | 2 |
| 4 | | 28.75x5.80 | 166.75 | 5800 | 7400 | 341 | 435 | 0.60 | 30.00 | |
| 5 | 12 | 28.95x6.35 | 183.83 | 6700 | 8600 | 358 | 459 | 0.70 | 35.00 | 3 |
| 6 | | 28.80x6.30 | 181.44 | 6200 | 8600 | 335 | 465 | 0.60 | 30.00 | |
| 7 | 12 | 28.95x5.10 | 147.65 | 5400 | 6500 | 359 | 432 | 0.65 | 32.50 | 4 |
| 8 | | 28.90x5.10 | 147.39 | 5200 | 6400 | 346 | 426 | 0.70 | 35.00 | |
| 9 | 12 | 28.80x5.80 | 167.04 | 5600 | 7700 | 329 | 452 | 0.80 | 40.00 | 5 |
| 10 | | 28.80x5.75 | 165.60 | 5600 | 7600 | 332 | 450 | 0.65 | 32.50 | |
| Only Ten Samples for Tensile Test | | | | | | | | | | |
| Bend Test | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/11/37406

Dated: 22-11-2021

Dated of Test: 25-11-2021

To
Deputy Director (QCD)
Water & Sanitation Agency
Faisalabad
(M/s Rasheed RCC Pipe Manufacturing Factory Jhumra Road, Faisalabad)

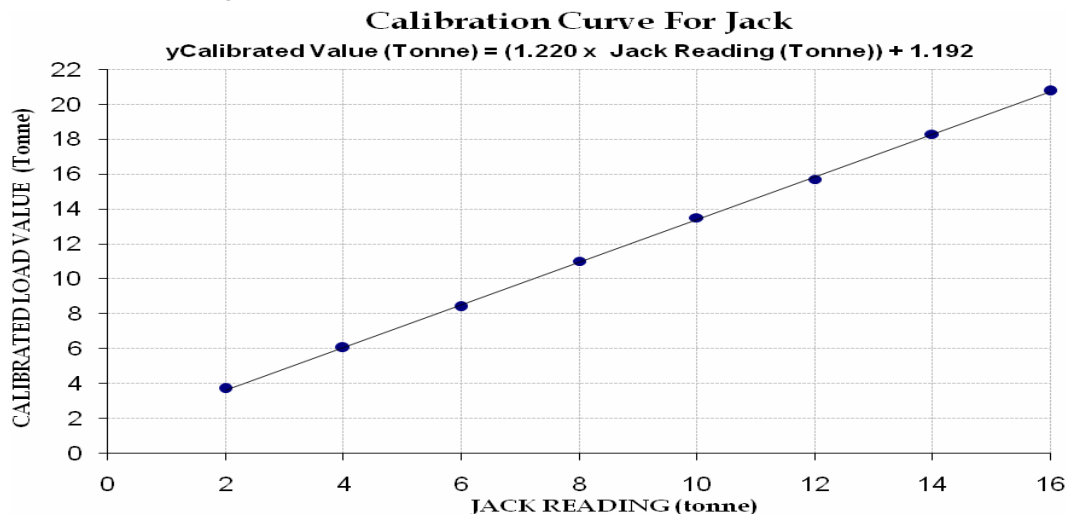
Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE
(MARK: TFL/11/37406)

Reference to your Letter No. 574/DD (QCD)/WASA/2021, Dated: 08/11/2021 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 20 (Tonne)
Calibrated Range : Zero - 16 (Tonne)

| Hydraulic Jack Reading (Tonne) | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | |
|--------------------------------|-------|------|------|-------|-------|-------|-------|-------|-------|
| Calibrated Load | 3700 | 6050 | 8400 | 11000 | 13500 | 15700 | 18300 | 20750 | |
| | kg | | | | | | | | |
| | Tonne | 3.70 | 6.05 | 8.40 | 11.00 | 13.50 | 15.70 | 18.30 | 20.75 |

