



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/05/33252

Dated: 16-05-19

To
Addl Dir Dev
DHA Phase-XI (Rahbar)
Development of Re-appropriated Area in Sector-II (Extension), DHA Phase-XI
(Rahbar)

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76]**

Reference to your letter No. Dev/RAA/Sec-II(Extn)/2/19/1641, dated 16.05.2019 on the subject cited above. Two R.C.C. Pipes as received by us have been tested. The results are tabulated as under.

| Sr. No | Nominal Size | Total Length | Loaded Length | External Diameter | Internal Diameter | Wall Thickness | Proof load | Ultimate Load | Proof Stress | Ultimate Stress |
|--------|--------------|--------------|---------------|-------------------|-------------------|----------------|------------|---------------|--------------|-----------------|
| | (mm) | (m) | (m) | (mm) | (mm) | (mm) | (kg) | (kg) | N/m/mm | N/m/mm |
| 1 | 228.6 (9") | 2.383 | 2.235 | 314.00 | 220.06 | 46.97 | 9700 | 15900 | 193.47 | 317.14 |
| 2 | 228.6 (9") | 2.383 | 2.238 | 318.00 | 223.60 | 47.20 | 9600 | 15200 | 188.20 | 297.98 |

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/05/33274

Dated: 21-05-19

To
Assistant Manager (Engg)
Punjab Daanish Schools and Centers of Excellence Authority
Upgradation of Daanish Schools (Boys & Girls) Chishtian, District BahawalNagar

Subject: TESTING OF R.C.C. PIPE [ASTM-C76]

Reference to your letter No. AM(E)/04/19/125, dated 11.05.2019 on the subject cited above. Two R.C.C. Pipes as received by us have been tested. The results are tabulated as under.

| Sr. No | Nominal Size | Total Length | Loaded Length | External Diameter | Internal Diameter | Wall Thickness | Proof load | Ultimate Load | Proof Stress | Ultimate Stress |
|--------|--------------|--------------|---------------|-------------------|-------------------|----------------|------------|---------------|--------------|-----------------|
| | (mm) | (m) | (m) | (mm) | (mm) | (mm) | (kg) | (kg) | N/m/mm | N/m/mm |
| 1 | 228.6 (9") | 2.376 | 2.212 | 275.00 | 224.44 | 25.28 | 6500 | 10100 | 128.44 | 199.57 |
| 2 | 304.8 (12") | 2.364 | 2.235 | 408.00 | 307.46 | 50.27 | 15100 | 20000 | 215.57 | 285.52 |

I/C Testing Laboratoires
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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
 AL-Imam Enterprises Pvt Ltd
 Construction of Penta Square, Phase-V, D.H.A, Lahore
 (Mughal Steel)

Reference # CED/TFL **33277** (Dr. Qasim Khan)
 Reference of the request letter # Al-mam/746/PS-1/DHA/LHE/866

Dated: 23-05-2019
 Dated: 20-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight (lbs/ft) | Diameter/ Size (mm) | | 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 | 0.402 | 10 | 9.85 | 0.11 | 0.118 | 4000 | 5000 | 80200 | 74660 | 100200 | 93400 | 1.20 | 15.0 | |
| 2 | 0.404 | 10 | 9.88 | 0.11 | 0.119 | 3700 | 4900 | 74200 | 68620 | 98200 | 90900 | 0.90 | 11.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 10mm Dia Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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I/C Testing Laboratoires
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Manager Coordination
 Izhar Construction (Pvt) Ltd
 Hyundai Nishat Motor Pvt. Limited, Faisalabad

Reference # CED/TFL 33278 (Dr. Qasim Khan)
 Reference of the request letter # ICPL/CONST-HNMPL/19/051

Dated: 23-05-2019
 Dated: 23-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight (lbs/ft) | Diameter/ Size (mm) | | 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 | 0.415 | 10 | 10.01 | 0.11 | 0.122 | 4100 | 5300 | 82200 | 74050 | 106200 | 95800 | 1.10 | 13.8 | |
| 2 | 0.414 | 10 | 9.99 | 0.11 | 0.122 | 4200 | 5400 | 84200 | 76160 | 108200 | 98000 | 1.10 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 10mm Dia Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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I/C Testing Laboratoires
UET Lahore, Pakistan.