1 Tonne = 1000 kg



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/11/37415

Dated: 23-11-2021

Date of Test: 25-11-2021

To,

M/S China Gezhouba Group Co., Limited
CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/37362) (Page # 1/5)

Reference to your Letter No. Nil, Dated: 23/11/2021 on the subject cited above. Five Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 50 (mm)
Calibrated Range : Zero - 50 (mm)

| Standard Reading | Dial Gauge Readings | | | | |
|------------------|-------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|
| | Dial Gauge No. I (6615067) | Dial Gauge No. II (7C04549) | Dial Gauge No. III (7C4525) | Dial Gauge No. IV (7C04593) | Dial Gauge No. V (7C04539) |
| 400 | 393 | 396 | 396 | 398 | 399 |
| 800 | 793 | 795 | 795 | 798 | 798 |
| 1200 | 1191 | 1195 | 1196 | 1197 | 1197 |
| 1600 | 1590 | 1594 | 1595 | 1595 | 1595 |
| 2000 | 1989 | 1994 | 1994 | 1995 | 1994 |
| 2400 | 2387 | 2393 | 2393 | 2394 | 2394 |
| 2800 | 2788 | 2793 | 2792 | 2794 | 2794 |
| 3200 | 3187 | 3192 | 3193 | 3193 | 3193 |
| 3600 | 3586 | 3592 | 3593 | 3593 | 3593 |
| 4000 | 3986 | 3991 | 3993 | 3992 | 3995 |
| 4400 | 4384 | 4390 | 4392 | 4391 | 4390 |
| 4800 | 4784 | 4789 | 4791 | 4788 | 4791 |
| 5000 | 4984 | 4990 | 4991 | 4988 | 4989 |

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/11/37415

Dated: 23-11-2021

Date of Test: 25-11-2021

To,

M/S China Gezhouba Group Co., Limited
CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/37362) (Page # 2/5)

Reference to your Letter No. Nil, Dated: 23/11/2021 on the subject cited above. Five Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 50 (mm)
Calibrated Range : Zero - 50 (mm)

| Standard Reading | Dial Gauge Readings | | | | |
|------------------|----------------------------|-----------------------------|-----------------------|------------------------|-----------------------|
| | Dial Gauge No. I (6615227) | Dial Gauge No. II (8207008) | Dial Gauge No. II (1) | Dial Gauge No. III (2) | Dial Gauge No. IV (3) |
| 400 | 398 | 398 | 398 | 394 | 386 |
| 800 | 797 | 798 | 795 | 796 | 683 |
| 1200 | 1194 | 1196 | 1197 | 1202 | 1186 |
| 1600 | 1594 | 1595 | 1596 | 1601 | 1585 |
| 2000 | 1994 | 1995 | 1996 | 2006 | 1981 |
| 2400 | 2391 | 2395 | 2399 | 2403 | 2380 |
| 2800 | 2790 | 2794 | 2800 | 2804 | 2780 |
| 3200 | 3190 | 3195 | 3201 | 3205 | 3185 |
| 3600 | 3592 | 3594 | 3600 | 3608 | 3584 |
| 4000 | 3995 | 3994 | 4002 | 4010 | 3981 |
| 4400 | 4394 | 4393 | 4401 | 4410 | 4378 |
| 4800 | 4794 | 4784 | 4803 | 4810 | 4778 |
| 5000 | 4994 | 4994 | 5000 | 5010 | 4975 |

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/11/37415

Dated: 23-11-2021

Date of Test: 25-11-2021

To,
M/S China Gezhouba Group Co., Limited
CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: - **CALIBRATION OF DIAL GAUGES (MARK: TFL/11/37362)** (Page # 3/5)