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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
 AZ Engineering Associates
 Rehabilitation/ Reconstruction of Road from Sialkot Bypass Mafiwala to Trigri via Arrop, G-II
 RD 13+12 to 64+50, L=5138 Rft in District Gujranwala

Reference # CED/TFL **33279** (Dr. Qasim Khan)
 Reference of the request letter # AZEA/REKMK/776

Dated: 23-05-2019
 Dated: 21-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
 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 | 0.378 | 3 | 0.376 | 0.11 | 0.111 | 3200 | 4400 | 64200 | 63530 | 88200 | 87400 | 1.10 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only one sample for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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I/C Testing Laboratoires
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Test Floor Laboratory
Department of Civil Engineering
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To,
 Sub Divisional Officer
 Buildings Sub Division
 Kamalia
 (Establishment of New Govt. Girls Primary School Chak No. 682/23 GB in District T.T. Singh)

Reference # CED/TFL **33280** (Dr. Qasim Khan)
 Reference of the request letter # 498/

Dated: 23-05-2019
 Dated: 20-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
 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 | 0.360 | 3/8 | 0.367 | 0.11 | 0.106 | 2200 | 3000 | 44100 | 45860 | 60200 | 62600 | 1.80 | 22.5 | |
| 2 | 0.386 | 3/8 | 0.380 | 0.11 | 0.113 | 2800 | 3700 | 56200 | 54460 | 74200 | 72000 | 1.70 | 21.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

I/C Testing Laboratoires
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Test Floor Laboratory
Department of Civil Engineering
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To,
 Sub Divisional Officer
 Buildings Sub Division
 Kamalia
 (Re-Construction of 1-No Class Room size (28'x18') with Verandah at GES Ravi Khokhar Tehsil
 Kamalia T.T. Singh)
 Reference # CED/TFL **33281** (Dr. Qasim Khan) Dated: 23-05-2019
 Reference of the request letter # 496/ Dated: 20-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
 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 | 0.356 | 3/8 | 0.365 | 0.11 | 0.105 | 3100 | 3700 | 62200 | 65280 | 74200 | 78000 | 1.50 | 18.8 | |
| 2 | 0.364 | 3/8 | 0.369 | 0.11 | 0.107 | 3100 | 3700 | 62200 | 63830 | 74200 | 76200 | 1.60 | 20.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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I/C Testing Laboratoires
UET Lahore, Pakistan.

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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
 PEPAC
 Establishment of Workers Welfare Complex (Phase-I) Adjacent to Sundar Industrial Estate,
 District Kasur (Package-R)

Reference # CED/TFL **33282** (Dr. Qasim Khan)
 Reference of the request letter # RE/PEPAC/WWC/84-00

Dated: 23-05-2019
 Dated: 21-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
 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 | 0.366 | 3/8 | 0.370 | 0.11 | 0.108 | 3200 | 5000 | 64200 | 65510 | 100200 | 102400 | 1.20 | 15.0 | |
| 2 | 0.364 | 3/8 | 0.369 | 0.11 | 0.107 | 3200 | 5100 | 64200 | 65910 | 102200 | 105100 | 1.30 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
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Pakistan. Ph: 92-42-99029202

To,
 Sub Divisional Officer
 Buildings Sub-Division, Arifwala
 (Establishment of Cattle Market District Pakpattan)

Reference # CED/TFL **33284** (Dr. Qasim Khan)
 Reference of the request letter # 1126/SDO-PPN

Dated: 23-05-2019
 Dated: 02-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
 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 | 0.376 | 3/8 | 0.375 | 0.11 | 0.110 | 4000 | 5500 | 80200 | 79790 | 110200 | 109800 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only one sample for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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I/C Testing Laboratoires
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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
(Infra Development Works Sector-E, DHA Phase-IX)(M/s Inland)

Reference # CED/TFL **33285** (Dr. Qasim Khan)
Reference of the request letter # 408/241/E/Lab/589/46

Dated: 23-05-2019
Dated: 23-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
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 | 0.368 | 3 | 0.371 | 0.11 | 0.108 | 3200 | 5300 | 64200 | 65270 | 106200 | 108100 | 1.00 | 12.5 | City Steel |
| 2 | 0.366 | 3 | 0.370 | 0.11 | 0.108 | 3400 | 5400 | 68200 | 69640 | 108200 | 110600 | 0.90 | 11.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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I/C Testing Laboratoires
UET Lahore, Pakistan.

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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
 (Infra Development Works Sector-B (extn), DHA Phase-V)(M/s Inland)

Reference # CED/TFL **33286** (Dr. Qasim Khan)
 Reference of the request letter # 408/241/E/Lab/590/27

Dated: 23-05-2019
 Dated: 23-05-2019

Tension Test Report (Page -1/1)

Date of Test 24-05-2019
 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 | 0.361 | 3 | 0.367 | 0.11 | 0.106 | 3200 | 5100 | 64200 | 66510 | 102200 | 106000 | 0.90 | 11.3 | City Steel |
| 2 | 0.367 | 3 | 0.371 | 0.11 | 0.108 | 3200 | 5300 | 64200 | 65370 | 106200 | 108300 | 1.10 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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I/C Testing Laboratoires
UET Lahore, Pakistan.

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- 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/04/33289

Dated: 24-05-19

To,
DCRE/RE-1
Zeeruk International (Pvt) Ltd
Lahore - Sialkot Motorway Project

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/05/33289) (Page -1/2)

Reference to your Letter No. LSMP/RE-1/2019/813, Dated: 22/05/2019 on the subject cited above. One Hydraulic Jack (Jack No 3401, Gauge No. AES-3401) as received by us has been calibrated. The results are tabulated as under:

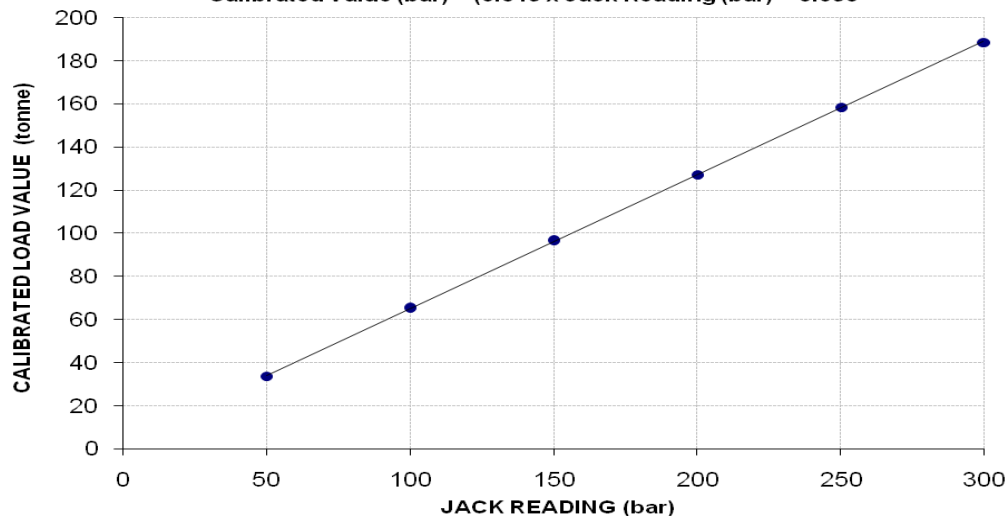
Total Range : Zero - 700 (bar)
Calibrated Range : Zero - 300 (bar)

| Hydraulic Jack Reading (bar) | 50 | 100 | 150 | 200 | 250 | 300 | |
|------------------------------|-------|--------|--------|--------|--------|--------|--------|
| Calibrated Load | (Kg) | 33600 | 65200 | 96400 | 127200 | 158400 | 188400 |
| | Tonne | 33.60 | 65.20 | 96.40 | 127.20 | 158.40 | 188.40 |
| Calibrated Pressure (bar) | 54.73 | 106.20 | 157.02 | 207.19 | 258.01 | 306.87 | |