Reference to your Letter No. Nil, Dated: 23/11/2021 on the subject cited above. Four Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 50 (mm)
Calibrated Range : Zero - 50 (mm)

| Standard Reading | Dial Gauge Readings | | | |
|------------------|----------------------|-----------------------|------------------------|-----------------------|
| | Dial Gauge No. I (4) | Dial Gauge No. II (5) | Dial Gauge No. III (6) | Dial Gauge No. IV (7) |
| 400 | 385 | 396 | 372 | 391 |
| 800 | 785 | 794 | 770 | 793 |
| 1200 | 1185 | 1197 | 1171 | 1192 |
| 1600 | 1584 | 1596 | 1571 | 1592 |
| 2000 | 1984 | 1995 | 1973 | 1991 |
| 2400 | 2385 | 2396 | 2374 | 2395 |
| 2800 | 2784 | 2796 | 2772 | 2792 |
| 3200 | 3184 | 3190 | 3173 | 3191 |
| 3600 | 3582 | 3595 | 3574 | 3595 |
| 4000 | 3983 | 3992 | 3975 | 3994 |
| 4400 | 4383 | 4395 | 4379 | 4398 |
| 4800 | 4780 | 4795 | 4774 | 4795 |
| 5000 | 4981 | 4995 | 4975 | 4985 |

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/11/37415

Dated: 23-11-2021

Date of Test: 25-11-2021

To,
M/S China Gezhouba Group Co., Limited
CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: - **CALIBRATION OF DIAL GAUGES (MARK: TFL/11/37362)** (Page # 4/5)

Reference to your Letter No. Nil, Dated: 23/11/2021 on the subject cited above. Four Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 50 (mm)
Calibrated Range : Zero - 50 (mm)

| Standard Reading | Dial Gauge Readings | | | |
|------------------|---------------------------------|-------------------------------|--------------------------------|-------------------------------|
| | Dial Gauge No. I (16F083230) | Dial Gauge No. II (510842) | Dial Gauge No. III (510798) | Dial Gauge No. IV (510771) |
| 400 | 392 | 392 | 386 | 388 |
| 800 | 795 | 792 | 787 | 788 |
| 1200 | 1194 | 1195 | 1187 | 1188 |
| 1600 | 1594 | 1593 | 1587 | 1588 |
| 2000 | 1993 | 1994 | 1988 | 1988 |
| 2400 | 2394 | 2394 | 2388 | 2388 |
| 2800 | 2794 | 2794 | 2789 | 2787 |
| 3200 | 3194 | 3196 | 3189 | 3189 |
| 3600 | 3594 | 3596 | 3589 | 3588 |
| 4000 | 3993 | 3999 | 3991 | 3985 |
| 4400 | 4393 | 4399 | 4390 | 4386 |
| 4800 | 4792 | 4799 | 4790 | 4786 |
| 5000 | 4991 | 4999 | 4990 | 4987 |

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/11/37415

Dated: 23-11-2021

Date of Test: 25-11-2021

To,

M/S China Gezhouba Group Co., Limited
CGGC Dasu Hydropower Project Management in Pakistan
Dasu Hydropower Project

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/37362) (Page # 5/5)

Reference to your Letter No. Nil, Dated: 23/11/2021 on the subject cited above. Two Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 2 (inch)
Calibrated Range : Zero - 2 (inch)

| Standard Reading | | Dial Gauge Readings (inch) | |
|-------------------------|---------------|-----------------------------------|-----------------------------------|
| | | Dial Gauge No. I (C15029) | Dial Gauge No. II (C15063) |
| (mm) | (inch) | | |
| 400 | 0.157 | 0.158 | 0.157 |
| 800 | 0.315 | 0.314 | 0.314 |
| 1200 | 0.472 | 0.471 | 0.470 |
| 1600 | 0.630 | 0.629 | 0.625 |
| 2000 | 0.787 | 0.787 | 0.785 |
| 2400 | 0.945 | 0.944 | 0.943 |
| 2800 | 1.102 | 1.101 | 1.100 |
| 3200 | 1.260 | 1.258 | 1.257 |
| 3600 | 1.417 | 1.414 | 1.414 |
| 4000 | 1.575 | 1.571 | 1.571 |
| 4400 | 1.732 | 1.728 | 1.729 |
| 4800 | 1.890 | 1.890 | 1.886 |
| 5000 | 1.969 | 1.963 | 1.964 |