1 Tonne = 1000 Kg, The Ram Area of Jack = 602.09 cm²

Calibration Curve For Jack No. AES 3401

Calibrated Value (bar) = (0.619 x Jack Reading (bar) + 3.093



I/C Testing Laboratories
UET Lahore, Pakistan.

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Ref: CED/TFL/04/33289

Dated: 24-05-19

To,
DCRE/RE-1
Zeeruk International (Pvt) Ltd
Lahore - Sialkot Motorway Project

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/05/33289) (Page -2/2)

Reference to your Letter No. LSMP/RE-1/2019/813, Dated: 22/05/2019 on the subject cited above. One Hydraulic Jack (Jack No 3402, Gauge No. AES-3402) as received by us has been calibrated. The results are tabulated as under:

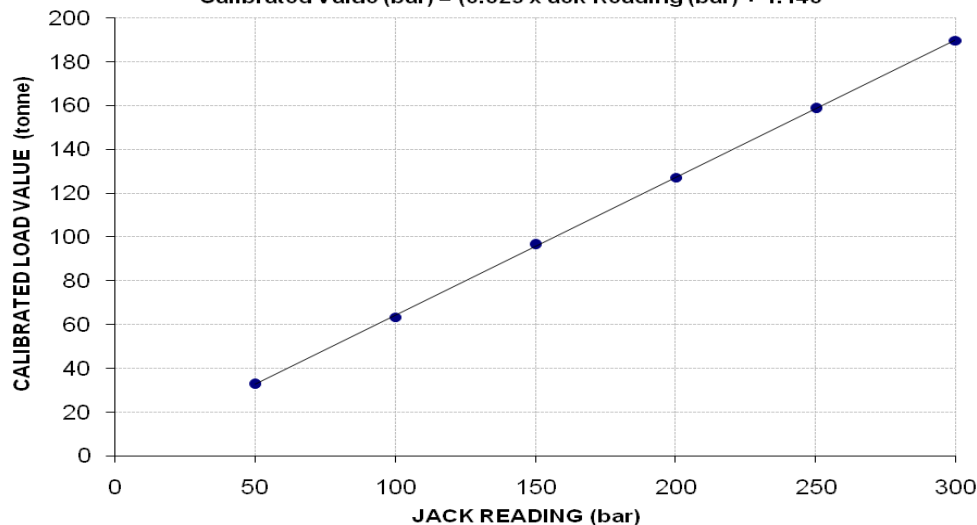
Total Range : Zero - 700 (bar)
Calibrated Range : Zero - 300 (bar)

| Hydraulic Jack Reading (bar) | 50 | 100 | 150 | 200 | 250 | 300 | |
|------------------------------|-------|--------|--------|--------|--------|--------|--------|
| Calibrated Load | (Kg) | 32600 | 63400 | 96400 | 127000 | 158600 | 189600 |
| | Tonne | 32.60 | 63.40 | 96.40 | 127.00 | 158.60 | 189.60 |
| Calibrated Pressure (bar) | 53.10 | 103.27 | 157.02 | 206.86 | 258.33 | 308.83 | |

1 Tonne = 1000 Kg, The Ram Area of Jack = 602.09 cm²

Calibration Curve For Jack No. AES 3402

Calibrated Value (bar) = (0.629 x Jack Reading (bar) + 1.146



I/C Testing Laboratories
UET Lahore, Pakistan.

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I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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