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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 Defence Housing Authority.
 Lahore Cantt
 (Const. of New Main Gate on Tukey Basis at DHA Phase-XII) – (M/s Sincere Eng)

Reference # CED/TFL **37416** (Dr. Usman Akmal)
 Reference of the request letter # 408/241/E/Lab/167/01

Dated: 24-11-2021
 Dated: 23-11-2021

Tension Test Report (Page -1/1)

Date of Test 25-11-2021
 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 | 0.377 | 3 | 0.376 | 0.11 | 0.111 | 4000 | 5000 | 80200 | 79570 | 100200 | 99500 | 1.10 | 13.8 | Mughal Steel |
| 2 | 0.380 | 3 | 0.377 | 0.11 | 0.112 | 4100 | 5100 | 82200 | 80870 | 102200 | 100600 | 1.20 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 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
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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 M. Saleem Construction Company
Sheikhupura

Reference # CED/TFL **37417** (Dr. Usman Akmal)
Reference of the request letter # Nil

Dated: 24-11-2021
Dated: 24-11-2021

Tension Test Report (Page -1/1)

Date of Test 25-11-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| 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 | 0.383 | 3/8 | 0.379 | 0.11 | 0.113 | 3800 | 5100 | 76200 | 74360 | 102200 | 99800 | 1.10 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only one sample for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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 Defence Housing Authority.
Lahore Cantt
(Const. of U/G External Electrification Works (MV/LV) alongwith Street Lighting System of
Package E-1, Phase-9 (Prism) DHA Lahore) – (M/s DHA-C)

Reference # CED/TFL **37418** (Dr. Usman Akmal)
Reference of the request letter # 408/241/E/Lab/163/875A

Dated: 24-11-2021
Dated: 16-11-2021

Tension Test Report (Page -1/1)

Date of Test 25-11-2021
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 | 0.369 | 3 | 0.371 | 0.11 | 0.108 | 3200 | 4600 | 64200 | 65080 | 92200 | 93600 | 1.60 | 20.0 | Kamran Steel |
| 2 | 0.385 | 3 | 0.380 | 0.11 | 0.113 | 3600 | 4800 | 72200 | 70070 | 96200 | 93500 | 1.30 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 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
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Resident Engineer
 NESPAK

Construction of Underpass Across Bedian Road Connecting Phase-VI with Phase-IX, DHA,
 Lahore

Reference # CED/TFL **37419** (Engr. Amina Rajput)

Dated: 24-11-2021

Reference of the request letter # 3790/102/IUK/1/002

Dated: 22-11-2021

Tension Test Report (Page -1/1)

Date of Test 25-11-2021

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 | 3800 | 4650 | 76200 | 74230 | 93200 | 90900 | 1.00 | 12.5 | Mughal Steel |
| 2 | 0.386 | 3 | 0.380 | 0.11 | 0.113 | 3600 | 4850 | 72200 | 69920 | 97200 | 94200 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

Witness by NESPAK & DHA Representative

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 FM (Work Div)
 SUPARCO
 M/s STATGIA
 Construction of Staff Hostel at Kala Shah Kaku Lahore

Reference # CED/TFL **37420** (Engr. Amina Rajput)
 Reference of the request letter # 63301(001) Works/Div/SRDC-L

Dated: 24-11-2021
 Dated: 16-11-2021

Tension Test Report (Page -1/1)

Date of Test 25-11-2021
 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 | 0.366 | 3 | 0.370 | 0.11 | 0.107 | 3800 | 4900 | 76200 | 77960 | 98200 | 100600 | 0.90 | 11.3 | |
| 2 | 0.364 | 3 | 0.369 | 0.11 | 0.107 | 3800 | 4900 | 76200 | 78190 | 98200 | 100900 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 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
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples